

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

BILLIONTOONE, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

8071
(Primary Standard Industrial
Classification Code Number)

81-1082020
(I.R.S. Employer
Identification Number)

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(650) 460-2551**
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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☐

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐
Non-accelerated filer ☒

Accelerated filer ☐
Smaller reporting company ☐
Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

J.P. Morgan	Piper Sandler	Jefferies	William Blair
Stifel	Wells Fargo Securities		BTIG
, 2025			

**BILLION
TO ONE**

We strive to
remove the fear
of the unknown.

Our revolutionary technology allows us to push
beyond the current limitations in diagnostics so
we can detect disease one molecule at a time.

We provide patients with powerful and
precise information about the state of their
health for themselves and their children.

And it's only the beginning of what we seek to do.

Key Metrics

\$265M+	84%	Emerging	\$100B
annualized revenue run-rate (ARR) ¹	YOY revenue growth ²	profitability ³	US annual market opportunity ⁴

REVENUE	\$209M	LTM revenue ⁵
	167%	CAGR (2021-2024)
TESTS ACCESSIONED ⁶	508K	LTM tests accessioned <i>as of June 30, 2025</i>
	51%	YOY tests accessioned growth ²
	1M+	tests accessioned since launch
GROSS PROFIT MARGIN	65%	gross profit margin <i>H1 2025</i>
	14 pp	YOY increase in gross profit margin ²
OTHER	\$1.8M	ARR per sales representative
	225M+	covered lives ⁷

1. Q2 2025 revenue of \$66.6M annualized. Calculated as Q2 2025 revenue multiplied by 4.
2. Q2 2025 compared to Q2 2024.
3. Based on \$.01M EBITDA in Q2 2025 and (\$0.2M) net loss in Q2 2025. See *Management's discussion and analysis of financial condition and results of operations* > *Non-GAAP financial measures* for additional information and reconciliations of our non-GAAP financial measures to the most directly comparable financial measures prepared in accordance with GAAP.
4. Our estimated US annual market opportunity includes important assumptions, including regarding the number of eligible patients, frequency of testing and ASPs. See *Management's discussion and analysis of financial condition and results of operations* > *Key factors affecting our results of operations and performance* for more information regarding our total addressable market calculations and assumptions. Half of this addressable market includes early detection, an area in which we have not yet begun specific product development or commercial sales, but we believe will be strongly enabled by our existing research platform.
5. Last twelve months (LTM) revenue. Equal to sum of each month's revenue over the prior 12 months ended June 30, 2025.
6. Number of billable tests received for processing.
7. Number of individuals covered under contracts with payors in the US as of June 30, 2025.

Our Impact



Marina was excited about her pregnancy at 9 weeks.*

That was when she took the BillionToOne's **UNITY Fetal Risk™** Screen test, which revealed she was a carrier for cystic fibrosis. However, the same report also showed her baby had an extremely low risk of having the disease (1 in 5000). While initially surprised, Marina felt much less anxious and more at ease with her pregnancy than she would have with traditional carrier screening. Traditional methods would have only identified her carrier status and required her partner to undergo further testing to assess the baby's risk.

Juan was unfortunately diagnosed with stage IV lung cancer.*

After his initial biopsy, Juan's doctor requested BilliontoOne's **Northstar Select®** blood test to help him determine which treatment would work best. Northstar Select uncovered *EGFR* mutation at 0.05% variant allele fraction (VAF), a highly actionable cancer variant that has a known targeted therapy. Cancers at this low level of VAF are often missed by other cancer tests**. Thanks to Northstar Select, Juan was able to start on the best therapy for his cancer and his doctor can easily monitor his progress using **Northstar Response®**.

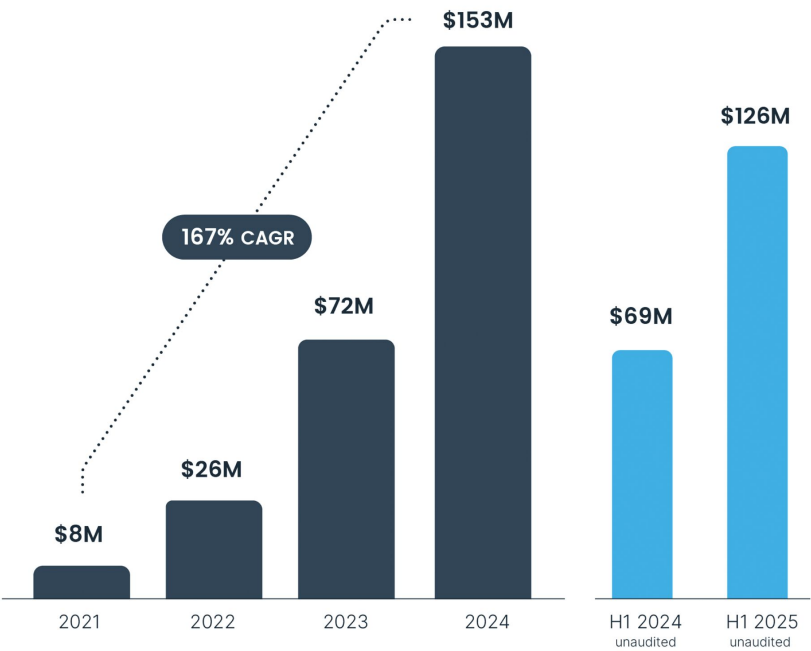


* Actual customer stories. Names have been changed to preserve patients' privacy and the photos are actor portrayals.
** Other liquid biopsy tests have an LOD that ranges between 0.25% - 0.50% (e.g. TSO500 at 0.5% VAF for SNVs) whereas Northstar Select has demonstrated an LOD of 0.15%, representing a 2x higher sensitivity than other assays.



Our Revenue Growth

Revenue Growth



Net Loss

(\$42M)	(\$80M)	(\$83M)	(\$42M)	(\$15M)	(\$4M)

Net Margin

(520%)	(303%)	(115%)	(27%)	(22%)	(3%)

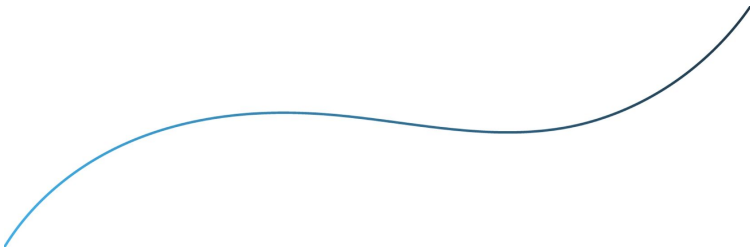
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Through and including _____, 2025 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

We have not, and the underwriters have not, authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares of Class A common stock offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our Class A common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: Neither we nor any of the underwriters have taken any action that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons who have come into possession of this prospectus in a jurisdiction outside the United States are required to inform themselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.



Letter from Our Co-Founder & CEO

BillionToOne was born from a single question that continues to drive everything we do: What is the most challenging, most impactful global healthcare problem that physics allows us to solve, but that no one else will tackle?

As interdisciplinary scientists with PhDs, we were not interested in incremental improvements or well-trodden paths. My co-founder, David, and I wanted to confront problems of true consequence and provide solutions that could transform millions of lives. This pursuit led us to sickle cell disease and beta-thalassemia. These are the most common genetic disorders worldwide and classified by the World Health Organization as among the greatest global healthcare burdens.

Prenatal detection of these conditions required us to develop a novel technology capable of reaching the physical limit of detection and precision. However, this challenge did not stop us. In fact, it invigorated our resolve to create solutions for these burdensome genetic conditions.

We knew that if we developed such a technology, we would unlock the full potential of cell-free DNA, the most remarkable biomarker that represents every tissue in blood. It was only through our interdisciplinary approach that combines physics, applied mathematics, and molecular biology that we have been able to invent a breakthrough technology that could tackle this problem.

Since then, our diagnostics innovations have already changed the diagnostics paradigm in multiple areas. Just from a single maternal blood sample, our prenatal tests detect whether a developing baby is at risk for many severe but actionable diseases, early on during pregnancy. Our oncology tests first detect the most important features of a tumor that determine the best course of therapy for that patient from a blood draw. They then enable the physicians to know precisely how well the therapy is working, and when it stops working, often many months ahead of imaging scans.

While we have state-of-the-art laboratories today, we have never forgotten that we started with half a bench at a Stanford University accelerator space. It was more difficult to raise the initial \$300,000 than the \$300,000,000 that followed it. Our name, BillionToOne, reflects our technological breakthrough as we believe it is the only platform that can detect a single DNA letter of a single DNA molecule among the three billion other letters in our genome. But, it also reflects our founding spirit. The domain was simply the only relevant one that we could acquire for just \$12. And we refused to spend more for a name at that stage.

This decision is an example of a set of principles that have guided our growth to becoming a pioneer in precision diagnostics. These principles are not only management's philosophy. They are the operating system of our company and foundation of our success.

Our Guiding Principles

- **Relentless resourcefulness.** In our earliest days, we traveled to Turkey to collect the first specimens from pregnant patients and to India, where beta-thalassemia is much more common, to conduct our first clinical studies. It was an unnerving process every time we cleared customs with our reagents, knowing that each sample we can test represented not just data points, but a crucial step toward helping real families facing devastating genetic conditions. This was not just about frugality. This and many similar examples of resourcefulness ended up significantly accelerating our progress.
- **Patients first.** The weight of what we do has been clear to us from the very early days when we started receiving tests not just for general screening, but from high-risk pregnant mothers who already had previous babies with these severe conditions and wanted to rely on us to avoid amniocentesis. In fact, our first-ever clinical test was for SMA, a devastatingly progressive condition in which every day matters for treatment efficacy. I vividly remember doing a custom report design with David until 2 a.m. to best represent our result. While we have automated almost all analysis and reporting over time, we maintain this personal touch to this day. Our genetic counselors, scientists, and laboratory directors, and sometimes still I, personally look at individual patient data when needed.
- **Audacious goals.** We set targets that initially seem impossible. In 2020, we set a small set of ambitious goals that we wanted to achieve by 2025. These goals ranged from changing medical guidelines to processing one million molecular diagnostic tests. At the time, we were in a tiny lab and even tinier office. Our daily test volume was approximately five tests per day, and our small team would 'high five' each time we were notified with a ping indicating a sample was picked up. Even our executive team thought our 5-year goals bordered on fantasy. However, each sample represented a patient receiving insights that could change the course of their healthcare journey, invigorating us to push harder. By March 2025, we conducted our millionth test and achieved every one of our seemingly impossible 2025 goals, by breaking them down into quarterly milestones and executing with precision.
- **Disciplined and focused.** Achieving such audacious goals has only been possible because we have been ruthless in saying "No" to any and all distractions. We did not get distracted by early-stage M&A discussions, investment outreaches outside of fundraising periods, seemingly lucrative partnerships, and me-too product expansions that could generate significant additional revenue. Anything that was outside the scope of our 5-year goals was not worked on.

- ***Pressure is a privilege.*** Our executive team adopts the motto, “pressure is a privilege.” If you are asked to deliver stretch goals, the implication is that we trust in your abilities to get the job done. We have found this trust to be well placed. Every time our executives are asked to deliver on ambitious goals, they see it as a badge of trust. And every time they run into a problem, they see it as an opportunity. When COVID-19 resulted in Ob/Gyn clinics restricting access to sales reps threatening our survival, we did not retreat. At a time that the US government had limited N95 masks, we were able to find and import them, preserving our ability to have safe conversations with the Ob/Gyns. We grew our test volume more than 10x during 2020, surpassing every quarterly goal that we had set before COVID-19. More recently, when we set a goal to decrease our COGS by approximately ~20% in a single year, instead of remarking on the difficulty of the goal, we broke it down to pieces, worked together as a team, and not only achieved but surpassed this challenging goal. This mindset has become one of our core strengths.
- ***Step-by-step deliberate approach.*** While we believe others in our industry poured hundreds of millions of dollars into fully automated labs that locked down their assays, we identified bottlenecks systematically, automating our facilities step-by-step. This deliberate progression has allowed us to remain nimble and build a proprietary and scalable laboratory infrastructure while continuously improving our products. It also provided us with the financial discipline that has become a competitive advantage.
- ***20-Mile March.*** We embrace what Jim Collins calls the “20-Mile March” philosophy. We play the long game with fanatical discipline and relentless execution regardless of external conditions. We do not overextend in good times or retreat in challenging ones. When the markets were rewarding growth at all costs, we prioritized sustainable growth over flashy but hollow and expensive expansion. Even during the darkest days of market volatility, we maintained our pace of growth, continuing to hire and grow past our competitors. This approach has enabled us to achieve in the first half of 2025 what many thought impossible: growing our revenue by 82% year-over-year while achieving positive non-GAAP net operating income — a feat almost unheard of in molecular diagnostics.
- ***1%’ers.*** Our hiring process is so rigorous that we select only 1% of all applicants. But this is not just about hiring the smartest or most talented people. This is about creating a collaborative culture that pushes the limits of what each individual could achieve on their own. This is about building a team that is empowered and capable of solving problems that have stumped the entire industry for decades. This is the philosophy of ONE. Walking through our labs and offices, you can feel the difference. Challenges are met not with complaints but with creative solutions. People move with purpose. This is not just another healthcare company; it is a gathering of minds determined to rewrite what is possible in molecular diagnostics.

We believe that these guiding principles enabled us to achieve a unique profile that combines powerful technology, category-defining products, and a differentiated financial position of 84% year-over-year growth and emerging profitability. We believe that these elements will make BillionToOne a generational company that can redefine the industry and achieve our goal of becoming the first molecular diagnostics company in the S&P 500.

The Opportunity & Long-Term Vision

The precision diagnostics market represents one of the greatest opportunities in healthcare today. As our understanding of the disease processes deepens, the ability to deliver precise, actionable information to clinicians becomes increasingly valuable. Our technology platform enables us to unlock this information and gives us an advantage to succeed in multiple high-growth markets, with our current products addressing a more than \$20 billion total addressable market (TAM), while our planned pipeline of products in development can increase this to over \$100 billion.

These numbers only hint at our true opportunity. The true opportunity is to not only change the standard of care for diagnostics but also enable new treatment paradigms. We are already seeing this. Our partnership with Johnson & Johnson has the potential to enable a therapy for hemolytic disease in fetuses and newborns, a high-risk condition that can result in fetal death. We are hearing more and more about pregnant mothers taking CF therapies for their affected babies during pregnancy, and their CF newborns not needing NICU stays or sometimes even passing newborn screening, an incredible outcome. Our goal is to make such success stories standard-of-care in the next five years.

Our next five-year goals for 2030 are much more ambitious and, in some instances, more than 10 times higher than 2025 goals we have already achieved. Yet, this time, our current investors who have witnessed our journey and executives on our team firmly believe they are achievable. They believe because they have seen our track record and know what is possible when a unique combination of talent, culture, and technology converges on a mission that matters.

I personally believe that when we look back a decade from now, we will see that the largest impact on pregnancy and cancer care of the past 100 years will have come from BillionToOne, powered by our technology and our people. That belief is what drives us. That is why we work tirelessly.

Why Go Public Now

This offering represents a pivotal moment in our journey. The capital we raise will accelerate our research and development initiatives, expand our commercial footprint, and enable us to bring our life-changing diagnostics to more patients.

But this offering is about more than capital. It is about setting the stage for our next phase of growth and impact. It is about building the foundation for a company that will stand among the most consequential healthcare innovators of our time.

We are not building just another successful company; we are changing the very landscape of healthcare. Millions of patients whose lives will be transformed may never know our name, but they will benefit from what we have built.

We invite you to join us in writing this next chapter of medical history.

Sincerely,



Oguzhan Atay, PhD
Co-Founder & CEO



Glossary

As used in this prospectus, unless we state otherwise or the context otherwise requires:

ACOG: American College of Obstetricians and Gynecologists—the primary medical organization that sets the guidelines, practice advisories, and standard of care for women’s healthcare

Amplification bias: One of the biases caused by PCR amplification during library preparation for NGS. Amplification bias in PCR occurs as different DNA sequences across the genome amplify at unequal rates due to slight variations in primer binding efficiency, sequence composition, or template accessibility. Because PCR amplification is exponential—doubling with each cycle—even small differences in amplification efficiency (e.g., 95% versus 90% per cycle) compound dramatically over 25 to 30 cycles of PCR, potentially causing certain sequences to be overrepresented by multiple folds, which can be particularly problematic when trying to accurately detect and quantify rare cfDNA fragments that may already constitute less than 1% of the total sample

ASP: Average selling price—The average payment BillionToOne receives per test (inclusive of any non-payments)

Calling threshold: For early cancer detection tests, this is the specific cutoff value at which a test result is classified as “positive” (cancer detected) rather than “negative” (no cancer detected)

CF: Cystic fibrosis—A genetic disorder that can be detected by UNITY tests

cfDNA: Cell-free DNA—Extracellular DNA in blood plasma that is shed from all tissues into the bloodstream. Due to its short half-life, cfDNA has a unique capability to provide a real-time snapshot of cellular turnover and can be used to diagnose and monitor disease

CNV: Copy number variant—A variation in gene copies that Northstar Select can detect

Control spike-in: A known quantity of an external molecule - such as synthetic RNA - added to a biological sample prior to measurement. This serves as an internal reference to monitor and correct for technical variation, enabling more accurate quantification and comparison across samples, especially in high-throughput sequencing and related assays

ctDNA: Circulating tumor DNA—Cell-free DNA released from tumor cells, which can be used as a biomarker for various cancer-related diagnostics

Methylation: A biochemical process where a methyl group (a carbon atom bonded to three hydrogen atoms) is added to a molecule, such as DNA. This process can change gene expression levels (increase expression of or silence genes). Hypermethylation of certain genes (e.g., those involved in regulation of cell division), is a hallmark for cancer

Mis-priming errors: One of the errors caused by PCR amplification during library preparation for NGS. Mis-priming errors occur when primers mistakenly stick to the incorrect region of test DNA, leading to the amplification of unintended or incorrect results

MolDX: Molecular Diagnostic Services program – establishes coverage and reimbursement for Medicare beneficiaries

MRD: Minimal residual disease—When a minimal amount of circulating tumor DNA shed from cancer cells remain after surgery or treatment

NGS: Next-generation sequencing refers to various high-throughput DNA sequencing technologies that have enabled rapid and comprehensive analysis of genetic material

NIPT: Non-invasive prenatal testing—Testing that uses cell-free DNA from maternal blood to assess fetal genetic risks

Non-specific binding bias: One of the biases caused by PCR amplification during library preparation for NGS. Non-specific binding bias occurs when DNA, proteins, or assay reagents bind to unintended targets, leading to reduced specificity, false-positive results, background noise, and ambiguity in test interpretation

PCR: Polymerase Chain Reaction—A laboratory technique that amplifies, or creates multiple copies of, a specific DNA sequence. PCR, initially developed in 1980s, is one of the most commonly used methods in molecular diagnostics. While PCR is still used as an initial step in many diagnostics for amplifying DNA, other methods (e.g., first Sanger sequencing and then NGS), have been used as a more precise read-out in diagnostics over time

Primer binding bias: One of the biases caused by PCR amplification during library preparation for NGS. Primer binding bias occurs when different PCR primers in a multiplex reaction are exponentially amplified at different rates, leading to dramatic differences in end-point PCR abundances of different sequences

QCT: Quantitative Counting Templates—BillionToOne’s patented synthetic DNA fragments that are the foundation of the smNGS platform. See “Business—Our Technology—The components of our platform—Quantitative Counting Templates (QCTs)”

Sample accessioning: The process in a laboratory where incoming specimens are received, logged, labeled, and assigned unique identifiers as soon as they arrive

SCD: Sickle cell disease—A hereditary red blood cell disorder that can be detected by UNITY tests

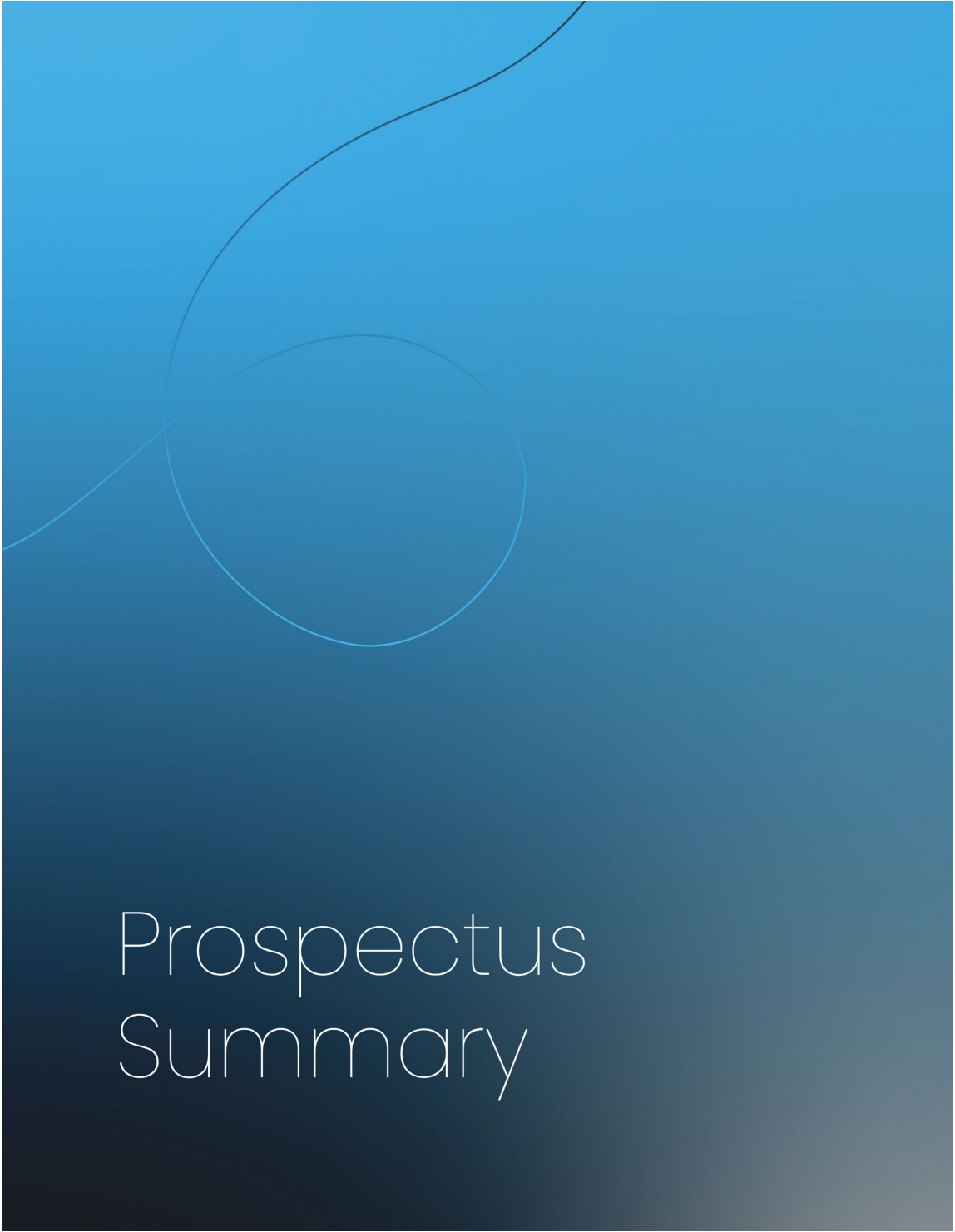
sgNIPT: Single-gene non-invasive prenatal testing—A type of test pioneered by BillionToOne that can detect single-gene disorders without paternal sample. See “Business—Our Product Portfolio” for a description of how sgNIPT is used in our products

SMA: Spinal muscular atrophy—A genetic disorder that can be detected by UNITY tests

smNGS: Single-molecule next-generation sequencing—BillionToOne’s platform technology that enables detection and quantification of blood-based genetic targets with single molecule sensitivity. See “Business—Our Technology—Breakthrough performance capabilities”

SNV: Single nucleotide variant—A variation in a gene’s sequence that Northstar Select can detect

TMS: Tumor Methylation Score—Northstar Response’s metric that measures the quantity of cancer-specific DNA methylation in blood for monitoring response to a cancer therapy



Prospectus summary

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our Class A common stock, you should carefully read this entire prospectus, including our financial statements and the related notes included elsewhere in this prospectus and the information set forth under the sections titled “Risk factors,” “Special note regarding forward-looking statements,” and “Management’s discussion and analysis of financial condition and results of operations.” Unless the context otherwise requires the terms “BillionToOne,” “company,” “our,” “us” and “we” in this prospectus to refer to BillionToOne, Inc.

Overview

BillionToOne is transforming healthcare by redefining molecular diagnostics. Our revolutionary single molecule NGS (smNGS) platform achieves what was once thought impossible – detecting and precisely quantifying genetic targets with single-molecule sensitivity. At the heart of this technological breakthrough lies our patented QCTs, enabling measurements at the physical limit of detection – the single DNA molecule. This leap forward addresses a fundamental limitation in healthcare – the inability to detect sparse but clinically crucial disease signals in cfDNA.

Our superior technology platform¹ has enabled us to build category-defining prenatal and oncology products. Our products reveal actionable insights from a simple blood draw that are fundamentally changing how diseases are diagnosed and treated, leading to a paradigm shift in personalized medicine.² We believe our novel smNGS platform technologies combined with our AI-enhanced integrated workflow, allows us to push the technology frontier forward and deliver on the full promise of non-invasive liquid biopsy, which we estimate has an annual market opportunity of over \$100 billion in the United States alone.³

Founded with the mission to remove the fear of the unknown through powerful and accessible smNGS-based diagnostics, we have swiftly transitioned from a research and development (R&D) focused company to a proven commercial organization. In 2019, we launched our first prenatal product, UNITY. UNITY is the first non-invasive prenatal test (NIPT) that uses cfDNA to provide fetal risk assessment for recessive conditions such as sickle cell disease (SCD) and cystic fibrosis (CF) without requiring a paternal sample or invasive procedures such as amniocentesis. Since then, we have established ourselves as a leader in the prenatal testing market and expanded our UNITY offering to cover comprehensive prenatal genetic needs from a single maternal blood draw. While we know of competitors working to develop and launch competing NIPTs for recessive conditions, we believe the differentiation of our smNGS technology and five years of accumulated data and publications will allow us to maintain our competitive advantage as this type of testing becomes the standard of care and significantly improves patient outcomes.⁴

In the oncology setting, ultrasensitive tests with real-time insights are required to effectively detect, diagnose, and treat patients with a diverse range of mutations and solid tumor types across the cancer care continuum. In 2023, we successfully leveraged our smNGS platform to launch two complementary pan-cancer liquid biopsy

¹ Our smNGS platform overcomes the technical noise that restrains the traditional NGS testing methods used by other diagnostic companies. Please see “Business—Our Technology” for more details.
² For further information on the impact of our products on how diseases are diagnosed and treated, please see “Business—Patient Case Studies”.
³ Half of this addressable market includes early detection, an area in which we have not yet begun specific product development or commercial sales, but we believe will be strongly enabled by our existing technology platform.
⁴ This is based on (i) our six months ended June 30, 2025 prenatal testing revenue as compared to the publicly disclosed prenatal testing revenue of Myriad Genetics, one of the largest laboratories for prenatal diagnostic testing, and (ii) recent ACOG practice advisory changes for RhD and fetal antigen NIPT have specifically cited our publications, resulting in changes to the standard of care.

tests – Northstar Select and Northstar Response. Our Northstar Select test is used to guide therapy selection and has been shown to detect over 50% more actionable solid tumor mutations than conventional liquid biopsies.⁵ Based on our knowledge of all widely available tests, Northstar Response is the only methylation-based assay that quantifies the amount of cancer (tumor burden) at the single molecule level without requiring a tissue biopsy, enabling real-time monitoring of patient response to therapy with unprecedented precision. Our Northstar tests give physicians extraordinary visibility into cancer profile and treatment response, enabling more informed and earlier treatment decisions that can fundamentally alter patient outcomes. Our business momentum is evidenced by our rapidly scaling commercial success and improving operational efficiency. Of approximately one million smNGS-based tests that we have processed since our initial launch, over 50% of them, or approximately 508,000 tests, were processed within the last 12 months ended June 30, 2025. For the year ended December 31, 2024, we generated revenue of \$152.6 million, representing 113% year-over-year growth, with a gross margin of 53% and net loss of \$41.6 million. We have incurred losses since inception, including a net loss of \$41.6 million and \$4.2 million for the year ended December 31, 2024 and six months ended June 30, 2025, respectively, and we had an accumulated deficit of \$286.4 million as of June 30, 2025. Our loss from operations for the six months ended June 30, 2024 and 2025 was \$22.8 million and \$3.9 million, respectively. Our business model has demonstrated improving operational leverage, which has enabled us to reach, on a non-GAAP income from operations basis, positive operating income after adjusting for stock-based compensation expense for the six months ended June 30, 2025. During this period, we generated revenue of \$125.5 million, representing 82% year-over-year revenue growth as compared to the six months ended June 30, 2024, with a gross margin of 65%. This translated to a non-GAAP net operating income of \$1.2 million for the six months ended June 30, 2025 compared to a non-GAAP net operating loss of \$18.9 million for the six months ended June 30, 2024, which represented an improvement of approximately \$20.1 million. Backed by our commitment to continued innovation and high-quality execution, we aim to lead the next wave of advancements in precision diagnostics, delivering profound benefits to patients, providers, and the broader healthcare system. Our four pillars of differentiation At BillionToOne, we are building a different type of molecular diagnostics company, backed by our four pillars of differentiation described below. We believe these competitive advantages are difficult for others to replicate and uniquely position us to redefine the industry. Our breakthrough technology platform. Our revolutionary platform achieves absolute quantification at the single molecule level, enabling us to: (i) accurately quantify genetic targets by eliminating biases introduced from next-generation sequencing (NGS);⁶ (ii) precisely measure and analyze intermediate biochemical reactions to optimize the performance of our assays; and (iii) reduce sequencing costs by obtaining a higher quality signal at each genomic location analyzed.⁷ Moreover, we believe our design-based R&D approach allows us to harness	
5	Bower, X., Wignall, J., Varga, M. G., Zhu, J., O'Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhard, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. (2025). Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling. <i>The Journal of Liquid Biopsy</i> , 100322.
6	PCR amplification during library preparation for NGS introduces significant biases and errors, including primer binding bias, mis-priming errors, non-specific binding, and amplification bias. When this inefficiency is amplified exponentially over several cycles, it leads to notable inaccuracies in sequencing results. Our QCTs act as a control when we conduct amplification and allow us to identify and remove the biases.
7	The cost of NGS scales with the total number of reads required per sample. In standard NGS, additional reads for each genomic location or sequencing of additional genomic locations may be needed to average out the noise associated with amplification biases. However, with QCTs, such biases are removed during analysis, increasing the overall signal quality. This can enable the laboratory to achieve the same diagnostic accuracy with significantly fewer total reads, reducing costs. For example, a typical test for aneuploidy NIPT screen may require interrogation of more than 10,000 genomic locations to average out the amplification bias that is present across locations whereas the same diagnostics may be possible by interrogation of a few hundred loci when control spike-ins and QCTs are used.

this technology and accurately predict the clinical performance of a novel assay before testing a single patient sample, which we believe accelerates time-to-market and significantly improves our commercial launch success rate.⁸ Collectively, these platform capabilities enable us to build better products while we simultaneously decrease costs. Our category-defining products. As demonstrated in multiple analytical and clinical studies, as well as peer reviewed publications, we have leveraged our smNGS platform to create differentiated prenatal and oncology products with 10 times greater precision versus other available tests. For example, our UNITY test has extended NIPT from detecting one million-plus base pair conditions to single base pair conditions. This advancement is already starting to impact the treatment options for babies affected by these severe recessive conditions. In addition, our Northstar Select and Response tests deliver superior sensitivity and precision, respectively, and can generate clinically relevant insights for late-stage cancer therapy selection and response monitoring that may otherwise have been missed or delayed through conventional liquid biopsy tests and/or imaging tools. We believe that each of our products has the potential to become the standard of care in its respective market. Furthermore, we believe our competitive moat will strengthen over time as we continue to enhance and expand our portfolio of ultrasensitive tests. Our ability to deliver rapid growth at scale. The differentiated nature of our products and our relentless commitment to improving the patient and provider experience have resulted in recurring use of our tests with extremely low customer churn. Our existing accounts have created a stable and growing revenue base with increasing penetration, and we see similar adoption trends in new clinics, as we continue our expansion within existing and new territories. Additionally, while our current products already address an estimated annual market opportunity of over \$20 billion in the United States, we believe that our R&D pipeline could eventually expand this annual addressable market to over \$100 billion.⁹ We believe this market setup, along with our scaling business, provides a significant opportunity for us to grow over the near and long-term horizon. Our superior efficiency. We believe our capital efficiency and emerging profitability set us apart from other molecular diagnostics companies especially at our scale. Since inception we have produced a track record of cost efficiency, demonstrated by limiting our accumulated deficit of \$282.2 million as of December 31, 2024. This figure is a small fraction of the accumulated deficits reported by certain of our public company competitors (Caris Life Sciences, Guardant Health, Natera, and Tempus AI) as of the same date.¹⁰ The important factors resulting in this efficiency are (i) our gross margin of 65% for the three months ended June 30, 2025, which has increased 14 percentage points year-over-year, (ii) our high sales efficiency driven by differentiated products, with our annualized revenue run-rate per sales representative at over \$1.8 million for the three months ended June 30, 2025, and (iii) disciplined operational practices supplemented by automation and AI. Going forward, our financial discipline will continue to be integral to our innovation efforts. By prioritizing efficiency, we have been able to consistently invest in R&D and commercial expansion while reducing losses over time and achieving profitability. In doing so, we believe we have established a differentiated financial profile that positions us for sustainable value creation.	
⁸	Because our technology platform is quantitative, we can often mathematically model and accurately predict assay performance in advance when designing new smNGS assays.
⁹	Half of this addressable market includes early detection, an area in which we have not yet begun specific product development or commercial sales, but we believe will be strongly enabled by our existing technology platform.
¹⁰	These competitors consist of different size companies, based on revenue, with product offerings that may not be directly comparable to our product offerings.

Background on cfDNA and the limitations of traditional NGS technologies

cfDNA represents one of the most promising biomarkers in modern precision medicine. cfDNA is continuously shed from all tissues into the bloodstream and has a short half-life of approximately one to two hours. This transient nature gives cfDNA a unique capability to provide a real-time snapshot of cellular turnover and can be used to diagnose and monitor disease, as both genetic and epigenetic properties of cfDNA directly reflect the originating tissue.

Despite its potential, the detection of cfDNA is fundamentally challenging due to its limited quantity in blood and short half-life. Certain conditions that stem from large scale genetic changes or generate abundant quantities of cfDNA in the bloodstream can be identified by previous testing approaches. However, other serious conditions may have lower DNA shedding rates which can result in very few relevant DNA fragments in the blood. These conditions are nearly undetectable with previous cfDNA detection techniques. For example, even in a late-stage cancer patient, there may only be one mutated cell-free tumor DNA molecule found in one tube of blood.

While traditional NGS has revolutionized genomic medicine over the past decade, it faces inherent limitations when applied to the analysis of cfDNA. Conventional NGS technologies are primarily limited to presence or absence detection. For example, within germline testing, which includes nearly unlimited input DNA material, the clinically relevant changes are detected at around 50% additional disease burden. However, in cfDNA applications, these clinically relevant changes can be at the level of 0.01% of cfDNA in blood. These applications require ultrasensitive quantification at the single molecule level that we believe is only possible with our smNGS platform.¹¹ Further complicating the challenge, cfDNA samples undergo numerous enzymatic, amplification, and other biochemical steps prior to sequencing. Each of these steps introduces technical noise that makes it harder for traditional sequencing technologies to accurately quantify the absolute and relative abundance of cfDNA sequences in the biological specimen, resulting in lower sensitivity and specificity.

Our proprietary single-molecule next-generation sequencing platform (smNGS)

We have developed a transformative technology platform that redefines the possibilities of cfDNA analysis. In the past, the significant advancements from polymerase chain reaction (PCR) to Sanger Sequencing to NGS expanded molecular diagnostics from being limited to infectious disease testing and human genome mapping to now becoming standard of care for genetic screening. Today, we are experiencing another step change as we believe our smNGS platform enables the absolute quantification of cfDNA and we believe overcomes the technical noise that restrains the traditional NGS testing methods used by other diagnostic companies. This breakthrough capability enables our non-invasive diagnostic tests to achieve performance characteristics previously only possible with invasive tissue biopsies from the affected organ.

The cornerstone of our platform is its ability to resolve and quantify individual DNA molecules with absolute precision. This single-molecule resolution provides extraordinary visibility into the biological signals present in a sample, even when the target DNA represents just one molecule among billions. Beyond mere detection, our technology enables absolute quantification of cfDNA, eliminating the reliance on relative measurements that has constrained previous approaches. This quantitative foundation allows us to transform every aspect of our operations in a measurable way, from research and development to clinical testing and quality control. While traditional diagnostic approaches have often relied on trial-and-error experiments to screen for incremental improvements, our smNGS platform does not. The quantitative nature of the data that our smNGS platform generates is critical to our success in creating ultrasensitive, differentiated molecular diagnostics.

¹¹ Stasik, S., Mende, M., Schuster, C., et al. Sensitive Quantification of Cell-Free Tumor DNA for Early Detection of Recurrence in Colorectal Cancer. *Front Genet.* (2021);12:811291.

Perhaps most significantly, we believe, our smNGS technology transcends the precision-versus-scale tradeoff that has limited legacy diagnostic methods. Conventional genetic analysis techniques, such as NGS and digital droplet PCR (ddPCR), typically sacrifice either sensitivity or multiplexing, i.e., ability to interrogate many genomic loci at the same time, forcing compromises in clinical utility.¹² We believe our platform eliminates this constraint, delivering both high sensitivity and broad genomic coverage simultaneously. This unique capability allows us to provide physicians and patients with more actionable information from cfDNA that was previously possible only with more invasive diagnostics. Our smNGS platform is powered by several patented technologies, most notably the use of synthetic DNA fragments, called QCTs. QCTs encode the molecular information in sequencing data which are subsequently decoded using proprietary machine learning and bioinformatic algorithms, enabling us to precisely quantify cfDNA. The precision and multiplexability of QCT-powered assays make them ideal for addressing clinically significant challenges where sensitivity of rare-variant detection or quantification necessary for longitudinal measurements is essential. The power of QCTs is best exemplified when the clinical problem itself is quantitative, as in the case of fetal risk assessment of recessive conditions during pregnancy and monitoring of response to therapy in a cancer patient. QCTs and our other smNGS technologies also serve as the backbone of our technical operations. We leverage this quantitative foundation to track samples throughout our workflows, to drive continuous operational improvement, and to support robust quality controls. For instance, QCTs detect cross-contamination down to the level of <0.001% and thereby enable the creation of carefully constructed and automated end-to-end laboratory workflows, including special laboratory infrastructure, that prevent such cross-contamination that could otherwise be a bottleneck on sensitivity and specificity of an assay.¹³ The financial impact of our technology platform is substantial. We believe the ability to quantify biomarkers enables us to rationally design and engineer superior diagnostic tests optimized for clinical performance, scalability, and cost of goods sold (COGS). Our smNGS platform therefore drives our differentiated financial performance both by enabling the development of unique products and by de-risking clinical studies before dedicating significant resources. Our platform is a key differentiator versus our peers in the molecular diagnostics space and is protected by a robust and growing collection of patents and proprietary know-how. Our solution and suite of products Our product portfolio of ultrasensitive tests touches everyone from the beginning of life, with prenatal genetic testing, to the end of life, with cancer therapy selection and response monitoring. We launched our initial prenatal product, UNITY, in 2019. Today, we believe it is becoming the new standard of care, as evidenced by two recent ACOG practice advisory changes that cited our publications in support of the change. With UNITY, we have leap-frogged the resolution of cfDNA testing from one million base-pair chromosomal abnormalities to single base-pair recessive conditions. In this highly competitive market with increasing commoditization, our differentiated UNITY Fetal Risk Screen remains the only cfDNA test for these conditions with peer-reviewed clinical publications. We have more recently entered the oncology market, initially focusing on addressing the highest unmet need areas of therapy selection and response monitoring in late-stage cancer patients. We intend to expand our	¹² Tsao, D. S., Silas, S., Landry, B. P., Itzep, N. P., Nguyen, A. B., Greenberg, S., Kanne, C. K., Sheehan, V. A., & Lo, Y. H. (2019). A novel high-throughput molecular counting method with single basepair resolution enables accurate single-gene NIPT. <i>Scientific Reports</i>, 9, 14382. ¹³ See our patent for "Quality Control Templates for Ensuring the Validity of Sequencing-Based Assays" U.S. Patent No. 11,629,381. See section entitled "Intellectual Property" on page 163 for more information.

oncology test offerings into testing of earlier stage cancer patients, including through MRD testing and potentially for early cancer detection. We are in the late stages of development of our first assay for MRD detection, and we anticipate launching this assay in 2026. We expect that any products we launch for MRD will be laboratory developed tests (LDTs), and the products would not be subject to FDA approval requirements.¹⁴ Longer term, we believe that our smNGS-based technology could address the sensitivity challenges of early-stage cancer detection; however, we have not yet started development in this area.¹⁵

To date, we have launched multiple products across these large addressable markets. We performed approximately 508,000 smNGS-based tests in the last 12 months ended June 30, 2025, with significant room to further grow test volume in both markets.

Prenatal products

PRENATAL



- Fetal Risk Screen: Inherited conditions
- Aneuploidy Screen: Chromosomal + microdeletion conditions
- Fetal RhD + Fetal Antigen NIPT: Non-alloimmunized and alloimmunized pregnancies

Traditional prenatal screening focuses on assessing a fetus' risk for larger chromosomal changes. However, many common and severe conditions are the result of much smaller genetic changes, in single base pairs. These recessively inherited conditions, including SCD, alpha thalassemia, beta-thalassemia, CF, and SMA, are collectively more common than aneuploidy conditions like Down syndrome. Yet these conditions cannot be directly tested with traditional NIPT since each condition requires the precise quantification of fetal cfDNA.

Given the technical challenges of directly assessing the fetal risk for these conditions, current medical guidelines recommend that every pregnant patient is offered carrier screening, with father screening then required if the mother is found to be a carrier. However, studies estimate that fewer than half of fathers complete the recommended screening due to barriers related to cost, availability, and willingness. As a result, approximately 58% of pregnancies affected by these recessive conditions are undetected by traditional screening workflows.¹⁶

Our UNITY Complete Fetal Risk Screen directly addressed these challenges and is the first test that uses cfDNA to provide precise fetal risk assessments for recessive conditions without requiring a paternal sample. In

¹⁴ Each of our genetic tests is an LDT. The FDA had historically taken the position that it had the authority to regulate LDTs as medical devices under the Federal Food, Drug, and Cosmetic Act but exercised enforcement discretion until it recently rescinded LDT regulations indicating that it does not have the authority to require clearance, de novo classification, or approval of LDTs prior to market release. As a result, our molecular diagnostic products are not currently subject to FDA approval requirements. While LDTs do not require FDA approval currently, they may be subject to state regulatory requirements. For example, many of our LDTs are approved by the New York's Clinical Laboratory Evaluation Program (CLEP), which reviews LDTs for accuracy. See "Risk Factors—Risks related to legal and regulatory matters—Our tests are currently marketed as LDTs, and future changes in FDA enforcement of LDTs could subject our operations to much more significant regulatory requirements." See also "Business—Government regulations—New York laboratory licensing."

¹⁵ While we have not yet started development in this area, the research work for MRD and our Select and Response tests is a necessary precursor to early detection development. We also believe that there is significant potential for our smNGS platform to accommodate products in this area. We believe the molecular information provided by our tests can assist in predicting the diagnostic pathway that can confirm the presence and tissue of origin of cancer.

¹⁶ Riku, S., Herman, M., et al. (2022). Reflex single-gene non-invasive prenatal testing is associated with markedly better detection of fetuses affected with single-gene recessive disorders at lower cost. *Journal of Medical Economics*.

addition, it reports fetal aneuploidy and 22q11.2 microdeletion, enabling complete genetic insights from a single maternal blood draw. We estimate the prenatal market represents an annual opportunity of over \$2.5 billion in the United States.¹⁷

Oncology products

ONCOLOGY


NORTHSTAR

- **Select:** Cancer treatment selection
- **Response:** Cancer treatment response monitoring
- **Minimum Residual Disease (MRD):** Cancer detection & surveillance post-surgery
In Development

Non-invasive liquid biopsy tests are a rapidly growing approach to detect and measure tumor DNA, driven by the increasing focus on molecular-targeted cancer treatments. However, current imaging and conventional liquid biopsy approaches present critical shortcomings, including missed actionable mutations and delays in detecting treatment response and progression.

In 2023, we entered the oncology market with two complementary products that leverage our smNGS platform to address these unmet needs. Northstar Select, our ultrasensitive liquid biopsy test, provides insights into appropriate therapies for stage III or IV cancer patients. In a head-to-head study presented at the American Society of Clinical Oncology (ASCO) annual meeting in 2024, our test demonstrated superior performance by detecting 51% more pathogenic and actionable SNVs and 109% more CNVs than conventional liquid biopsies.¹⁸ Northstar Select targets the therapy selection cancer diagnostics market, which we estimate is an annual United States market opportunity of over \$6 billion.¹⁹

We simultaneously launched Northstar Response, the only tissue-free, pan-cancer, smNGS-based liquid biopsy test that precisely measures thousands of genomic loci uniquely methylated in cancer to provide insight into dynamic changes in therapy response. Validation studies showed Northstar Response's consistent ability to detect changes in tumor fraction across more than 10 different cancer types, in some cases as much as six months earlier than indicated by imaging scans. Northstar Response targets the cancer therapy response diagnostics market, which we estimate is an annual United States market opportunity of over \$15 billion.¹⁹

The clinical value of our oncology portfolio is validated by physician adoption. More than 95% of oncologists who order our tests utilize both Northstar Select and Northstar Response in tandem, highlighting their complementarity in guiding cancer care.

Additional opportunities in oncology

We are actively developing additional diagnostic products to address critical needs across the cancer care continuum. Our current development efforts focus on MRD detection, leveraging our platform's exceptional

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See "Management's discussion and analysis of financial condition and results of operations—Key factors affecting our results of operations and performance" for more information regarding how these total addressable markets are calculated, including material assumptions.

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Bower, X., Wignall, J., Varga, M. G., Zhu, J., O'Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhard, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. (2025). Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling. The Journal of Liquid Biopsy, 100322.

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See "Management's discussion and analysis of financial condition and results of operations—Key factors affecting our results of operations and performance" for more information regarding how these total addressable markets are calculated, including material assumptions.

sensitivity to identify trace amounts of tumor DNA following curative-intent surgery in earlier stage cancers. We are developing a tissue-free, pan-cancer MRD test, which we expect to be commercially available in 2026. We estimate the annual United States market opportunity for MRD to be over \$30 billion.¹⁹ Longer term, we believe that our smNGS-based technology could address the sensitivity challenges of early-stage cancer detection. While we have not yet started development in this area, the research work that we have done for Northstar Response and MRD is a necessary precursor for early detection development. In particular, we believe that a sensitive tissue-free MRD test, which we have already de-risked by the recent launch of an ultra-sensitive response monitoring assay (Northstar Response v2), which can detect tumor DNA in blood down to a limit of detection (LOD) of 0.01%, can be technically equivalent to an early detection test for cancer.²⁰ We estimate the annual United States market opportunity for early detection to be over \$50 billion.²¹	
Our vision of powering AI-enabled personalized medicine for all	
Healthcare today stands at an inflection point, poised for transformation through the convergence of unprecedented molecular insights and artificial intelligence (AI). Despite significant advances in precision medicine, particularly in oncology where treatments have evolved from being organ-based to increasingly being mutation-based, response rates for many marketed targeted therapies can be as low as single-digit percentages in their indicated patient populations. Similarly, pregnancy care follows one-size-fits-all standardized protocols despite unique patient biology. Even with broader technological advances, clinicians still cannot reliably predict or prevent major complications like preterm birth, preeclampsia, and gestational diabetes. This sobering reality underscores a fundamental challenge: many current approaches to precision medicine often rely on single biomarkers that fail to capture the full complexity of disease biology and individual patient variation. We believe that these important problems can be addressed in the future with the combination of AI and smNGS technology.	
We believe AI-enabled personalized medicine can revolutionize healthcare delivery across all specialties. Truly personalized medicine requires the (i) characterization of the disease specific to each patient beyond the presence of the single mutation marker to quantification of disease biology of individuals at the single-molecule level, and (ii) integration of this characterization with multi-modal clinical history, powered by AI. We have already built products for this characterization, and we are starting to integrate our diagnostics with this multi-modal clinical history.	
Our approach to building AI-enabled precision medicine will begin with our ability to generate extraordinarily precise molecular data. As we continue to generate unique data via our smNGS platform, we are building a differentiated and clinically actionable genomics dataset. Our advantage stems from two key factors: first, our biomarker measurements achieve single-molecule precision and sensitivity, capturing the key disease-causing molecular signatures in cfDNA; and second, our response monitoring assay provides an objective measurement of how a patient is responding to a therapy. AI has recently unlocked widespread access to and analysis of multimodal patient clinical history data. This powerful combination positions us to harness AI for identifying distinct patient subgroups based on their specific biomarker profiles and for predicting how each subgroup will respond to different therapeutic approaches. By mapping these response patterns with extraordinary granularity, we believe we will be able to deliver personalized treatment recommendations based on each person's unique biology that maximize efficacy while minimizing adverse effects — moving precision medicine from aspiration to clinical reality.	
20	Both MRD and early-detection assays are designed to detect minute amounts of cancer DNA in blood (e.g., at levels of 0.01% or even lower). Given the trade off between specificity and sensitivity (LOD), this higher specificity can be, in principle, achieved by changing the calling threshold. As a part of our five-year strategic plan, we have included the necessary R&D funding for development of an early detection test that builds upon our earlier work.
21	See "Management's discussion and analysis of financial condition and results of operations—Key factors affecting our results of operations and performance" for more information regarding how these total addressable markets are calculated, including material assumptions.

While our AI-enabled vision represents the future of our platform, our commercial success today demonstrates the fundamental value of our existing products. Our existing products in prenatal and oncology have already demonstrated strong growth from zero to \$266.3 million annualized revenue run-rate (ARR) in five years as of June 30, 2025. As we expand into new and larger markets, we believe that our foundational smNGS platform will position us to become a generational healthcare company.

Our growth strategy

We are driving and leading a paradigm shift within precision diagnostics. Our vision is to leverage our novel smNGS platform to develop ultrasensitive diagnostic tests that enable personalized solutions and enhance patient outcomes. Our growth strategy to achieve this goal includes the following elements:

- Drive increased adoption of our existing products in the prenatal and oncology markets.
- Build beyond our extensive library of clinical evidence to support favorable coverage and reimbursement.
- Utilize our smNGS platform and R&D capabilities to efficiently expand and improve our portfolio of category-defining molecular diagnostic tests.
- Continue to deploy AI across our entire organization, including laboratory operations, to improve efficiency and productivity.
- Leverage our growing clinical dataset with AI to improve the utility of diagnostics and enable personalized medicine.

Recent developments

Preliminary unaudited operating results

We are in the process of finalizing our operating results as of and for the three months ended September 30, 2025. We have presented below certain preliminary operating results representing our estimates for the three months ended September 30, 2025. Actual results remain subject to the completion of our financial close processes. These preliminary estimates are based on currently available information and do not present all information necessary for an understanding of our operating results as of and for the three months ended September 30, 2025.

The preliminary estimates included in this prospectus have been prepared by and are the responsibility of our management. Our independent registered public accounting firm has not audited, reviewed, examined, compiled, nor applied agreed-upon procedures with respect to the preliminary estimates included below and does not express an opinion or any other form of assurance with respect thereto.

We expect to complete the preparation of our interim consolidated financial statements as of and for the three months ended September 30, 2025 following the completion of this offering. Although we are currently unaware of any items that would require us to make adjustments to the information set forth below, it is possible that we or our independent registered public accounting firm may identify such items as we complete the preparation of our interim consolidated financial statements and any resulting changes could be material. Factors that could cause the preliminary information to differ include, but are not limited to: additional adjustments arising from discovery of new information that affects accounting estimates; management judgment; or impacts of valuation methodologies underlying these estimated results. Accordingly, undue reliance should not be placed on these preliminary estimates. There can be no assurance that the range of our preliminary estimates of revenue, gross

profit and income (loss) from operations for the three months ended September 30, 2025, are indicative of what our results will be for the three months ended September 30, 2025, or for any future period. These preliminary estimates should be read together with the sections titled "Risk factors" and "Special note regarding forward-looking statements," and our historical financial statements and related notes included elsewhere in this prospectus.

	Three months ended September 30,		
	2024	2025	
	Actual	Low (estimated)	High (estimated)
(in thousands)			
Selected statement of operations data:			
Revenue:			
Prenatal revenue	\$ 36,600	\$	\$
Oncology revenue	1,138		
Clinical trial services revenue	681		
Total revenue	38,419		
Gross profit	20,215		
Income (loss) from operations	(12,634)		

We estimate our total revenue to be between \$ million and \$ million for the three months ended September 30, 2025, compared to \$38.4 million for the three months ended September 30, 2024, primarily due to .

We estimate our gross profit to be between \$ million and \$ million for the three months ended September 30, 2025, compared to \$20.2 million for the three months ended September 30, 2024, primarily due to .

We estimate our income (loss) from operations will improve to a range of approximately \$ to \$ million for the three months ended September 30, 2025, compared to a loss of \$12.6 million for the three months ended September 30, 2024, primarily due to .

	Three months ended September 30,	
	2024	2025
	Actual	(estimated)
Test volume:		
Total test volume	107,934	

We estimate our total test volume to be for the three months ended September 30, 2025, compared to 107,934 for the three months ended September 30, 2024. Additionally, we expect to report that we had approximately \$ million in cash and cash equivalents at September 30, 2025.

Risk factors summary

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks include the following:

- Our limited operating history and rapid growth make it difficult to evaluate our future prospects and the risks and challenges we may encounter.

- We primarily generate revenue from sales of our molecular diagnostic tests and we are highly dependent on them for our success.
- If the government and other third-party payors fail to provide coverage and adequate payment for our existing and future tests, our revenue and prospects for profitability will be harmed.
- Our revenue may be adversely affected if we are unable to successfully obtain reimbursement from the Medicare program and state Medicaid programs.
- Our billing and claim processing are complex and time-consuming, and any delay in submitting claims or failure to comply with applicable billing requirements could hinder collection and have an adverse effect on our revenue.
- The inherent variability of the insurance coverage and reimbursement landscape makes it difficult to predict amounts we ultimately collect for our tests, and if our estimates of revenue to be recognized materially differs from the revenue recorded for tests, our revenue or operating results may fall below investor or analyst expectations.
- The loss of key members of our senior management team or our inability to attract and retain highly skilled scientists, technicians, clinicians, and sales representatives could adversely affect our business.
- If our existing laboratory facilities become damaged or inoperable or we are required to vacate our existing facilities, our ability to perform our tests and pursue our research and development efforts may be jeopardized.
- Our tests in development may not be clinically effective or may never achieve significant commercial market acceptance and our test offerings that we have recently launched may not be commercially successful.
- If our products do not meet the expectations of patients and our customers, our operating results, reputation and business could suffer.
- International trade policies, including tariffs, sanctions and trade barriers may adversely affect our business, financial condition, results of operations and prospects.
- New product development and commercialization involve a lengthy and complex process and we may be unable to develop or commercialize new products on a timely basis or at all.
- Any inability to effectively protect our proprietary technologies could harm our competitive position.
- We have identified material weaknesses in our internal control over financial reporting. If our remediation of such material weaknesses is not effective, or if we identify additional material weaknesses in the future or otherwise fail to develop and maintain effective internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable laws and regulations could be impaired.

The summary risk factors described above should be read together with the text of the full risk factors in the section titled “Risk factors” and the other information set forth in this prospectus, including our financial statements and the related notes. The risks summarized above or described in full elsewhere in this prospectus are not the only risks that we face. Additional risks and uncertainties not presently known to us, or that we currently deem to be immaterial, may also materially adversely affect our business, financial condition, results of operations, and future growth prospects.

Channels for disclosure of information

Following the closing of this offering, in addition to filings with the Securities and Exchange Commission (SEC), we intend to announce material information to the public via the investor relations page on our website, press releases, public conference calls, public webcasts, our X handle (@BillionToOneInc) and our LinkedIn feed.

Any updates to the list of disclosure channels through which we will announce information will be posted on the investor relations page on our website.

Corporate and other information

We commenced operations in 2016 as a Delaware corporation. Our principal executive offices are located at 1035 O'Brien Drive, Menlo Park, CA 94025. Our telephone number is (650) 460-2551. Our website address is www.billiontoone.com. The information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus.

"BillionToOne" and the BillionToOne logo, UNITY Complete, Northstar Select, Northstar Response, UNITY Screen (registered in the EU and UK), Quantitative Counting Templates, QCTs, UNITY Fetal Risk, UNITY Aneuploidy, UNITY Fetal Antigen, Tumor Methylation Score, and other trademarks or service marks of BillionToOne, Inc. appearing in this prospectus are the property of BillionToOne, Inc. This prospectus contains additional trade names, trademarks, and service marks of others, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or ™ symbols.

Implications of being an emerging growth company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act). An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

- a requirement to have only two years of audited financial statements and only two years of related selected financial data and management's discussion and analysis of financial condition and results of operations disclosure in this prospectus;
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002;
- an exemption from implementation of new or revised financial accounting standards until they would apply to private companies and from compliance with any new requirements adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotation;
- reduced disclosure obligations regarding executive compensation arrangements; and
- no requirement to seek nonbinding advisory votes on executive compensation or golden parachute arrangements.

We may take advantage of some or all these provisions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier to occur of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which our annual gross revenue is

\$1.235 billion or more, or (c) in which we are deemed to be a "large accelerated filer," under the rules of the SEC, which means the market value of our equity securities that is held by non-affiliates exceeds \$700 million as of the prior June 30th, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

We have elected to take advantage of the extended transition period to comply with new or revised accounting standards and to adopt certain of the reduced disclosure requirements available to emerging growth companies. As a result of the accounting standards election, we will not be subject to the same implementation timing for new or revised accounting standards as other public companies that are not emerging growth companies, which may make comparison of our financials to those of other public companies more difficult. In addition, the information that we provide in this prospectus may be different than the information you may receive from other public companies in which you hold equity interests. Further, it is possible that some investors will find our Class A common stock less attractive as a result of these elections, which may result in a less active trading market for our Class A common stock and higher volatility in our stock price.

The offering	
Class A common stock offered by us	shares.
Option to purchase additional shares	We have granted the underwriters an option to purchase up to additional shares of Class A common stock from us at any time within 30 days from the date of this prospectus.
Class A common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares of Class A common stock in full).
Class B common stock to be outstanding immediately after this offering	shares.
Total Class A and Class B common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares of Class A common stock in full).
Use of proceeds	We estimate the net proceeds from the sale of shares of our Class A common stock this offering will be approximately \$ million, or \$ million if the underwriters exercise their option to purchase additional shares of Class A common stock in full, assuming an initial public offering price of \$ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, for working capital and other general corporate purposes, including to fund our growth, research and development initiatives, technology development, working capital, and operating expenses. See the section titled “Use of proceeds” for additional information.
Voting rights	Each share of our Class A common stock entitles its holder to one vote on all matters to be voted on by stockholders generally. Each share of our Class B common stock entitles its holder to 15 votes on all matters to be voted on by stockholders generally. Holders of our Class A common stock and Class B common stock will generally vote together as a single class, unless otherwise required by law or our amended and restated certificate of incorporation (the Post-IPO Certificate of Incorporation).

Oguzhan Atay, our Chief Executive Officer and Co-Founder, and David Tsao, our Chief Technology Officer and Co-Founders (each, a Founder, and together, the Co-Founders), will beneficially own 100% of our outstanding Class B common stock and, as a result, Drs. Atay and Tsao will beneficially own approximately % and approximately %, respectively, of the voting power of our outstanding capital stock immediately following this offering, assuming no exercise of the underwriters' option to purchase additional shares of Class A common stock.

As a result, our Co-Founders may have significant influence over the outcome of matters submitted to our stockholders for approval, including the election of our directors and the approval of any change of control transaction. These risks are more fully described in the section titled "Risk factors." For additional information, see the sections titled "Principal stockholders" and "Description of capital stock."

All of the outstanding shares of our Class B common stock will convert automatically on a one-for-one basis into shares of our Class A common stock upon the earliest of (i) seven years from the date of filing the Post-IPO Certificate of Incorporation and (ii) the date specified by a vote of the holders of Class B common stock representing a majority of the outstanding shares of Class B common stock. In addition, each share of Class B common stock held by a Founder and such Founder's permitted transferees will automatically convert into one share of Class A common stock upon the earlier of (i) the date that is between 90 days and 270 days, as determined by our Board of Directors, after the death or incapacitation of such Founder or (ii) the date that is between 61 and 180 days, as determined by our Board of Directors, after the date on which such Founder is no longer serving as an officer or director of the Company. See the section titled "Description of capital stock—Common stock."

Directed share program

At our request, the underwriters have reserved up to 5% of the shares of Class A common stock being offered by this prospectus for sale, at the initial public offering price, to our officers, directors and employees through a directed share program. Shares purchased through the directed share program will not be subject to a lock-up restriction, except in the case of shares purchased by any of our directors or officers. We do not know if these parties will choose to purchase all or any portion of these reserved shares, but the number of shares of our Class A common stock available for sale to the general public will be reduced to the extent these individuals or entities purchase such reserved shares. Any reserved shares that are not so purchased will be offered by the underwriters to the

general public on the same terms as the other shares offered by this prospectus. J.P. Morgan Securities LLC will administer our directed share program. See the section titled "Underwriting—Directed share program" for additional information.

Risk factors

See the section titled "Risk factors" for a discussion of factors that you should consider carefully before deciding to invest in our Class A common stock.

Proposed Nasdaq Global Select Market trading symbol "BLLN"

The number of shares of our common stock to be outstanding after this offering is based on 35,616,629 shares of our Class A common stock and 4,552,650 shares of our Class B common stock outstanding as of June 30, 2025, after giving effect to the Preferred Stock Conversion, the Reclassification and the Class B Stock Exchange (each as defined below), in each case as if they had occurred on June 30, 2025, and excludes:

- 8,930,919 shares of our Class A common stock issuable upon the exercise of stock options outstanding as of June 30, 2025 under our 2018 Stock Plan, as amended (the 2018 Plan), at a weighted-average exercise price of \$10.59 per share;
- 1,224,549 shares of our Class A common stock issuable upon the exercise of outstanding stock options that were granted subsequent to June 30, 2025 under our 2018 Plan, at a weighted-average exercise price of \$28.88 per share;
- up to 9,660 shares of our Class A common stock issuable upon the exercise of a redeemable convertible preferred stock warrant (the A-6 Warrant) for an exercise price of \$2.5879 per share;
- up to 80,357 shares of our Class A common stock issuable upon the exercise of a 2021 common stock warrant (the 2021 Common Warrant) for an exercise price of \$2.80 per share;
- up to 41,209 shares of our Class A common stock issuable upon the exercise of a 2022 common stock warrant (the 2022 Common Warrant) for an exercise price of \$10.92 per share;
- shares of our Class A common stock reserved for future issuance under our 2025 Equity Incentive Plan (the 2025 Plan), which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, as well as any future increases in the number of shares of our Class A common stock reserved for issuance under the 2025 Plan; and
- shares of our Class A common stock reserved for future issuance under our 2025 Employee Stock Purchase Plan (ESPP), which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, as well as any future increases in the number of shares of our Class A common stock reserved for issuance under the ESPP.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- the automatic conversion of all 29,084,235 outstanding shares of our redeemable convertible preferred stock into an aggregate of 29,084,235 shares of our common stock immediately prior to the completion of this offering (the Preferred Stock Conversion);
- the automatic adjustment of the A-6 Warrant into a warrant to purchase 9,660 shares of our common stock immediately prior to the completion of this offering;

- the filing and effectiveness of our Post-IPO Certificate of Incorporation immediately prior to the completion of this offering, which, among other things, will reclassify all outstanding shares of our common stock into an equal number of shares of Class A common stock (the Reclassification), and the adoption of our amended and restated bylaws (the Post-IPO Bylaws), which will become effective upon the filing of our Post-IPO Certificate of Incorporation;
- the exchange of an aggregate of 4,552,650 shares of Class A common stock held by our Co-Founders, for an equivalent number of shares of our Class B common stock, to be effected immediately prior to the completion of this offering pursuant to the terms of an exchange agreement entered into with us (the Class B Stock Exchange);
- no exercise, settlement or termination of the outstanding options or warrants described above; and
- no exercise by the underwriters of their option to purchase up to additional shares of our Class A common stock in this offering.

Summary financial data

The following table sets forth our summary statements of operations data for the years ended December 31, 2023 and 2024 and the six months ended June 30, 2024 and 2025, as well as our summary balance sheet data as of June 30, 2025. We derived the summary statements of operations data for the years ended December 31, 2023 and 2024 from our audited financial statements included elsewhere in this prospectus. The summary condensed statements of operations data for the six months ended June 30, 2025 and 2024 and summary balance sheet data as of June 30, 2025 have been derived from our unaudited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future. When you read this summary financial data, it is important that you read it together with the historical financial statements and the related notes included elsewhere in this prospectus, as well as the section titled “Management’s discussion and analysis of financial condition and results of operations.”

(in thousands, except per share data)	Year ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Statements of operations data:				
Revenue	\$ 71,729	\$ 152,582	\$ 69,086	\$ 125,536
Cost of revenue	54,421	71,667	34,105	44,098
Gross profit	17,308	80,915	34,981	81,438
Operating expenses:				
Research and development	22,414	36,596	16,050	22,181
Selling, general and administrative	64,389	91,465	41,751	63,199
Total operating expenses	86,803	128,061	57,801	85,380
Loss from operations	(69,495)	(47,146)	(22,820)	(3,942)
Other income (expense):				
Interest income	3,456	5,819	2,196	2,957
Interest expense	(3,272)	(2,386)	(1,917)	(72)
Net gain on extinguishment of debt	—	7,289	8,635	—
Change in fair value of term loan	—	(3,137)	—	(3,102)
Change in fair value of convertible notes	(12,921)	(835)	(835)	—
Other expenses, net	(442)	(1,145)	(443)	39
Total other (expense) income	(13,179)	5,605	7,636	(178)
Loss before provisions for income taxes	(82,674)	\$ (41,541)	(15,184)	(4,120)
Provision for income taxes	9	29	5	114
Net loss	\$ (82,683)	\$ (41,570)	\$ (15,189)	\$ (4,234)
Net loss per share, basic and diluted⁽¹⁾	\$ (8.45)	\$ (4.12)	\$ (1.52)	\$ (0.41)
Weighted-average shares used in computing net loss per share, basic and diluted⁽¹⁾	9,783	10,080	10,020	10,349
Pro forma net loss per share, basic and diluted⁽²⁾				
Pro forma weighted-average shares used in computing pro forma net loss per share, basic and diluted⁽²⁾				

- (1) See Note 14 to our audited financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per share attributable to common stockholders and the weighted-average shares used in computing the per share amounts.
- (2) Pro forma basic and diluted net loss per share attributable to common stockholders has been prepared to give effect to adjustments to our capital structure arising in connection with the completion of this offering and is calculated by dividing the pro forma net loss attributable to common stockholders by the pro forma weighted-average common shares outstanding for the period. Pro forma weighted-average common shares outstanding is computed by adjusting the weighted-average common shares outstanding to give pro forma effect to the automatic conversion of all shares of our redeemable convertible preferred stock outstanding as of June 30, 2025 into shares of common stock as if such conversion had occurred on January 1, 2024. Pro forma basic and diluted net loss per share attributable to common stockholders does not include the effect of the shares expected to be sold in this offering.

(in thousands)	As of June 30, 2025		
	Actual	Pro forma ⁽¹⁾	Pro forma as adjusted ⁽²⁾⁽³⁾
Balance sheet data:			
Cash and cash equivalents	\$ 188,958	\$	\$
Working capital ⁽⁴⁾	196,279		
Total assets	312,633		
Total liabilities	143,477		
Long term debt	52,072		
Redeemable convertible preferred stock	419,409		
Total stockholders' (deficit) equity	(250,253)		

- (1) The pro forma balance sheet data gives effect to (i) the Preferred Stock Conversion, (ii) the Reclassification, (iii) the Class B Stock Exchange, (iv) the conversion of the A-6 Warrant to a warrant to purchase common stock and the related reclassification of the warrant liability to stockholders' equity, and (v) the filing and effectiveness of our Post-IPO Certificate of Incorporation, all of which will occur immediately prior to the completion of this offering.
- (2) The pro forma as adjusted balance sheet data reflects (i) the pro forma adjustments described in footnote (1) above; and (ii) the sale by us of _____ shares of Class A common stock in this offering at the assumed initial public offering price of \$ _____ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) Each \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, each of pro forma as adjusted cash and cash equivalents, working capital, total assets, and total stockholders' (deficit) equity by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares offered by us would increase or decrease, as applicable, each of pro forma as adjusted cash and cash equivalents, working capital, total assets, and total stockholders' (deficit) equity by approximately \$ _____ million, assuming the assumed initial public offering price per share remains the same, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price, number of shares offered, and other terms of this offering determined at pricing.
- (4) We define working capital as current assets less current liabilities. See our financial statements and related notes appearing elsewhere in this prospectus for further details regarding our current assets and current liabilities.

Non-GAAP financial measures

To supplement our financial statements, which are prepared and presented in accordance with generally accepted accounting principles in the United States (GAAP), we use the following non-GAAP financial measures for financial and operational decision-making and as a means to assist us in evaluating period-to-period comparisons. By excluding the impact of certain items that we believe do not directly reflect our underlying operations, we are of the opinion that non-GAAP operating loss and non-GAAP net loss provide meaningful supplemental information regarding our performance. However, there are a number of limitations related to the use of non-GAAP financial measures, and these non-GAAP measures should be considered in addition to, not as a substitute for or in isolation from, our financial results prepared in accordance with GAAP. Other companies, including companies in our industry, may calculate these non-GAAP financial measures differently or not at all, which reduces their usefulness as comparative measures.

The following table summarizes our non-GAAP financial measures for each period presented below. See the section titled “Management’s discussion and analysis of financial condition and results of operations—Non-GAAP financial measures” for additional information and reconciliations of our non-GAAP financial measures to the most directly comparable financial measures prepared in accordance with GAAP.				
(in thousands)	Year ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Non-GAAP income (loss) from operations	\$ (64,641)	\$ (38,784)	\$ (18,915)	\$ 1,164
Non-GAAP net income (loss)	(64,908)	(36,525)	(19,084)	3,974
EBITDA	(76,984)	(37,934)	(12,031)	(3,465)
Adjusted EBITDA	(59,209)	(32,889)	(15,926)	4,743

Risk factors

Investing in our Class A common stock involves a high degree of risk. You should carefully consider the following risks and uncertainties described below, together with all of the other information contained in this prospectus, including our financial statements and the related notes and the section titled "Management's discussion and analysis of financial condition and results of operations," before making a decision to invest in our Class A common stock. The risks and uncertainties described below are not the only ones we may face. Our business, financial results, or prospects could also be harmed by additional risks and uncertainties not currently known to us or that we currently do not believe are material to disclose. Any of the following risks could have an adverse effect on our business, financial results, and prospects and could cause the market price of our Class A common stock to decline, which would cause you to lose all or part of your investment.

Risks related to our business and strategy

Our limited operating history and rapid growth make it difficult to evaluate our future prospects and the risks and challenges we may encounter.

We were founded in 2016 and received our first commercial test sample in 2019. We have since experienced rapid growth in revenue, headcount, adoption of our products and testing volume. We operate in a highly competitive market characterized by rapid technological advances. Our business has evolved, and we expect it to continue to evolve, over time to remain competitive. Our limited operating history, evolving business, rapid growth and ambitious goals make it difficult to evaluate our future prospects and the risks and challenges we may encounter, and may increase the risk that we will not continue to grow at or near historical rates. Further, these factors may make it difficult for us to accurately project the future performance of our business.

We intend to continue to expand our overall business, customer base, headcount and operations, and managing our growth will also require significant expenditures and allocation of valuable management resources. Continued growth increases the challenges involved in:

- recruiting, training and retaining sufficient skilled technical, marketing, sales and management personnel;
- preserving our high performing culture, core values and entrepreneurial environment;
- developing and improving our internal administrative infrastructure, particularly our financial, operational, compliance, recordkeeping, communications and other internal systems;
- maintaining high levels of satisfaction with our products among our customers; and
- effectively managing expenses related to any future growth.

We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in rapidly changing industries. Our future financial performance and our ability to commercialize our products, to increase our sales and to compete effectively will depend, in part, on our ability to manage our potential future growth effectively, without compromising quality. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations and our business, financial condition and results of operations could be adversely affected.

We primarily generate revenue from sales of our molecular diagnostic tests and we are highly dependent on them for our success.

Our ability to execute our growth strategy and become or remain profitable is highly dependent on the continued adoption and use of our molecular diagnostic tests, which are our primary source of revenue. Continued adoption and use of our tests will depend on several factors, including the prices we charge for our tests, the scope of coverage and amount of reimbursement available from third-party payors for our tests, the availability of clinical data that supports the value of our tests and the inclusion of our tests in industry treatment guidelines. In addition, many healthcare providers have existing relationships with companies that develop molecular diagnostic tests, including our competitors, and may continue to use their tests instead of ours. If we are unable to achieve or maintain commercial success for our tests, our business, results of operations and financial condition would be materially and adversely affected. We cannot assure that our tests will continue to maintain or gain market acceptance, and any failure to do so would materially harm our business and results of operations.

If the government and other third-party payors fail to provide coverage and adequate payment for our existing and future tests, our revenue and prospects for profitability will be harmed.

Our business depends on our ability to obtain and maintain adequate coverage and reimbursement from third-party payors and patients. Reimbursement from third-party payors for our tests represented more than 90% of our revenue for each of the years ended December 31, 2023 and 2024, and we expect government and commercial third-party payors to continue to be our primary source of payments. If we are unable to obtain or maintain coverage or adequate reimbursement from, or achieve in-network status with, third-party payors for our existing or future tests, our ability to generate revenue will be limited. For example, physicians may be reluctant to order our tests due to the potential of a substantial out-of-pocket cost to the patient if reimbursement coverage is unavailable or insufficient.

The insurance landscape, particularly for molecular diagnostics, is continually changing and our efforts to broaden reimbursement for our tests with third-party payors may not be successful. Third parties, such as commercial health insurers and government programs, from whom we have received reimbursement may withdraw coverage or decrease the amount of reimbursement for our tests at any time and for any reason, or may otherwise adopt requirements, programs or policies that may restrict or adversely affect our business. In addition, in some cases, our tests or their uses within certain populations are considered experimental by third-party payors and, as a result, some payors have decided not to cover or reimburse for such tests. Some payors may not load our Proprietary Laboratory Analyses (PLA) codes into their system, necessitating us to bill multiple codes for multiple conditions analyzed in a single panel test, resulting in varied billing practices and limiting our reimbursement in those situations. Payors may also dispute our billing or coding practices. Based on any of the foregoing, third-party payors may also decide to deny payment or recoup payment for testing that they contend to have been not medically necessary, against their coverage determinations, or for which they have otherwise overpaid, and we may be required to refund reimbursements already received or otherwise bring legal action to defend our position. We deal with demands for overpayment recoupment from third-party payors from time to time in the ordinary course of our business, and it is likely that we will continue to do so in the future. If a third-party payor denies payment for testing, the reimbursement revenue for our testing could decline. If a third-party payor successfully proves that payment for prior testing was in breach of contract or otherwise contrary to law, they may recoup payment or bring legal action to do so, which amounts could be significant and would adversely impact our results of operations, and it may decrease reimbursement going forward. We may also decide to negotiate and settle with a third-party payor in order to resolve an allegation of overpayment.

In addition, third-party reimbursement for our tests is based on professional society practice guidelines around the tests performed by our products. These guidelines are issued by medical professional societies in the

prenatal and oncology clinical areas, such as ACOG for our prenatal tests and the National Comprehensive Cancer Network (NCCN) for our oncology tests. While ACOG guidelines generally acknowledge that NIPT is the most sensitive screening option for, and/or are generally supportive of NIPT in, average-risk pregnancies in addition to high-risk pregnancies, and NCCN is generally supportive of comprehensive genomic profiling tests, a category that includes Northstar Select, not all of our current tests are covered under practice guidelines, and we cannot predict whether our future tests will be covered by such guidelines. Further, medical professional societies, at times, change their guidelines. In that case, our tests may no longer be covered, which could negatively affect our ability to obtain reimbursement, or the tests offered by our competitors may be more highly preferred by the ordering providers as a result of a change in a medical guideline.

While our primary prenatal tests, such as carrier testing and aneuploidy, have broad guideline support and payor coverage, certain add-ons of our prenatal tests, such as the 22q microdeletion component of UNITY Aneuploidy NIPT or the single-gene NIPT component of our UNITY Fetal Risk Screen, are covered by only a small number of insurance companies, due to more limited, or non-existent, medical guideline support. In oncology, Northstar Select is covered broadly by Medicare, but more narrowly for only certain indications (e.g., lung cancer) by commercial third-party payors. Northstar Response is currently neither covered by Medicare nor by many insurance companies.

In that case, our tests may no longer be covered, which could negatively affect our ability to obtain reimbursement, or the tests offered by our competitors may be more highly preferred by the ordering providers as a result of a change in a medical guideline.

If a third-party payor denies coverage, it may be difficult for us to collect from the patient. In particular, we are often unable to collect the full amount of a patient's responsibility where we are an out-of-network provider and the patient is left with a large balance, despite our efforts to collect. As a result, we cannot always collect the full amount due for our tests when third-party payors deny coverage, cover only a portion of the invoiced amount or the patient has a large cost-sharing obligation. We believe that our billing policies and our patient collection practices are compliant with applicable laws and reimbursement policies. However, from time to time we receive inquiries from third-party payors regarding our billing policies and collection practices. We address these inquiries as and when they arise, but there is no guarantee that we will always be successful in addressing such concerns, which may result in a third-party payor deciding to reimburse for our tests at a lower rate or not at all, seeking recoupment of amounts previously paid to us, or bringing legal action to seek recoupment of previous amounts paid. Any of such occurrences could cause third-party payor revenue for our testing, which represented more than 90% of our revenue for each of the years ended December 31, 2023 and 2024, to decline. Additionally, if we were required to make a repayment, such repayment could be significant, which would adversely impact our results of operations, and we might be required to restate our financials from a prior period, which would likely cause the market price of our Class A common stock to decline. As part of our revenue recognition process, we estimate the expected amount of consideration to be received from our tests using all the information (historical, current and forecasted) that is reasonably available to identify possible consideration amounts. The estimate of revenue is affected by, among other factors, changes in payor mix, payor collections, current customer contractual requirements, experience with collections from third-party payors, and changes in medical policies. We have experienced, and may continue to experience, positive and negative changes in our revenue estimates for previously delivered tests as a result of third-party payors disputing our claims or denying payment for tests that we have performed or from changes in the estimated transaction price due to contractual adjustments, obtaining updated information from payors and patients that was unknown at the time the performance obligation was met and settlements with third-party payors. While we believe our revenue recognition process is reasonable and performed in accordance with applicable accounting standards, we cannot guarantee that our revenue estimates for our tests will be accurate or equal the amount of cash actually collected or that we will not continue to recognize positive or negative changes in our revenue for tests performed in prior periods.

Given the efforts to control and reduce healthcare costs, in the United States and internationally, available levels of reimbursement may change for our current and future products, if authorized for marketing. Third-party reimbursement and coverage may not be available or adequate in either the United States or international markets, which may reduce the demand for our products or our ability to sell our products on a profitable basis. Additionally, the U.S. government may propose and pass legislation designed to reduce the cost of healthcare. We expect that there will continue to be federal and state proposals to implement governmental controls or impose healthcare requirements. In addition, the Medicare and Medicaid programs and increasing emphasis on managed care in the United States will continue to put pressure on product pricing. Cost control initiatives could decrease the price that we would receive for any tests in the future, which would limit our revenue and profitability.

Our revenue may be adversely affected if we are unable to successfully obtain reimbursement from the Medicare program and state Medicaid programs.

The Centers for Medicare & Medicaid Services (CMS) plays a crucial role in determining reimbursement rates for all Current Procedural Terminology (CPT) codes, which are vital for billing and payment for our tests. Annually, CMS publishes these rates in the Clinical Laboratory Fee Schedule (CLFS), providing a comprehensive guideline for laboratories and healthcare providers. If CMS decides to alter the reimbursement rates for the CPT codes associated with the company's tests, it could have an adverse effect on our revenues. Any such changes could impact not only Medicare coverage but also the reimbursement landscape from Medicaid programs and commercial third-party payors because many private insurance companies and state Medicaid plans establish their payment rates as a percentage of the amounts that Medicare allocates for the same CPT codes. Consequently, any modifications in CMS's reimbursement structure could lead to reduced coverage or lower reimbursement rates for our tests.

The Protecting Access to Medicare Act of 2014 (PAMA) introduced a multi-year pricing program and new payment methodology to calculate the rates for tests listed under the CLFS that are reimbursable by Medicare Part B. Under PAMA, services payable by Medicare under the CLFS are adjusted based on negotiated payment rates paid by private payors for the same test reported by an "applicable laboratory" to CMS. However, the PAMA reporting requirements were suspended in 2021 and have continued to be delayed, most recently until 2026, which in turn has not resulted in rate reductions under the Medicare Part B CLFS. Accordingly, any decrease in the reimbursement we receive under the CLFS due to PAMA in the future may negatively impact our revenue when the PAMA rates are implemented. In addition, federal budgetary limitations and changes in healthcare policy, such as the creation of broad limits for our tests and requirements that beneficiaries of federal health care programs pay for, or pay for higher portions of, clinical laboratory tests or services received, could substantially diminish the utilization of our tests, increase costs and adversely affect our ability to generate revenue and achieve profitability.

It is estimated that nearly half of all births in the United States are to state Medicaid program beneficiaries. Each state's Medicaid program has its own coverage determinations related to our testing, and several state Medicaid programs do not provide coverage for our testing.²² Even if our testing is covered by a state Medicaid program, we must be recognized as an enrolled Medicaid provider by the state in which the Medicaid beneficiary receiving the services resides in order for us to be reimbursed by a state's Medicaid program, including under a Medicaid managed care plan. Furthermore, in certain states that have implemented managed care organizations (MCOs) that are typically operated by commercial third-party payors, we may also need to contract with one or more MCOs as a participating network provider for us to be reimbursed for testing services that we provide to a Medicaid beneficiary in such state.

²² Our carrier screen test is not covered by Alabama, Michigan, or Nevada, and our aneuploidy test is not covered by Nebraska, Nevada or Utah. State Medicaid coverage for our RhD and fetal antigen tests is currently uncommon. Our oncology test are covered at the federal level by Medicare. Medicaid coverage for our oncology tests is less relevant, as the vast majority of cancer patients do not have Medicaid coverage.

Our Union City laboratory, where our prenatal tests are processed, is currently enrolled as a Medicaid provider in over 40 states. However, even if we are recognized as a Medicaid provider in a state, the Medicaid reimbursement amounts are sometimes as low, or lower, than the Medicare reimbursement rate. In addition, from time to time we receive requests from state Medicaid programs seeking information or documents to determine eligibility for and the amount of Medicaid reimbursement. As a result of all of these factors, some state Medicaid programs may only reimburse our testing at a low dollar amount, or not at all. Low or zero-dollar Medicaid reimbursement rates for our tests could have an adverse effect on our business and revenue.

Our billing and claim processing are complex and time-consuming, and any delay in submitting claims or failure to comply with applicable billing requirements could hinder collection and have an adverse effect on our revenue.

Billing for our tests is complex, time-consuming and expensive. Depending on the billing arrangement and applicable law, we bill various payors, such as Medicare, Medicaid, health plans, insurance companies and patients, all of which may have different billing requirements. Several factors make the billing process complex, including:

- differences between the list prices for our tests and the reimbursement rates of payors;
- compliance with complex federal and state regulations related to billing government healthcare programs, including Medicare and Medicaid, to the extent our tests are covered by such programs;
- differences in coverage among payors and the effect of patient co-payments or co-insurance;
- differences in information, pre-authorization and other billing requirements among payors;
- changes to codes and coding instructions governing our tests;
- incorrect or missing billing information; and
- the resources required to manage the billing and claim appeals process.

These billing complexities and the related uncertainty in obtaining payment for our tests could negatively affect our revenue and cash flow, our ability to achieve or maintain profitability and the consistency and comparability of our results of operations. In addition, if claims for our tests are not submitted to payors on a timely basis, or if we fail to comply with applicable billing requirements, it could have an adverse effect on our revenue and our business.

In addition, the coding procedure used by third-party payors to identify various procedures, including our tests, during the billing process is complex, does not adapt well to our tests and may not enable coverage and adequate reimbursement rates. Third-party payors require us to identify the test for which we are seeking reimbursement using a Current Procedural Terminology (CPT) code. CPT coding plays a significant role in how our tests are reimbursed both from commercial and governmental payors. The CPT code set is maintained by the American Medical Association (AMA). In cases where there is not a specific CPT code to describe a test, the test may be billed under an unlisted molecular pathology procedure code or through the use of a combination of single gene CPT codes, depending on the payor. PAMA authorized the adoption of new, temporary billing codes and unique test identifiers for FDA-cleared or approved tests as well as advanced diagnostic laboratory tests. The AMA has created a new section of CPT codes, Proprietary Laboratory Analyses codes (PLA), to facilitate implementation of this section of PAMA. We received PLA codes for most of our tests in 2024. Because billing third-party payors for our tests is an unpredictable, challenging, time-consuming and costly process, we may face long collection cycles and the risk that we may never collect at all, either of which

could adversely affect our business, results of operations and financial condition, and we may have to increase collection efforts and incur additional costs. Additionally, because next generation genomic sequencing is a rapidly evolving area of medicine, and because clinical treatment guidelines continue to develop, any changes to, or interpretations of, applicable billing and coding guidance, rules, policies, and procedures may impact our business. There is no guarantee that our retrospective or prospective billing practices will not be challenged or reversed, such as by a demand for repayment, recoupment, or prospective billing policies. Any such attempts could adversely affect our results and operations.

The inherent variability of the insurance coverage and reimbursement landscape makes it difficult to predict amounts we ultimately collect for our tests, and if our estimates of revenue to be recognized materially differs from the revenue recorded for tests, our revenue or operating results may fall below investor or analyst expectations.

It is difficult to predict the amounts, if any, we are able to collect for our tests from third-party payors. We are a participating in-network provider with some commercial third-party payors from whom we receive reimbursement for our molecular diagnostic tests. We also provide testing services to patients as a non-participating (out of network) provider. While we have contracts as an in network provider with some payors, we do not have contracts with all payors (out of network) and these payors may determine independently the amount that they are willing to reimburse us for our tests.

Even when payors have paid a claim, they may elect at any time (subject to applicable federal or state law restrictions) to review previously paid claims for overpayment against such claims. In the event of an overpayment determination, the payor may offset the amount they determine they overpaid against amounts they owe us on current claims. There is generally a defined process and we have limited leverage to dispute these retroactive adjustments and we cannot predict when, or how often, a payor might engage in these reviews. A significant amount of these offsets by one or more payors in any given quarter could have a material effect on our results of operations and cause them to fall below expectations or guidance we may provide.

Our efforts to become a participating provider of a number of government and commercial third-party payors may not be successful. Even when we have obtained positive coverage decisions for our tests from third party payors and entered into agreements with them, such agreements typically are standard form contracts and may allow payors to terminate coverage on short notice, impose significant obligations on us and create additional regulatory and compliance hurdles for us.

As part of our billing operations, we appeal claim denials from third party payors, and if successful, we receive payments from these appeals. However, due to the inherent variability of the insurance landscape, we cannot guarantee future success of, or any payments from, appeals of claim denials by all payors. Historical success and payments are not indicative of future success of and payments from such appeals. To receive payments from these appeals, we may need to pursue arbitration and/or litigation, either of which would require resources and costs.

Due to the inherent variability and unpredictability of the insurance landscape, including, without limit, the amount that payors reimburse us for any of our tests, we estimate the amount of revenue to be recognized at the time a test is provided and record revenue adjustments if and when the cash subsequently received for a test differs from the revenue recorded for the test. Due to this variability and unpredictability, previously recorded revenue adjustments are not indicative of future revenue adjustments from actual cash collections, which may fluctuate significantly. If this variability and unpredictability results in our revenue or operating results falling below the expectations of analysts or investors or below any guidance we may provide, the market price of our Class A common stock could decline substantially.

The loss of key members of our senior management team or our inability to attract and retain highly skilled scientists, technicians, clinicians, and sales representatives could adversely affect our business.

Our success depends on the skills, experience and performance of key members of our senior management team, including Oguzhan Atay, our Chief Executive Officer and David Tsao, our Chief Technology Officer (our Co-Founders). The individual and collective efforts of our Co-Founders, as well as other key employees, will be important as we continue to develop our platform and additional products, and as we expand our commercial activities. The loss or incapacity of either of our Co-Founders or other members of our executive management team could adversely affect our operations if we experience difficulties in hiring qualified successors. Our executive officers are at-will employees and we cannot guarantee their retention for any period of time. We do not maintain “key person” insurance on any of our employees, including our Co-Founders.

Our expected future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Recruiting and retention difficulties can limit our ability to support our research and development and sales programs. All of our employees are at-will, which means that either we or the employee may terminate their employment at any time. Our research and development programs and laboratory operations depend on our ability to attract and retain highly skilled scientists and technicians. We may not be able to attract or retain qualified scientists and technicians in the future due to the competition for qualified personnel among life science businesses, particularly near our headquarters in Menlo Park, California. We also face competition from universities and public and private research institutions in recruiting and retaining highly qualified scientific personnel.

In addition, we may have difficulties locating, recruiting or retaining qualified sales representatives. We currently sell to clinicians and healthcare providers in the United States through our own sales organization. Each of our target markets is large, distinctive and diverse. As a result, we prefer for our sales representatives to have established prenatal or oncology-focused expertise, as applicable. Competition for such employees within the molecular diagnostics industry is intense and oftentimes such individuals are subject to noncompetition and other employment restrictions by their former employer. We may not be able to attract and retain personnel or be able to build or maintain an efficient and effective sales organization, which could negatively impact sales and market acceptance of our products and limit our revenue growth and potential profitability. In particular, it may be challenging for us to recruit, train and retain sales personnel with oncology testing expertise, as we have relatively limited experience selling our products in this market compared with the prenatal testing market.

If our existing laboratory facilities become damaged or inoperable or we are required to vacate our existing facilities, our ability to perform our tests and pursue our research and development efforts may be jeopardized.

We currently derive nearly all of our revenue from tests performed at our laboratory facility located in Union City, California, with a small percentage of our revenue derived from a second facility in Menlo Park, California. While we expect to open a third laboratory facility in Austin, Texas in 2028, there is no assurance that we will be able to fully operationalize this facility to its capacity in a timely manner or at all. Our facility and equipment could be harmed or rendered inoperable by natural or man-made disasters, including war, fire, earthquake, flood, hurricanes, tornadoes, power loss, communications failure or terrorism, which may render it difficult or impossible for us to perform our tests and may also cause us to lose valuable stored blood samples. The inability to perform our tests or to reduce the backlog that could develop if our facility is inoperable, for even a short period of time, may result in the loss of customers or harm to our reputation, and we may be unable to regain those customers or repair our reputation. It would be difficult, time-consuming and expensive to rebuild our facility, to locate and qualify a new facility or enable a third party to practice our proprietary technology,

particularly in light of licensure and accreditation requirements. Even if we are able to find a third party with such qualifications to perform our tests, the parties may be unable to agree on commercially reasonable terms. Our physical laboratory facilities are also subject to regulatory oversight, such as by the federal Occupational Safety and Health Administration (OSHA), and certain state analogs. On occasion, certain safety issues may be required to be reported directly to OSHA. If not remediated, these regulatory bodies could intervene and suspend our operations, which could have a material impact on our business.

We carry insurance for damage to our property and disruption of our business, but this insurance may not cover all of the risks associated with damage or disruption to our facility and business, may not provide coverage in amounts sufficient to cover our potential losses and may not continue to be available to us on acceptable terms, if at all.

Our tests in development may not be clinically effective or may never achieve significant commercial market acceptance and our test offerings that we have recently launched may not be commercially successful.

We may not succeed in achieving significant commercial market acceptance of our test offerings that we have launched in recent years or are currently developing. Our ability to successfully develop and commercialize our current tests, as well as any future tests that we may develop or acquire, may depend on several factors, including:

- our ability to convince the medical community and consumers of our tests of their potential advantages over existing tests or other competing products or services;
- our ability to market current and future products in new and existing markets;
- our ability to collaborate with pharmaceutical companies;
- the agreement by third-party payors to reimburse our tests, the scope and extent of which will affect patients' willingness or ability to pay for our tests and will likely heavily influence physicians' decisions to recommend our tests; and/or
- the willingness of physicians to utilize our molecular diagnostic tests, which can be difficult to interpret as our tests only predict as to a probability, not certainty, that a tested individual will develop the disease, will benefit from a particular therapy or has an aggressive form of the disease that the test is intended to predict.

We may have to spend substantial time and money to overcome obstacles to commercial acceptance of our tests, and our anticipated timeline to launch new test offerings may not occur at the time we expect.

The tests we enhance or develop may not be clinically effective or commercially successful, may not ultimately meet our desired target product profile, or may not be offered at acceptable cost and with the test performance metrics necessary to address the relevant clinical need or commercial opportunity. We also may experience difficulties completing the clinical development of any new or enhanced product, or establishing or maintaining the collaborations that may be essential to our clinical development and commercialization efforts. Clinical development requires large numbers of patient specimens and, for certain products, may require large, prospective, and controlled clinical trials. We may not be able to enroll patients or collect a sufficient number of appropriate specimens in a timely manner, or we may experience delays during clinical development due to slower than anticipated enrollment, or due to changes in study or trial design or other unforeseen circumstances, or we may be unable to afford or manage the large-sized clinical trials that some of our planned future products may require. Our ongoing research and development and clinical study activities are subject to extensive regulation and review by numerous governmental authorities both in the United States and abroad. Clinical testing is difficult to design and implement, can take many years, can be expensive and carries

uncertain outcomes. The results of nonclinical studies and clinical studies of our products conducted to date, and ongoing or future studies of our current, planned or future products may not be predictive of the results of later clinical studies, and interim results of a clinical study do not necessarily predict final results. Clinical studies may produce negative or inconclusive results, and we may decide to conduct additional clinical and nonclinical testing in addition to those we have planned before we are able to launch our products. We may experience delays in our nonclinical studies and clinical studies for a number of reasons, which could adversely affect the costs, timing or successful completion of such studies or trials.

In addition, the publication of clinical data in peer-reviewed journals is an important step in commercializing and obtaining reimbursement for our tests, and our inability to control when, if ever, results are published may delay or limit our ability to derive sufficient revenue from any test that is the subject of a study or trial. Peer-reviewed publications regarding our tests may be limited by many factors, including delays in the completion of, poor design of or lack of compelling data from, nonclinical studies and clinical studies, as well as delays in the review, acceptance and publication process. If our tests or the technology underlying our current or future tests do not receive sufficient favorable exposure in peer-reviewed publications, the rate of clinician adoption of our tests and positive reimbursement coverage determinations for our tests could be negatively affected.

We rely on a limited number of suppliers or, in some cases, sole or single-source suppliers, for some of our laboratory instruments and materials and may not be able to find replacements or promptly transition to alternative suppliers.

We rely on a limited number of suppliers, or, in some cases, sole- or single-source suppliers, for certain sequencers, reagents, blood tubes and other equipment, instruments and materials that we use in our laboratory operations. Any disruption in operations of sole or single-source suppliers or termination or suspension of our relationships with them could materially and adversely impact our supply chain and laboratory operations and thus our ability to conduct our business and generate revenue. An interruption in our laboratory operations could occur if we encounter delays or difficulties in securing these laboratory equipment, instruments or materials, and if we cannot then obtain an acceptable substitute. Any such interruption could significantly and adversely affect our business, financial condition, results of operations and reputation.

If we were required to replace a supplier, transitioning to a new supplier would be time-consuming and expensive, may result in interruptions in our laboratory operations, could affect the performance specifications of our laboratory operations or could require that we revalidate our tests. While we have successfully transitioned suppliers in the past and we strive to keep, at least, a three-month inventory of a vast majority of required materials, transitioning suppliers may not always be possible in the future. We estimate replacing suppliers could take approximately one to nine months. If we were to encounter delays or difficulties in securing, reconfiguring or integrating the equipment and reagents we require for our products or in revalidating our products, our business, financial condition, results of operations and reputation could be materially and adversely affected.

Legislative or regulatory developments such as the BIOSECURE Act, proposed in the 118th Congress but not enacted, could materially affect our business operations, supply chain, or ability to contract with U.S. government agencies. If a statute akin to the BIOSECURE Act is enacted, in addition to potential other restrictions on our business, it would prohibit federal agencies from contracting with entities that use biotechnology equipment or services from certain foreign entities deemed to be under the control of foreign adversaries.

While we may currently rely, or in the future may rely, on equipment, reagents, or laboratory services from one or more companies that could be designated as “biotechnology companies of concern” under this or similar legislation, we have undertaken and continue to undertake measures to mitigate the risks associated with

utilizing material from biotechnology companies of concern. Further, and as a longstanding policy and practice, we utilize robust screening measures to ensure that any genetic data we obtain is protected to the maximum extent under law. If we are unable to verify or restructure our supply chain in compliance with such laws, we could become ineligible for federal contracts, grants, or funding, may be unable to receive reimbursement from Medicaid and Medicare agencies, which provide a substantial percentage of our total revenue, and could face reputational harm, contractual liabilities, or enforcement action.

Even if legislation akin to the BIOSECURE Act is not enacted, similar legislative or regulatory initiatives may be adopted, and compliance could require significant operational changes, increased costs, or procurement delays. There can be no assurance that we will not be adversely affected by their implementation.

We rely on commercial courier delivery services to transport samples to our facilities in a timely and cost-efficient manner and if these delivery services are disrupted, our business may be harmed.

Our business depends on our ability to quickly and reliably deliver test results to our customers and their patients. We typically receive blood samples for analysis at our laboratory facilities within days of collection from the patient. Disruptions in delivery service, which have occurred in the past and may occur in the future – whether due to error by the courier service, labor disruptions, bad weather, natural disaster, terrorist acts or threats or for other reasons – could adversely affect specimen integrity, our ability to process or store samples in a timely manner and to service our customers, and ultimately our reputation and our business. In addition, if we are unable to continue to obtain expedited delivery services on commercially reasonable terms, our business, financial condition, results of operations may be adversely affected.

If our products do not meet the expectations of patients and our customers, our operating results, reputation and business could suffer.

Our success depends on the market's confidence that we can provide reliable, high-quality precision prenatal and oncology products that will improve clinical outcomes and lower healthcare costs. We believe that patients, clinicians, healthcare providers and payors are likely to be particularly sensitive to product defects and errors in the use of our products, including if our products fail to detect clinically relevant information with high accuracy from samples or if we fail to list or inaccurately include certain treatment options and available clinical trials in our test reports, and there can be no guarantee that our products will meet their expectations. Furthermore, if our competitors' products do not perform to expectations, it may result in lower confidence in our tests as well. As a result, the failure of our products to perform as expected could significantly impair our operating results and our reputation. In addition, we may be subject to legal claims arising from any defects or errors in our products. Confidence in us, as well as the strength of our brand and reputation, could also be eroded by perceived failures by us or our competitors, even absent any evidence of failure or wrongdoing.

If our information technology systems or those third parties with whom we work or our data, are or were compromised, we could experience adverse consequences resulting from such compromise, including regulatory investigations or actions, litigation, fines and penalties, disruptions of our business operations, reputational harm, loss of revenue or profits, loss of customers or sales, and other adverse consequences.

In the ordinary course of our business, we and the third parties with whom we work, process, collect, receive, store, process, generate, use, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share (collectively, process) proprietary, confidential, and sensitive data, including protected health information (PHI) and other personally identifiable information, credit card and other financial information, intellectual property and proprietary business information owned or controlled by us or other parties such as customers and payors. We manage and maintain our applications and data utilizing a combination of on-site

systems and cloud-based data centers. We utilize external security and infrastructure vendors to manage parts of our data centers. Our information technology systems store a wide variety of information critical to our business, including research and development information, patient data, commercial information and business and financial information. We face a number of risks related to protecting this critical information, including loss of access, inappropriate use or disclosure, unauthorized access, inappropriate modification and our being unable to adequately monitor, audit or modify our controls over such critical information. This risk extends to the third-party providers, strategic partners and other contractors, subcontractors or consultants we use to manage this sensitive data or otherwise process it on our behalf.

Cyberattacks, security breaches, computer viruses, malicious internet-based activity, online and offline fraud, ransomware attacks, phishing, structured query language injections, social engineering schemes, distributed denial-of-service attacks, supply chain attacks, malware and other incidents, as well as employee theft or misuse, human error, fraud, denial or degradation of service attacks, unauthorized access or use by persons inside our organization or persons with access to systems inside our organization, and other similar activities threaten the confidentiality, integrity, and availability of our sensitive information and information technology systems, and those of the third parties with whom we work. Misappropriation, exposure, loss or other unauthorized disclosure of confidential data, personal information, materials or information, as well as interruptions, delays or cessation of service often result from these events. Increasingly complex methods have been used in cyberattacks, and the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased and come from a variety of sources, including traditional computer “hackers,” threat actors, “hacktivists,” organized criminal threat actors, personnel (such as through theft or misuse), sophisticated nation states, and nation-state-supported actors. Because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may experience security breaches that may remain undetected for an extended period. Even if identified, we may be unable to adequately investigate or remediate incidents or breaches.

The costs of attempting to protect against the foregoing risks and responding to a cyberattack are significant. Breaches of our and/or our vendors’ security measures and the unauthorized dissemination of sensitive personal information or proprietary or confidential information about us, our customers or other third-parties, could result in investigations, regulatory enforcement actions, notices to affected individuals, regulators and the media, material fines and penalties, loss of customers, litigation or other actions which could have a material adverse effect on our business, prospects, reputation, results of operations and financial condition. Breaches and incidents also cause operational harm such as by preventing us from performing our laboratory operations, preparing and providing reports to customers, billing payors, processing reimbursement appeals, handling patient or physician inquiries, conducting research and development activities and managing the administrative aspects of our business.

We and certain of our service providers are from time to time subject to cyberattacks and security incidents. Although we have implemented security measures and an enterprise security program to prevent unauthorized access to our systems, information and patient data, there is no assurance that these measures will be effective. As cyber threats evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities, and these efforts may not be successful.

We have contingency plans and insurance coverage for certain potential claims, liabilities and costs relating to security incidents that may arise from our business or operations; however, the coverage may not be sufficient to cover all claims, liabilities and costs arising from the incidents, including fines and penalties. Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data

privacy and security obligations. The ultimate resolution of any such incidents or estimating the amounts or ranges of potential loss, if any, that could result therefrom are highly uncertain. If we cannot successfully resolve a security incident or contain any potential loss, it could materially impact our ability to operate our business as well as our results of operations and financial position.

If we experience a significant disruption in our information technology systems, or those of third-parties upon which we rely, our business operations and financial condition could be adversely affected.

Our IT and communications systems support a variety of functions, including sample processing, tracking, quality control, customer service and support, billing, research and development activities, and various general and administrative activities. The availability of our products and services and fulfillment of our customer contracts depends on the continuing operation of these systems. We currently maintain a data center within Amazon Web Services (AWS). In addition, our proprietary QCT technology is a crucial component of our test processing. We host the significant majority of these algorithms on a cloud-based software platform pursuant to an agreement with AWS. Our bioinformatics platform is hosted on third-party data center hosting facilities operated by AWS. We also host our algorithms on AWS platforms directly. Our algorithms are currently used to run many of our tests and certain of our research and development activities. In the event of any technical problems that may arise in connection with our on-site data systems, bioinformatics platform or the AWS servers on which the bioinformatics platform is hosted, or the AWS servers that host our data directly, or difficulties in or termination of our relationship with AWS, we could experience interruptions in our laboratory operations, and we may be unable to access our proprietary algorithms and therefore be unable to process tests or conduct any other activities that require access to such algorithms. Disruptions to the IT and communications systems supporting our laboratory and other operations may be caused by a variety of factors, including infrastructure changes, disruptions or shutdowns due to power outages, human or software errors, natural disasters, hardware failures, computer viruses, security attacks, fraud, spikes in customer usage and denial of service issues. Our IT and communication systems, and those of third-parties upon which we rely, also may experience interruptions, delays or cessations of service or produce errors in connection with system implementation, integration, upgrades or system migration work that takes place from time to time. We do not have any backup platform, server or other means to host our algorithms, and may be unable to find and implement an alternative platform that is satisfactory for our needs on commercially reasonable terms, in a timely manner, or at all. Interruptions in our operations or service may reduce our revenue, cause us to issue refunds, result in the loss of customers, or harm our reputation. We could also be exposed to potential lawsuits and liability claims.

Recent or future macroeconomic pressures resulting from geopolitical uncertainty, public health developments or other matters may have an adverse impact on our business, financial results and prospects.

Recent geopolitical matters have led to significant uncertainty and negative impact on the macroeconomic environment, such as the imposition of tariffs, inflation, rising interest rates, market volatility and supply chain issues. Parts of our direct and indirect supply chain are located overseas and both international and domestic components have been, and may in the future be, subject to disruption by these developments. Global economic and business activities continue to face widespread uncertainties, and global credit and financial markets have experienced extreme volatility and disruptions in the past, including severely diminished liquidity and credit availability, rising inflation and monetary supply shifts, rising interest rates, labor shortages, supply chain issues, declines in consumer confidence, declines in economic growth, increases in unemployment rates, recession risks, and uncertainty about economic and geopolitical stability. A severe or prolonged economic downturn, or additional global financial or political crises, could adversely impact our business, financial results, and prospects. In addition, such macroeconomic conditions could impact our ability to access the public

markets as and when appropriate or necessary to carry out our operations or our strategic goals. We cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

In the event of public health developments, health epidemics or outbreaks in the future, our operations could be disrupted and our business adversely impacted. Such disruptions or impacts may be similar to those faced during the COVID-19 pandemic, such as mandated business closures in impacted areas, limitations with employee resources due to stay at home orders or sickness of employees or their families, diversion or prioritization of health care resources away from the conduct of testing, limitations on patients' access to our products, disruptions or restrictions affecting the ability of our laboratory facility to process our tests, reduced demand for certain of our products, or supply chain constraints.

International trade policies, including tariffs, sanctions and trade barriers may adversely affect our business, financial condition, results of operations and prospects.

Current or future tariffs or other restrictive trade measures may raise the costs of raw materials, components or finished goods, which may adversely impact both our product offerings and our operational expenses. Such cost increases may reduce our margins, which could negatively impact our revenue. Our manufacturers, suppliers and distribution channels are also affected by the current trade environment, and we may experience supply chain disruptions as a result of increased costs and uncertainty, as well as risks to the long-term viability of key vendors, which may impact our ability to meet customer demand or manage inventory efficiently. Tariff and other trade-related cost pressures and supply chain disruptions may lead to reputational harm if we are unable to deliver test services on expected timelines.

Trade disputes, trade restrictions, tariffs and other political tensions between the U.S. and other countries may also exacerbate unfavorable macroeconomic conditions including inflationary pressures, foreign exchange volatility, financial market instability, and economic recessions or downturns, which may negatively impact our business and operations and contribute to volatility in the price of our common stock.

While we continue to monitor trade developments, the ultimate impact of these risks remains uncertain and any prolonged economic downturn, escalation in trade tensions, or deterioration in international perception of U.S.-based companies could materially and adversely affect our business, results of operations, financial condition and prospects.

If we were to be sued for product liability or professional liability, we could face substantial liabilities that exceed our resources.

The marketing, sale and use of our products has in the past and could in the future lead to the filing of product liability or similar claims were someone to allege that our tests failed to perform as designed or as claimed in our promotional materials, performed pursuant to incorrect or inadequate laboratory procedures, if we delivered incorrect or incomplete test results or our tests failed to produce a result, or if someone were to misinterpret test results. We may also be subject to professional liability for errors in, a misunderstanding of, or inappropriate reliance upon, the information we provide in the ordinary course of our business activities. A product liability or professional liability claim could result in substantial damages and be costly and time-consuming for us to defend. Even though our tests are highly accurate, they are not 100% accurate and we may report false negative or false positive results, which may subject us to lawsuits claiming product or professional liability or other claims, as has happened in the past and may happen in the future. A product liability or professional liability claim could result in substantial damages and be costly and time-consuming for us to defend. Although we maintain product and professional liability insurance, this insurance may not fully protect

us from the financial impact of defending against product liability or professional liability claims. Any product liability or professional liability claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. Additionally, any product liability or professional liability lawsuit could damage our reputation or cause current customers to terminate existing agreements with us and potential customers to seek other partners, any of which could adversely impact our results of operations.

Our estimates of total addressable market opportunity and forecasts of market growth may prove to be inaccurate, and even if the market in which we compete achieves the forecasted growth, our business could fail to grow at similar rates.

Total addressable market opportunity estimates and growth forecasts are subject to significant uncertainty and are based on internal and third-party assumptions and estimates that may not prove to be accurate. While we believe our assumptions and the data underlying our estimates are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors. As a result, our estimates of the annual total addressable market for our current or future products may prove to be incorrect. If the actual number of patients who would benefit from our products, the price at which we can sell our products, the number of tests we are able to successfully develop and commercialize, or the annual total addressable market for our products is smaller than we have estimated, it may impair our sales growth and have an adverse impact on our business, financial condition and results of operations. Additionally, half of the estimated total addressable market included in this prospectus includes early detection, an area in which we have not yet begun specific product development or commercial sales. There can be no assurance that we will launch future products on the timeline we expect or at all. Even if a market in which we compete, or expect to compete, meets our size estimates and forecasted growth for such market, we may not be able to penetrate the existing market to capture additional market share and our business could fail to grow at similar rates.

We may acquire businesses, form joint ventures or make investments in companies or technologies that could negatively affect our operating results, distract management's attention from other business concerns, dilute our stockholders' ownership, and significantly increase our debt, costs, expenses, liabilities and risks.

In the future we may seek to acquire or invest in businesses, technologies, services, products, or other assets that we believe could complement or expand our products, enhance our technical capabilities, or otherwise offer opportunities for our business. Other than our partnerships with Johnson & Johnson, we have limited experience with acquisitions and forming strategic partnerships. We may compete for those opportunities with others including our competitors, some of which may have greater financial or operational resources than we do. We may not be able to identify suitable acquisition candidates or strategic partners, we may have inadequate access to information or insufficient time to complete due diligence, and we may not be able to complete such transactions on favorable terms, if at all. If we make any acquisitions, we may not be able to integrate these acquisitions successfully into our existing business, and we could assume unknown or contingent liabilities. Integration of an acquired business may disrupt our ongoing operations and require management resources that we would otherwise focus on developing our existing business. In addition, any acquisition could result in the incurrence of debt, contingent liabilities or future write-offs of intangible assets or goodwill, any of which could have a material adverse effect on our financial condition, results of operations and cash flows. We may also experience losses related to investments in other companies, which could have a material negative effect on our results of operations and financial condition.

We may not realize the anticipated benefits of any acquisition, technology license, strategic investments or partnerships, or joint venture. To finance any acquisitions, joint ventures or investments, we may choose to

issue shares of our Class A common stock as consideration, which would dilute the ownership of our stockholders. If the market price of our Class A common stock is low or volatile, we may not be able to acquire other companies or fund a joint venture project using our stock as consideration.

Also, the anticipated benefit of any strategic alliance, joint venture or acquisition may not materialize or such strategic alliance, joint venture or acquisition may be prohibited. For example, our debt facility with Oberland Capital Management LLC (Oberland Capital) restricts our ability to pursue certain mergers, acquisitions, or consolidations that we may believe to be in our best interest. Additionally, future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We cannot predict the number, timing or size of future joint ventures or acquisitions, or the effect that any such transactions might have on our operating results.

New product development and commercialization involve a lengthy and complex process and we may be unable to develop or commercialize new products on a timely basis or at all.

Our products have taken time and considerable resources to develop, and we may not be able to complete the development and commercialization of new products on a timely basis, or at all. Before we can commercialize any new products, we may need to expend significant funds to:

- conduct substantial research and development, including validation studies;
- find appropriate third party collaborators to conduct clinical studies;
- further develop and scale our laboratory processes to accommodate different products; and
- further develop and scale our infrastructure to be able to analyze increasingly large amounts of data.

Our product development process involves a high degree of risk, and product development efforts may fail for many reasons, including:

- failure of the product to perform as expected, including defects and errors;
- inability to pass validation required by regulatory requirements;
- inability to find appropriate samples for clinical validity and utility studies;
- failure to demonstrate the clinical validity or utility of the product;
- inability to obtain necessary reimbursement by commercial or government payors;
- unattractive economics due to unexpected higher costs of the final version of the product; or
- high cost of commercialization.

Our development plan involves using data and analytical insights generated from our current products to foster research and development investment in our future products. However, if we are unable to generate additional or compatible data and insights, then we may not be able to advance our products under development as quickly, or at all, or without significant additional investment.

As we develop products, we have made and will have to make significant investments in product development, marketing and selling resources, including investing heavily in clinical studies, which could adversely affect our future cash flows. In addition, in our development and commercialization plans, we may forego other opportunities that may provide greater revenue or be more profitable. As a result, even if our development efforts result in commercially viable products, our business and results of operations could underperform in comparison to our customers and competitors.

The molecular diagnostics industry is subject to rapid change, which could make our current products, and any future products we may develop, obsolete.

Our industry is characterized by rapid changes, including technological and scientific breakthroughs, frequent new product introductions and enhancements and evolving industry standards, all of which could make our current and future products obsolete. Our future success will depend on our ability to keep pace with the evolving needs of our customers on a timely and cost-effective basis and to pursue new market opportunities that develop as a result of scientific and technological advances. In recent years, there have been numerous advances in technologies in the prenatal and oncology fields, as well as advances in the application of machine learning and AI to molecular diagnostics and decision-making. We must continuously enhance our platform and develop new products to keep pace with evolving standards of care. If we do not update our product offerings to reflect new scientific knowledge about disease biology, information about new therapies or relevant clinical studies, or insights regarding the current treatment landscape for applicable indications and advances in computational biology, software development and AI, our products could become obsolete and sales of our current products and any new products we may develop could decline or fail to grow as expected. Further, to the extent that pharmaceutical or biotechnology companies are able to develop therapies or technologies that eradicate or substantially limit the incidence or severity of diseases for which we sell molecular diagnostic tests, the market for our applicable products could disappear entirely.

If we are unable to support demand for our current and future products, including ensuring that we have adequate capacity to meet increased demand, or we are unable to successfully manage our anticipated growth, our business could suffer.

As our volume of test sales grows, we will need to continue to increase our workflow capacity for sample intake, customer service, billing and general process improvements, expand our internal quality assurance program and extend our platform to support comprehensive genomic analysis at a larger scale within expected turnaround times. We will need additional certified laboratory scientists and other scientific and technical personnel to process higher volumes of our molecular diagnostic products. Portions of our process are not automated and may require additional personnel to scale. We will also need to purchase additional equipment, some of which can take several months or more to procure, setup and validate and increase our software and computing capacity to meet increased demand. There is no assurance that any of these increases in scale, expansion of personnel, equipment, software and computing capacities or process enhancements will be successfully implemented, if at all, or that we will have adequate space in our laboratory facility or be able to secure additional facility space to accommodate such required expansion.

As we commercialize additional products, we will need to incorporate new equipment, implement new technology systems and laboratory processes, and hire new personnel with different qualifications. Failure to manage this growth could result in turnaround time delays, higher product costs, declining product quality, deteriorating customer service and slower responses to competitive challenges. A failure in any one of these areas could make it difficult for us to meet market expectations for our products and could damage our reputation and prospects.

Our employees, contractors, consultants and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk of fraud or other misconduct by our employees, contractors, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply with applicable federal, state and local regulations and with healthcare fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately, or disclose unauthorized activities to us. In

particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We currently have a code of conduct and compliance program applicable to all of our employees, contractors, consultants and partners, but it is not always possible to identify and deter misconduct, and our code of conduct, compliance program operations and the other precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting us from governmental investigations, lawsuits or other actions stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant civil, criminal and administrative penalties, including, without limitation, damages, monetary fines, individual imprisonment, disgorgement of profits, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs or from network participation with commercial third-party payors, contractual damages, reputational harm, diminished profits and future earnings, additional reporting or oversight obligations if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with the law and curtailment or restructuring of our operations, which could have a significantly adverse impact on our business. Whether or not we are successful in defending against such actions, we could incur substantial costs and expenses, including legal fees and divert the attention of management from the operation of our business.

We have been, and in the future may be, involved in legal proceedings, regulatory investigations and inquiries and other legal matters, which may have an adverse effect on our business, financial condition, results of operations and prospects.

We have been, and may in the future be, subject to threatened or actual legal claims, regulatory surveys or investigations, inquiries, proceedings and other legal matters. For example, from time to time we receive and respond to subpoenas from government authorities for records involving Medicaid patients. We consider our historical experiences with such claims and proceedings to be in the normal course of our business and typical for our industry.

We also operate in a highly competitive industry, and competitors may use legal proceedings, or the threat of legal proceedings, against us. For example, the marketing activities of molecular diagnostic companies are subject to less stringent regulation by the FDA, which can lead to greater variability in marketing and sales practices among industry participants, including in the way that laboratories communicate with physicians and patients about their tests. Lower enforcement risks and variability in the interpretation of permissible communications can sometimes lead to claims of inaccurate or misleading communications by a laboratory company against a competitor. If we are involved in a dispute with a competitor, we may need to defend our practices or take actions, including pursuing a lawsuit, to enforce compliance by another laboratory, which can be costly, may affect our reputation with customers and patients, and there is no assurance that we would prevail in any such action.

We do not view any of the legal claims, regulatory investigations, inquiries, proceedings and other legal matters that we are currently subject to as being material to our business; however, it is difficult to assess the outcome of these matters, and we may not prevail in any current or future proceedings or litigation. There are many uncertainties associated with these matters. Such matters may cause us to incur costly litigation and/or substantial settlement charges, divert management attention, result in adverse judgments, fines, penalties, injunctions or other relief, and may result in loss of customer or investor confidence regardless of their merit of

the proceeding or ultimate outcome. Since litigation is inherently uncertain, there is no guarantee that we will be successful in defending ourselves against such claims or proceedings, or that our assessment of the materiality of these matters, including any reserves taken in connection therewith, will be consistent with the ultimate outcome of such matters. In addition, the resolution of any intellectual property litigation may require us to make royalty payments, which could adversely affect gross margin in future periods. If any of the foregoing were to occur, our business, financial condition, results of operations, cash flows, prospects, or market price of our Class A common stock could be adversely affected.

Ethical, legal and social concerns related to the use of genetic information could reduce demand for our tests.

Genetic testing, like that conducted using our tests, has raised ethical, legal and social issues regarding privacy and the appropriate uses of the resulting information. Governmental authorities could, for social or other purposes, limit or regulate the use of genomic information or genomic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Patients may also refuse to use genetic tests even if permissible, for similar reasons such as religious concerns; they may also refuse genetic testing due to concerns regarding eligibility for life or other insurance. Ethical and social concerns may also influence U.S. and foreign patent offices and courts with regard to patent protection for technology relevant to our business. These and other ethical, legal and social concerns may limit market acceptance of our tests or reduce the potential markets for services and products enabled by our technology platform, either of which could harm our business.

The increasing use of social media platforms presents new risks and challenges.

Social media is increasingly being used to communicate about our products. Social media practices in our industry continue to evolve and regulations and regulatory guidance relating to such use are evolving and not always clear. This evolution creates uncertainty and risk of noncompliance with regulations applicable to our business, resulting in potential regulatory actions against us, along with the potential for litigation. In addition, there is a risk of inappropriate disclosure of sensitive information or negative or inaccurate posts or comments about us or our products on any social networking website. If any of these events were to occur or we otherwise fail to comply with any applicable regulations, we could incur liability, face restrictive regulatory actions, or incur other harm to our business such as reputational damage.

If we cannot compete successfully with our competitors, we may be unable to increase or sustain our revenue or to achieve and then sustain profitability.

Growing understanding of the importance of molecular diagnostic testing is leading to more companies offering services in our industry. This has included new and accelerated development programs by a number of potential competitors and increasing levels of merger and acquisition and investment activity by both existing and new competitors. Currently, in prenatal, our main competitors offering NIPs include Illumina, through its subsidiary Verinata, Laboratory Corporation of America Holdings (Labcorp), Myriad Genetics, Inc. (Myriad), Natera, Inc. (Natera), and Quest Diagnostics Incorporated (Quest). We also compete with companies providing carrier screening tests such as Fulgent Genetics, Labcorp, Myriad, Natera, and Quest. Each of these companies offers comprehensive carrier screening panels. In oncology, our main competitors for our therapy selection and response monitoring tests include Caris Life Sciences, Inc., Foundation Medicine, Inc., which was acquired by Roche Holdings, Guardant Health, Inc., NeoGenomics Laboratories, Inc., and Tempus AI, Inc. As we expand our oncology offerings into applications such as MRD testing, as well as potentially testing for early detection in the future, we anticipate facing competition from a broader universe of companies, including Exact Sciences, Grail, Haystack, which was acquired by Quest, and Natera. Most if not all of our competitors sell molecular diagnostic

tests and have or may develop tests that compete with ours. In addition, new competitors, including academic medical centers or healthcare providers, may also develop their own tests and may decide to enter our markets.

Some of our competitors and potential competitors may have advantages such as: longer operating histories; larger customer bases; greater brand recognition and market penetration; substantially greater financial, technological and research and development resources and selling and marketing capabilities; more experience dealing with third-party payors; the ability to secure key inputs from vendors on more favorable terms; and the ability to adopt more aggressive pricing policies and devote substantially more resources to product development. As a result, our competitors may be able to respond more quickly to changes in customer requirements, devote greater resources to the development, promotion and sale of their tests than we do or sell their tests at prices designed to win significant levels of market share. We may not be able to compete effectively against these organizations. Furthermore, certain products offered by our competitors and potential market entrants may have attained FDA approval or Advanced Diagnostic Laboratory Test (ADLT) status. The presence of FDA approval, ADLT status, or both, enables such products to qualify for higher reimbursement rates, under CLFS, thereby affording competitors the opportunity to achieve higher profit margins. Increased competition and cost-saving initiatives on the part of governmental entities and other third-party payors are likely to result in pricing pressures, which could harm our sales, profitability or ability to gain market share. In addition, competitors may be acquired by, receive investments from or enter into other commercial relationships with larger, well-established and well-financed companies. In addition, companies or governments that control access to genetic testing through umbrella contracts or regional preferences could promote our competitors or prevent us from performing certain services. If we are unable to compete successfully against current and future competitors, we may be unable to increase market acceptance and sales of our tests, which could prevent us from increasing our revenue or achieving profitability and could cause our stock price to decline.

In addition, the market is constantly changing, and we are not in control of how our competitors' product development and pricing strategies are established. Our competitors may develop lower-priced, less complex tests that payors and providers could view as functionally equivalent to our products, which could force us to lower the list price of our tests and impact our operating margins and our ability to achieve and maintain profitability. In addition, technological innovations that result in the creation of enhanced diagnostic tools that are more effective than ours may enable healthcare providers to deliver specialized diagnostic tests similar to ours in a more patient-friendly, efficient or cost-effective manner than is currently possible. If we cannot compete successfully against current or future competitors, we may be unable to increase or create market acceptance and sales of our products, which could prevent us from increasing or sustaining our revenue or achieving or sustaining profitability.

We have incurred significant losses since inception, and we may not be able to generate sufficient revenue to achieve or maintain profitability.

We have incurred significant losses since our inception. For the years ended December 31, 2023 and 2024, and the six months ended June 30, 2024 and 2025, we incurred net losses of \$82.7 million, \$41.6 million, \$15.2 million and \$4.2 million, respectively. As of June 30, 2025 we had an accumulated deficit of \$286.4 million. To date, we have financed our operations principally from the sale of preferred stock, convertible securities and debt and revenue generated from our tests. We have devoted substantially all of our resources to the development and commercialization of our smNGS platform and current products, and to sales and marketing and research and development activities. In addition, as a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company.

While we have been able to achieve gross margin of 24% and 53% for the years ended December 31, 2023 and 2024, and 51% and 65% for the six months ended June 30, 2024 and 2025, respectively, factors including

reimbursement rates, insurance coverage policies, supply chain issues or increased personnel costs could cause our gross margin for existing or new products to decrease. We will need to generate substantial revenue and maintain our gross margin profile to achieve and then sustain profitability, and even if we achieve profitability, we cannot be sure that we will remain profitable for any period of time. While we have recently experienced improvements in our operational efficiency that has contributed to revenue growth, in the future we may not be able to continue to improve operational efficiency or manage costs as we expand our business and become a public company. In addition, though we expect that our test volumes and ASPs will increase in the future, our failure to achieve and sustain profitability in the future will make it more difficult to finance our business and accomplish our strategic objectives, which would have a material adverse effect on our business, financial condition and results of operations and cause the market price of our common stock to decline.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including:

- the level of demand for any of our products, which may vary significantly;
- the timing and cost of, and level of investment in, research, development, regulatory compliance or commercialization activities relating to our products, which may change from time to time;
- the introduction of new products or product enhancements by us or others in our industry;
- coverage and reimbursement policies with respect to our products and products that compete with our products;
- expenditures that we may incur to develop or commercialize additional products and technologies;
- changes in governmental regulations including with respect to privacy and data security and CLIA (as defined below), and our compliance therewith;
- future accounting pronouncements or changes in our accounting policies; and
- the impact of natural disasters, political and economic instability, including wars, terrorism, and political unrest, epidemics or pandemics, boycotts, high inflation, volatility, tariffs and other trade actions or curtailments, and other business restrictions.

The cumulative effects of factors discussed above could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any guidance we may provide, or if the guidance we provide is below the expectations of analysts or investors, the market price of our Class A common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated guidance we may provide.

We may need to raise additional capital, and if we cannot do so when needed or on commercially acceptable terms, we will be required to slow or cease our investment in our product development and commercialization plans, which would have an adverse effect on our business.

We have incurred net losses since our inception. While we have introduced products that are generating revenue, this revenue may not be sufficient to fund all of our operations, including our product development

and commercialization plans and our sales and marketing efforts. Consequently, we may need to generate additional revenue to achieve or maintain future profitability and, even if this offering is successful, may need to raise additional funds through public or private equity or debt financings, corporate collaborations or licensing arrangements to continue to fund or expand our operations. However, subject to limited exceptions, our debt facility with BWCB SA LLC (an entity affiliated with Oberland Capital) prohibits us from incurring additional indebtedness without the prior written consent of Oberland Capital and investors holding at least 50% of the aggregate principal amount of the Note Purchase Agreement (as defined below). If sufficient funds on acceptable terms are not available when needed, or at all, we could be forced to significantly reduce operating expenses and delay, scale back or eliminate one or more of our development programs or our business operations. Furthermore, changing circumstances could result in lower revenues or cause us to consume capital significantly faster than we currently anticipate, and we may need to raise capital sooner or in greater amounts than currently expected because of circumstances beyond our control.

Our actual capital funding requirements will depend on numerous factors, including:

- our ability to achieve broader commercial success with our tests;
- the costs and success of our research, development, and commercialization efforts for potential new offerings and additional indications for, and enhancements to, current offerings;
- the cost of expanding our offerings, including our sales and marketing efforts;
- our ability to obtain coverage and reimbursement for our tests, as we continue to invest in expanding our offerings;
- our ability to generate sufficient revenue from our tests;
- our ability to collect on our accounts receivable;
- our need to finance capital expenditures and further expand our laboratory operations;
- our ability to manage our operating costs;
- costs and expenses to protect or enforce our intellectual property rights or to defend against infringement claims brought against us, including any associated litigation settlements or judgments we are required to pay; and
- the timing and results of any regulatory authorizations that we are required to obtain for our tests.

While we currently have in place a debt facility pursuant to which we may request up to an additional \$60.0 million as of June 30, 2025, as well as an obligation to sell a tranche of notes in the amount of \$30 million before March 31, 2026, as described in more detail below, we may need to raise additional capital which may not be available on satisfactory terms or at all. Furthermore, any additional capital raised through the sale of equity or convertible securities, or grant of equity or convertible securities in connection with any debt financing, will dilute stockholders' ownership interests in us and may have an adverse effect on the market price of our Class A common stock. In addition, the terms of any financing may adversely affect stockholders' holdings or rights. To the extent that we raise capital through collaborations and licensing arrangements, it may be necessary to relinquish some rights to our technologies or grant licenses on terms that may not be favorable to us.

These alternatives for raising additional capital may not be available to us on acceptable or commercially reasonable terms, if at all, or in amounts sufficient to meet our needs. If we are not able to obtain adequate funding when needed, we may be required to delay or slow our investment in the development and commercialization of our products and significantly scale back our business and operations, which would have an adverse effect on our business.

Risks related to our intellectual property

Any inability to effectively protect our proprietary technologies could harm our competitive position.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. As of June 30, 2025, we held nine U.S. issued patents, 45 foreign patents, 14 pending U.S. patent applications and 31 foreign patent applications. If we fail to obtain, maintain and/or protect our intellectual property rights, third parties may be able to compete more effectively against us. Our success and ability to compete depend to a large extent on our ability to develop proprietary products and technologies and to maintain adequate protection of our intellectual property in the United States and other countries. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and we may encounter difficulties in establishing and enforcing our proprietary rights outside of the United States. In addition, the proprietary positions of companies developing and commercializing tools for molecular diagnostics, including ours, generally are uncertain and involve complex legal and factual questions. This uncertainty may materially affect our ability to defend or obtain patents or to address the patents and patent applications owned or controlled by our collaborators and licensors.

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are protected by valid and enforceable patents or are effectively maintained as trade secrets. However, obtaining, maintaining and enforcing biotechnology patents is costly, time-consuming and complex. We may fail to apply for patents on important products, services or technologies in a timely fashion or at all, or we may fail to apply for patents in potentially relevant jurisdictions. We may not be able to file and prosecute all necessary or desirable patent applications, or maintain or enforce patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We have worked to procure patents protecting our technologies, but our procurement efforts may not always be successful, and any patents we successfully procure may be challenged in ways that lead to post-procurement scope reduction or invalidity. Any such challenges may impede our ability to protect our proprietary rights from unauthorized use. In addition, any finding that others have claims of inventorship or ownership rights to our patents and applications could require us to obtain certain rights to practice related technologies, which may not be available on favorable terms or at all.

The patent positions of molecular laboratory companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States or elsewhere. Courts frequently render opinions in the biotechnology field that may affect the patentability of certain inventions or discoveries, including opinions that may affect the patentability of methods for analyzing or comparing DNA sequences.

In particular, the patent positions of companies engaged in the development and commercialization of molecular diagnostic tests, like us, are particularly uncertain. Various courts, including the U.S. Supreme Court, have rendered decisions that affect the scope of patentability of certain inventions or discoveries relating to certain molecular diagnostic tests and related methods. These decisions state, among other things, that a patent claim that recites an abstract idea, natural phenomenon or law of nature (for example, the relationship between particular genetic variants and cancer) are not themselves patentable. Precisely what constitutes a law of nature is uncertain, and it is possible that certain aspects of molecular diagnostics tests would be considered natural laws. Accordingly, the evolving legal and administrative standards around the world, including in the United States may adversely affect our ability to obtain patents and may facilitate third-party challenges to any

owned or future licensed patents. The laws of some foreign jurisdictions do not protect intellectual property rights to the same extent as the laws of the United States, and we may encounter difficulties in protecting and defending such rights in foreign jurisdictions. The legal systems of many foreign jurisdictions do not favor the enforcement of patent rights and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patent rights and other intellectual property rights thereunder. Proceedings to enforce our patent rights and other intellectual property protection in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business could be harmed.

In addition to pursuing patents covering our products, services and technology, we take steps to protect our intellectual property and proprietary technology by entering into agreements, including confidentiality and non-disclosure agreements with those that have access to our confidential and proprietary information including employees, independent contractors, academic institutions, corporate partners and advisers, and invention assignment agreements with our employees and independent contractors, and when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized use or disclosure or obtain adequate remedies for breaches.

Monitoring unauthorized use or disclosure is difficult, and we do not know whether the steps we have taken to prevent such use or disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time-consuming, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets.

We also seek to preserve the integrity and confidentiality of our proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor, absent patent protection, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

If we are subject to litigation or other proceedings arising from a claim of infringement of the intellectual property of a third party, we might incur significant costs and delays in test introduction or we could be prevented from using technologies incorporated in our tests.

Our success depends in part on our non-infringement of the patents or intellectual property rights of third parties, and our ability to successfully prevent third parties from infringing our intellectual property. We operate in a crowded technology area in which there has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the molecular diagnostics industry. For example, third parties in this industry have brought numerous patent infringement lawsuits against one another in which certain of these parties were found to infringe the others' patents. Third parties have also challenged other parties' patents and successfully invalidated some of those patents in patent infringement lawsuits or post-

grant proceedings. Some of these third parties are our competitors and some have broad patent claims. These competitors or other third parties may also target us in patent infringement lawsuits or may also challenge our patents.

Third parties have already asserted and may in the future assert that we are infringing their intellectual property rights. We may become subject to and/or initiate future intellectual property litigation as our product portfolio, and the level of competition in our industry, grow. Such proceedings could also include contested post-grant proceedings such as oppositions, *inter partes* review, reexamination, interference, or derivation proceedings before the U.S. Patent and Trademark Office or foreign patent offices.

Should we be unsuccessful defending against patent infringement claims, we may be required to pay substantial royalties, money damages, change our marketing practices, modify our tests, or be enjoined from offering our tests. In addition, we could experience delays in product introductions or sales growth while we attempt to develop non-infringing alternatives. Any of these or other adverse outcomes could delay or prevent us from offering our tests or otherwise have a material adverse effect on our business, financial condition and our results of operations.

If we are found to infringe, misappropriate or otherwise violate a third-party's intellectual property rights, we could be required to obtain a license from such third-party to continue developing, manufacturing, marketing and selling our tests. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us and could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease commercializing the infringing technology, products or product candidates. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent and could be forced to indemnify our customers or collaborators. A finding of infringement could also result in an injunction that forces us to cease some of our business operations, which could materially harm our business. In addition, we may be forced to redesign our tests, seek new regulatory approvals and indemnify third parties pursuant to contractual agreements. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

We cannot predict whether, or offer any assurance that, any patent infringement claims we may initiate in the future will be successful. We may become subject to counterclaims by patent infringement defendants. Our patents may be declared invalid or unenforceable, or narrowed in scope.

Even if we prevail in an infringement action, we cannot assure you that we would be adequately compensated for the harm to our business. If we are unable to enjoin third-party infringement, our revenue may be adversely impacted and we may lose market share; and such third-party product may continue to exist in the market, but fail to meet our regulatory or safety standards, thereby causing irreparable harm to our reputation as a provider of quality products, which in turn could result in loss of market share and have a material adverse effect on our business, financial condition and our results of operations.

In addition, our agreements with some of our customers, suppliers and other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in patent infringement claims, including the types of claims described in this risk factor. We have agreed, and may in the future agree, to defend or indemnify third parties if we determine it to be in the best interests of our business relationships. If we are required or agree to defend or indemnify third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, financial condition and results of operations.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

Changes in patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

Changes in either the patent laws or in interpretations of patent laws in the United States or other countries or regions may diminish the value of our intellectual property rights. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. We may not develop additional proprietary products, services, methods and technologies that are patentable.

Under the Leahy-Smith America Invents Act, assuming that certain requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. Prior to March 16, 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. A third party that files a patent application in the USPTO on or after March 16, 2013, but before us, could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party, requiring us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we were the first to either (i) file any patent application related to our products or (ii) invent any of the inventions claimed in our patents or patent applications.

The America Invents Act also affects the way patent applications are prosecuted and patent litigation. The Act allows third-party submission of prior art to the USPTO during patent prosecution or post-grant proceedings, including post-grant review, *inter partes* review and derivation proceedings, to attack the validity of a patent. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence might not be sufficient to invalidate the claim if presented in a district court action. Accordingly, third parties may attempt to use the USPTO proceedings to invalidate our patent claims that would not have been invalidated if first challenged by the third party in a district court action, which could increase the uncertainties and costs surrounding our prosecution of patent applications and enforcement or defense of issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Similarly, there is complexity and uncertainty related to European patent laws. In June 2023, a new unitary patent system was introduced, which will significantly impact European patents, including those granted before the introduction of the system. Under the unitary patent system, after a European patent is granted, the patent proprietor can request unitary effect, thereby getting a European patent with unitary effect (a Unitary Patent). The Unitary Patent will make it possible for a patentee to obtain patent protection in numerous European Union member states in a single patent as an alternative to the current, more expensive system of selecting and paying for validation of a patent in each specific European Union state of interest. Each Unitary Patent is subject to the jurisdiction of the Unitary Patent Court (UPC). As the UPC is a new court system, there is limited precedent for the court, increasing the uncertainty of any litigation. It is not yet known if the UPC will be more or less favorable to patentees than the national courts for each individual European Union state that have historically heard patent litigations in that corresponding state. Patentees having patents granted before the implementation of the UPC will have the option of opting out of the jurisdiction of the UPC and having their

patents remain as national patents in the UPC countries. Patents that remain under the jurisdiction of the UPC may be potentially vulnerable to a single UPC-based revocation challenge that, if successful, could invalidate the patent in all countries that are signatories to the UPC. We cannot predict with certainty the long-term effects of the new unitary patent system. Upon each grant of a European patent, we will have to make the decision as to whether to proceed with national patents or a Unitary Patent based. Since the unitary patent system is continuing to develop and we have limited information, we may make a choice that results in some patents being invalidated. In addition, the European Patent Office (the EPO) patent system is relatively stringent in the type of amendments that are allowed during prosecution. These limitations and requirements could adversely affect our ability to obtain new patents in the future that may be important for our business. The EPO also has an opposition procedure in which third parties, such as competitors, can file an opposition against one of our European patents for a period of nine months after grant of the patent. If the opposition is successful, it can result in invalidation of the patent, which could mean that the product covered by that patent is not protected in Europe.

The patent positions of companies engaged in the development and commercialization of molecular laboratory products are particularly uncertain. Court rulings may narrow the scope of patent protection available in certain circumstances and weaken the rights of patent owners in certain situations. We cannot predict how decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patents. Any similar adverse changes in the patent laws of other jurisdictions could also have a material adverse effect on our business, financial condition and results of operations. Depending on future actions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

In the United States, the current presidential administration has been making numerous changes that could have unforeseeable short- and long-term effects on intellectual property law and how the patent system operates. These changes may affect patentability of inventions, enforcement of patents, patent scope, patent validity, patent infringement issues and lawsuits, post-grant proceedings within the USPTO, among other areas. In addition, due to reductions in staff within the USPTO, particularly within the Patent Trial and Appeal Board (PTAB), certain processes may take longer or become unavailable to patentees. It may take longer for patents to grant because there are fewer patent examiners or fewer judges within the PTAB to handle patent appeals, which may hinder our ability to protect our products with patents. In addition, the USPTO may reduce or cut certain programs that benefit patentees if the USPTO is understaffed, which may also limit our ability to protect our products with patents. Additionally, patentees may have more limited access to post-grant proceedings at the PTAB within the USPTO since there are fewer judges within the PTAB. This may make it more difficult for us to challenge competitor patents in a cost-effective manner and may instead require us to bring a more costly and lengthy patent litigation to challenge competitor patents.

Issued patents covering our products, services or technology could be found invalid or unenforceable if challenged.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability. Some of our patent rights may be challenged at a future point in time in opposition, derivation, re-examination, *inter partes* review, post-grant review. Any successful third-party challenge to our patent rights in this or any other proceeding could result in the unenforceability or invalidity of such patent rights, which may lead to increased competition to our business. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop, manufacture or commercialize our current or future products, services or technology.

We may not be aware of all third-party intellectual property rights potentially relating to our products or technology. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until approximately 18 months after filing or, in some cases, not until such patent applications issue as patents. We might not have been the first to make the inventions covered by each of our pending patent applications and we might not have been the first to file patent applications for these inventions. To determine the priority of our inventions, we may participate in interference proceedings, derivation proceedings or other post-grant proceedings declared by the USPTO that could result in substantial cost to us. The outcome of such proceedings is uncertain. No assurance can be given that other patent applications will not have priority over our patent applications. In addition, changes to the patent laws of the United States allow for various post-grant opposition proceedings that have not been extensively tested, and their outcome is therefore uncertain. If third parties bring actions against our patent rights, we could experience significant costs and management distraction.

In patent litigation in the United States or abroad, defendant counterclaims alleging invalidity or unenforceability of plaintiff's patents are common. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the patent office or made a misleading statement during prosecution. Similar claims may also be raised before patent offices in the United States or abroad, even outside the context of litigation, through mechanisms including re-examination, post-grant review and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our patent rights in such a way that they no longer cover our products. The outcome of patent litigation or patent office proceedings following assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the relevant patent that protects our products, service or technology. Such a loss of patent protection could have a material adverse impact on our business.

We may in the future initiate or become involved in legal proceedings against a third party to enforce a patent covering one of our products or technology. Defendants in such proceedings could counterclaim that the patents covering our products or technology are invalid or unenforceable and could institute legal proceedings to challenge such patents both in court and before patent offices. Any assertion of invalidity and/or unenforceability against the patents covering our products or technology, even if not successful, could be time-consuming and expensive to defend, damage our reputation in the marketplace and the prospects for our business, and divert our management's attention.

We may be subject to claims challenging the inventorship or ownership of our intellectual property.

We may be subject to claims that former employees, independent contractors, collaborators or other third parties have an interest in or right to our owned or future licensed patents, trade secrets or other intellectual property. For example, we may have inventorship disputes arise from conflicting obligations of employees, independent contractors or others who are involved in developing such intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership of our owned patents, trade secrets or other intellectual property. If we fail in defending against any such claims, we may lose exclusive ownership of, or right to use, valuable intellectual property. Even if we are successful in defending against such claims, litigation could result in damage to our reputation and substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed trade secrets of their former employers.

We have employed or engaged and expect to employ or engage individuals who were previously employed at or associated with universities or other companies, including our competitors or potential competitors. Although we try to ensure that our employees and independent contractors do not use the proprietary information or know-how of others in their work for us, we have received claims in the past, and may be subject to claims in the future, that our employees or independent contractors have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers or other third parties, or to claims that we have improperly used or obtained such trade secrets. Litigation may be necessary to defend against these claims in the future. If we lose, in addition to paying monetary damages, we may be deprived of valuable intellectual property and face increased competition. A loss of key personnel or work product could hamper or prevent our ability to develop, manufacture and/or commercialize products, services or technology, which could materially adversely affect our business. Even if we are successful in defending against these claims, litigation could result in damage to our reputation and substantial costs and be a distraction to management and affected individuals.

We may not be able to protect and enforce our trademarks and we could infringe others' trademarks.

We have not yet registered trademarks in all of our potential markets, although we have registered BillionToOne, UNITY Complete, NorthStar Select and NorthStar Response in the United States and certain foreign jurisdictions. If we apply to register additional trademarks in the United States and other countries, our applications may not be allowed for registration in a timely fashion or at all, and our registered trademarks may not be maintained or enforced. In addition, opposition or cancellation proceedings may be filed against our trademark applications and registrations, and our trademarks may not survive such proceedings. If we do not timely register and enforce marks used in connection with our products or technology, we may encounter difficulty in enforcing them against third parties, and if these marks are registered by others, we could infringe such trademarks and may have to defend ourselves to continue the use of our trademarks, which may be time consuming and costly, and we may be unsuccessful.

At times, competitors or other third parties may adopt trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trademark infringement or other violation claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks. Over the long term, if we are unable to establish name recognition based on our trademarks, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks may be ineffective and could result in substantial costs and diversion of resources. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

We may not be able to protect or enforce our intellectual property rights adequately throughout the world.

In addition to nine U.S. issued patents and 14 pending U.S. patent applications, we held 45 foreign patents and 31 foreign patent applications as of June 30, 2025. Filing, prosecuting and defending patents and other intellectual property rights covering our products, services and technology in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some territories outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries and regions do not protect intellectual property rights to the same extent as the laws of the United States, and we

may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we may not be able to prevent third parties from practicing our inventions in all jurisdictions, or from selling, making or importing products, services or technology by practicing our intellectual property rights. Competitors may practice our intellectual property rights in jurisdictions where we have not obtained patent protection to develop, manufacture, sell or import their own products, services or technology and may also export products, services or technology that infringe upon our intellectual property rights to territories where we have patent protection that do not provide strong intellectual property or enforcement rights as strong as that in the United States. These products, services or technology may compete with our products, services or technology. Our patents or other intellectual property rights existing outside the United States may not be effective or sufficient to prevent third parties from competing with us. Similarly, intellectual property rights may be exhausted in certain situations, and others could import our products sold abroad and compete with us domestically.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of many other countries and regions do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents and other intellectual property rights in such jurisdictions. Proceedings to enforce our patent rights and other intellectual property rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded to us, if any, may not be commercially meaningful. Accordingly, our efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage.

Failure to comply with the terms of underlying open source software licenses could require us to publicly disclose our proprietary software.

We use open source software to leverage established solutions when those solutions are not central to our unique products. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source software licensors generally do not provide warranties or other contractual protections regarding infringement or other violation claims or the quality of the code. Some open source software licenses contain requirements that the licensee make its source code publicly available if the licensee creates modifications or derivative works using the open source software or provide software services at no cost to the user, depending on the type of open source software the licensee uses and how the licensee uses it. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source software licenses, be required to release the source code of our proprietary software to the public for free. This would allow our competitors to create similar products with less development effort and time and ultimately could result in a loss of product sales and revenue. In addition, some companies that use third-party open source software have faced claims challenging their use of such open source software, seeking enforcement of open source license provisions, asserting ownership of open source software incorporated in products and demanding compliance with the terms of the applicable open source license. We may be subject to suits by third parties claiming ownership of what we believe to be open source software, or claiming non-compliance with the applicable open source licensing terms. Use of open source software may also present additional security risks because the public availability of such software may make it easier for hackers and other third parties to compromise or attempt to compromise our systems. If an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of an open source license, we could incur significant legal costs defending ourselves against such allegations. In the event such claims were successful, we could be subject to significant damages or be enjoined from the distribution of our products.

There is little legal precedent and the terms of many open source software licenses have not been interpreted by United States courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Although we have reviewed our use of open source software, we cannot assure investors that our processes for monitoring and controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our product, to discontinue the sale of our products if re-engineering could not be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, financial condition and results of operations.

Obtaining and maintaining our patent protection depends on compliance with various required procedures, document submissions, fee payments and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States at several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we rely on our outside counsel and a third-party service provider to pay these fees due to patent agencies. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar requirements during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or forfeiture of the patent or patent application and thus loss of patent rights in the relevant jurisdiction. Such an event would allow our competitors to enter the unprotected market and have a material adverse effect on our business.

Patent terms may be inadequate to protect our competitive position for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our products are obtained, once the patent life has expired, we may be open to competition. Given the amount of time required for the development, testing and regulatory review of our new products or technologies, patents protecting them might expire before or shortly after they are commercialized. As a result, our patent portfolio may not provide us with a sufficient exclusivity period to exclude others from commercializing products similar or identical to ours.

Further, recent judicial decisions in the U.S. raised questions regarding the award of patent term adjustment (PTA) for patents in families where related patents have issued without PTA. Thus, it cannot be said with certainty how PTA will be viewed in the future and whether patent expiration dates may be impacted.

Risks related to legal and regulatory matters

Our tests are currently marketed as LDTs, and future changes in FDA enforcement of LDTs could subject our operations to much more significant regulatory requirements.

We currently offer a number of genetic tests, each of which is a laboratory developed test (LDT). Our laboratories are currently regulated under Clinical Laboratory Improvement Amendments of 1988 (CLIA) and

we have elected to comply with the higher standards and requirements established by the College of American Pathologists (CAP), a CMS-approved accreditation organization, and we are subject to extensive federal and certain state laws and regulations. The Food and Drug Administration (FDA) considers an LDT to be a test that is designed, developed, validated and used within a single laboratory. The FDA had historically taken the position that it had the authority to regulate LDTs as medical devices under the Federal Food, Drug, and Cosmetic Act (FD&C Act) but exercised enforcement discretion until it recently rescinded LDT regulations indicating that it does not have the authority to require clearance, de novo classification, or approval of LDTs prior to market release.

If FDA premarket clearance, approval or de novo classification is required, in the future, for any of our existing or future tests, or for any components or materials we use in tests, and we are not able to obtain such clearance, approval or de novo classification, we may be forced to stop selling our tests or we may be required to modify claims for or make other changes to our tests while we or our suppliers work to obtain FDA clearance, approval or de novo classification. The need for compliance with such FDA regulations would be time-consuming and expensive, potentially diverting resources from other aspects of our business, and we could be subject to legal actions, including fines and penalties, if we fail to comply with these requirements, any of which may adversely impact our business and results of operations. Our business could be adversely affected while such review is ongoing, and if we or our supplier are ultimately unable to obtain premarket clearance, approval or de novo classification. In addition, we may require cooperation in our filings for FDA clearance, approval or de novo classification from third-party manufacturers of the components of our tests. If we are unable to obtain such required cooperation, we may be unable to achieve the desired regulatory clearances, approvals or de novo classifications or may be delayed or be required to expend additional costs and other resources in doing so. Moreover, if FDA premarket clearance, approval or de novo classification is required, our revenue or cash flows may be adversely affected until we obtain such clearance, approval or de novo classification, as most third-party payors, including Medicaid, will not reimburse for use of medical devices which are required to, but which do not, have marketing authorization.

Furthermore, the FDA or the Federal Trade Commission (FTC), as well as state consumer protection agencies, may object to the materials and methods we use to promote the use of our current tests or other LDTs we may develop in the future, and may initiate enforcement actions against us. Enforcement actions by the FDA may include, among others, untitled or warning letters; fines; injunctions; civil or criminal penalties; recall or seizure of current or future tests, products or services; operating restrictions and partial suspension or total shutdown of production. Enforcement actions by the FTC and state consumer protection agencies may include, among others, injunctions, civil penalties and equitable monetary relief, any of which may adversely impact our business, financial position and results of operations.

Changes in the way the FDA regulates the reagents, other consumables, and testing equipment we use when developing, validating, and performing our tests could result in delay or additional expense in bringing our tests to market or performing such tests for our customers.

Many of the sequencers, reagents, kits and other consumable products used to perform our testing, as well as the instruments and other capital equipment that enable the testing, are labeled as for research use only (RUO). Products utilized in our tests that are intended for research use only and are labeled as RUO are exempt from compliance with FDA requirements, including the approval, clearance or de novo classification and other product quality requirements for medical devices. A product labeled RUO but which is actually intended by the manufacturer for molecular diagnostic use may be viewed by the FDA as adulterated and misbranded under the FDC Act and subject to FDA enforcement action. The FDA has issued guidance stating that when determining the intended use of a product labeled RUO, it will consider the totality of the circumstances surrounding distribution of the product, including how the product is marketed and to whom. In addition, many of the

reagents used to perform our testing are offered for sale as analyte specific reagents (ASRs). ASRs are medical devices and must comply with QSR provisions and other device requirements, but most are exempt from premarket review. The FDA could disagree with a manufacturer's assessment that the manufacturer's products are ASRs, or could conclude that products labeled as RUO are actually intended by the manufacturer for molecular diagnostic use, and could take enforcement action against the manufacturer, including requiring the manufacturer to cease offering the product while it seeks clearance, approval or de novo classification. Manufacturers of RUO products that we employ in our tests may cease selling their respective products, and we may be unable to obtain an acceptable substitute on commercially reasonable terms or at all, which could significantly and adversely affect our ability to provide timely testing results to our customers or could significantly increase our costs of conducting business.

The sequencers and reagents used in processing our tests are generally labeled as RUO in the United States. We are using these sequencers and reagents for molecular diagnostic use. If the FDA were to require clearance, approval or de novo classification for the sale of these sequencers or reagents and if the applicable manufacturer does not obtain such clearance, approval or authorization, we would have to find an alternative sequencing platform. If we were not successful in selecting, acquiring on commercially reasonable terms and implementing an alternative platform on a timely basis, our business, financial condition and results of operations would be adversely affected.

We and the third parties with whom we work are subject to stringent and evolving U.S. and foreign laws, regulations, and rules, contractual obligations, industry standards, policies and other obligations related to data privacy and security, and our actual or perceived failure to comply with those laws and regulations or to adequately secure the information in our possession could result in significant liability or reputational harm.

We are subject to numerous state, federal and foreign laws, requirements and regulations governing the collection, use, disclosure, retention and security of personal information. We collect, process, maintain, retain, evaluate, utilize and distribute large amounts of personal health and financial information and other confidential and sensitive data about customers, patients and others in the ordinary course of our business. Concerns about and claims challenging our practices with regard to the collection, use, retention, disclosure or security of personally identifiable information or other privacy-related matters, even if unfounded, could damage our reputation and harm our business.

As we seek to expand our business, we are, and will increasingly become, subject to various laws, regulations and standards, as well as contractual obligations, relating to the collection, use, retention, security, disclosure, transfer and other processing of sensitive and personal information in the jurisdictions in which we operate. In many cases, these laws, regulations and standards apply not only to third-party transactions, but also to transfers of information between or among us and other parties with which we have commercial relationships. These laws, regulations and standards are interpreted and applied differently over time and from jurisdiction to jurisdiction, and it is possible that they will be interpreted and applied in ways that will materially and adversely affect our business, financial condition and results of operations. The regulatory framework for data privacy, data security and data transfers worldwide is rapidly evolving and, as a result, interpretation and implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future.

Numerous federal, state and foreign laws and regulations govern collection, dissemination, use and confidentiality of PHI, including: the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, and regulations promulgated thereunder (collectively, HIPAA); state privacy and confidentiality laws (including state laws requiring disclosure of breaches); federal and state consumer protection and employment laws; and European and other foreign data protection laws. In addition to government regulation, privacy advocates and industry

groups have and may in the future propose self-regulatory standards, which may legally or contractually apply to us or which we may elect to comply with such standards. Implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet determine the impact future laws, regulations, standards or perception of their requirements may have on our business. This evolution often creates uncertainty in our business, affect our ability to operate in certain jurisdictions, necessitate the acceptance of more onerous obligations in our contracts, result in liability or impose additional costs on us. The cost of compliance with these laws, regulations and standards is high and is likely to increase in the future. Any failure or perceived failure by us to comply with laws or regulation, our internal policies and procedures or our contracts governing processing of personal information could result in negative publicity, government investigations and enforcement actions, claims by third parties and damage to our reputation, any of which could have a material adverse effect on our operations, financial performance and business.

We are a covered entity under HIPAA, and therefore, must comply with its requirements to protect the privacy and security of PHI and must provide individuals with certain rights with respect to their PHI. We currently, and will in the future, engage business associates to help us carry out healthcare activities and functions. For each such business associate, we must have a written business associate contract or other arrangement with the business associate that requires the business associate to comply with the same standards and safeguards and other requirements under HIPAA. We cannot guarantee that our security safeguards or those of our business associates will not fail or that they will not be deemed inadequate in the future. Determining whether PHI has been handled in compliance with applicable privacy standards and our contractual obligations can be complex and we cannot be sure how these regulations will be interpreted, enforced or applied to our operations.

Entities that are found to be in violation of HIPAA as the result of a breach of unsecured PHI, a complaint about privacy practices or an audit by the U.S. Department of Health and Human Services (HHS) can be subject to significant civil, criminal and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance. While HIPAA does not create a private right of action allowing individuals to sue us in civil court for violations of HIPAA, its standards have been used as the basis for duty of care in state civil suits such as those for negligence or recklessness in the misuse or breach of PHI. A person who knowingly obtains or discloses individually identifiable health information in violation of HIPAA may face additional fines and up to one-year imprisonment. In addition, our responding to government investigations regarding alleged violations of these and other laws and regulations, even if ultimately successful, can consume company resources, impact our business and, if public, harm our reputation.

Further, various states have implemented similar privacy laws and regulations, such as the California Confidentiality of Medical Information Act, that impose restrictive requirements regulating the use and disclosure of health information and other personally identifiable information. In addition, certain state laws may require us under certain circumstances to provide information, upon request, regarding the manner in which we share certain categories of personal information with third parties for marketing or other purposes (e.g. California Shine the Light law). These laws and regulations are not necessarily preempted by HIPAA, and where state laws are more protective, we may have to comply with the stricter provisions. These state data privacy laws are not consistent, and compliance in the event of a widespread data breach is costly. In addition to fines and penalties potentially imposed upon violators, some of these state laws also afford private rights of action to individuals who believe their personal information has been misused. Furthermore, the FTC, and certain state Attorneys General can enforce federal or state consumer protection laws against companies for online collection, use, dissemination and security practices that appear to be unfair or deceptive. The interplay of federal and state laws may be subject to varying interpretations by courts and government agencies.

Our employees and personnel use generative artificial intelligence (AI) and machine learning (ML) technologies (collectively, AI/ML) to perform their work, and the disclosure and use of personal data in AI/ML is subject to

various privacy laws and other privacy obligations. We use AI/ML for a variety of internal processes, including to draft sales emails, conduct product research, automate reimbursement processing, and draft code. While we supplement our usage of AI with quality checks and review processes, AI models can produce inaccurate, biased, or incomplete outputs that may affect decision-making or generate erroneous results in critical workflows. Our use of this technology could result in additional compliance costs, regulatory investigations and actions, and lawsuits. If we are unable to use AI/ML, it could make our business less efficient and result in competitive disadvantages.

We use AI/ML to assist us in making certain decisions, which is regulated by certain privacy laws. Specifically, we use AI to accelerate the reading of data on test requisition forms that arrive with our tests to our labs during sample accessioning. Based on that data read, the samples are assigned a distinct testing workflow. We manually validate the AI data read after accessioning to confirm the appropriate procedure is followed; however, this validation is subject to human error. Inaccuracies or flaws in the inputs, outputs, or logic of the AI/ML often lead to bias in the models and could lead us to make decisions that adversely impact the rights, employment, and ability of individuals or classes of individuals to obtain certain pricing, products, services, or benefits. We also use AI, including AI/ML in our products and services. The development and use of AI/ML present various privacy and security risks that may impact our business. AI/ML are subject to privacy and data security laws, as well as increasing regulation and scrutiny. While we have implemented robust controls, validations, and human oversight to mitigate the risks of the aforementioned biases and inaccuracies, these measures may not be found sufficient by current or future privacy and data security laws.

Several jurisdictions around the globe, including Europe and certain U.S. states, have proposed enacted, or are considering laws governing the development and use of AI/ML, such as the EU's AI Act. We expect other jurisdictions will adopt similar laws. Additionally, certain privacy laws extend rights to consumers (such as the right to delete certain personal data) and regulate automated decision making, which may be incompatible with our use of AI/ML. These obligations may make it harder for us to conduct our business using AI/ML, lead to regulatory fines or penalties, require us to change our business practices, retrain our AI/ML, or prevent or limit our use of AI/ML. For example, the FTC has required other companies to turn over (or disgorge) valuable insights or trainings generated through the use of AI/ML where they allege the company has violated privacy and consumer protection laws. If we cannot use AI/ML or that use is restricted, our business may be less efficient, or we may be at a competitive disadvantage.

In addition, the interpretation and application of consumer, health-related and data protection laws, especially with respect to genetic samples and data, in the United States, European Economic Area (EEA) and elsewhere are often uncertain, contradictory and in flux. The General Data Protection Regulation (GDPR) and other privacy laws and regulations related to the use, transfer, and protection of data impose obligations to the extent we test EU citizens or expand internationally. While we believe that our current processes and practices comply with the GDPR, we may need to expend considerable time and resources, including management attention, to revise our practices to ensure ongoing compliance with GDPR.

Some of the above privacy laws and regulations in many cases may be more restrictive than, and may not be preempted by, HIPAA and its implementing rules. In addition, some countries have stricter consumer notice and/or consent requirements relating to personal data collection, use or sharing, more stringent requirements relating to organizations' privacy programs and provide stronger individual rights. Failure to comply with GDPR and other applicable privacy or data security-related laws, rules or regulations in the EEA and elsewhere could have an adverse effect on our business, financial condition and results of operations.

We expect that there will continue to be new proposed laws and regulations in the U.S. and internationally concerning data privacy and security, and we cannot yet determine the impact such future laws, regulations and standards may have on our business. Because the interpretation and application of laws, regulations, standards and other obligations relating to data privacy and security are still uncertain, these laws, regulations, standards and

other obligations could be interpreted and applied in a manner that is inconsistent with our data processing practices and policies or the features of our products. In such cases, changes or modifications to our data processing practices and policies to comply with such interpretations in a commercially reasonable manner would be difficult.

We will make public statements about our use and disclosure of personal information through our privacy policy, information provided on our internet platform and press statements. Although we endeavor to comply with our public statements and documentation, we may at times fail to do so or be alleged to have failed to do so. The publication of our privacy policy and other statements that provide promises and assurances about data privacy and security can subject us to potential government or legal action if they are found to be deceptive, unfair or misrepresentative of our actual practices. Any failure, real or perceived, by us to comply with our posted privacy policy or with any legal or regulatory requirements, standards, certifications or orders or other privacy or consumer protection-related laws and regulations applicable to us could cause our customers to reduce their use of our products and could materially and adversely affect our business, financial condition and results of operations. In many jurisdictions, enforcement actions and consequences for non-compliance can be significant and are rising. In addition, from time to time, concerns may be expressed about whether our products or processes compromise the privacy of customers and others. Concerns about our practices with regard to the collection, use, retention, security, disclosure, transfer and other processing of personal information or other privacy-related matters, even if unfounded, could damage our reputation and materially and adversely affect our business, financial condition and results of operations.

We conduct business in a heavily regulated industry, and changes in regulations or violations of regulations may, directly or indirectly, reduce our revenue, adversely affect our results of operations and financial condition, and harm our business.

The molecular diagnostics industry is highly regulated, and there can be no assurance that the regulatory environment in which we operate will not change significantly and adversely to us in the future. Areas of the regulatory environment that may affect our ability to conduct business include, without limitation:

- federal, state and foreign laws applicable to test ordering, documentation of tests ordered, billing practices and claims payment and/or regulatory agencies enforcing those laws and regulations;
- federal, state and foreign health care fraud and abuse laws;
- federal, state and foreign laboratory anti-mark-up laws;
- coverage and reimbursement levels by Medicare, Medicaid, other governmental payors and private insurers;
- restrictions on coverage of and reimbursement for tests;
- federal, state and foreign laws governing laboratory testing, including CLIA, and state licensing laws;
- federal, state and foreign laws and enforcement policies governing the development, use and distribution of diagnostic medical devices;
- laws and regulations governing the marketing of molecular diagnostic tests, including by the FDA pursuant to the medical device provisions of the Federal Food, Drug and Cosmetic Act or FDCA;
- FDA regulation, via the FDCA and its implementing regulations, of the research, design, testing, manufacturing, safety, labeling, storage, recordkeeping, premarket clearance or approval, marketing and promotion and sales and distribution of medical devices in the United States;
- FDA regulation of the import and export of medical devices;

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- federal and state laws and enforcement policies governing the use of AI in analyzing data, including data in healthcare-related areas;
- federal, state, local and foreign laws governing the handling and disposal of medical and hazardous waste;
- federal and state Occupational Safety and Health Administration rules and regulations;
- HIPAA, GDPR, CCPA, CPRA and similar state or foreign data privacy and security laws; and
- consumer protection laws.

Changes in the current regulatory framework for algorithmic diagnostic products and services can impose additional regulatory burdens on us. The FDA is currently considering the development of novel regulatory pathways for AI technologies and other software. As the regulatory framework evolves, we may incur substantial costs to ensure compliance with new or amended laws and regulations. Failure to comply with any of these laws and regulations could result in enforcement actions against us or damage to our reputation, any of which could have a material adverse effect on our business, financial condition and results of operations.

Our business could be harmed by the loss, suspension or other restriction on a license, certification, or accreditation, or by the imposition of a fine or penalties, under CLIA, its implementing regulations, or other state, federal and foreign laws and regulations affecting licensure or certification, or by future changes in these laws or regulations.

The laboratory testing industry is subject to extensive laws and regulations, many of which have not been interpreted by the courts. CLIA requires virtually all laboratories to be certified by the federal government and mandates compliance with various operational, personnel, facilities administration, quality and proficiency testing requirements intended to ensure that testing services are accurate, reliable and timely. CLIA certification is also a prerequisite to be eligible to bill state and federal health care programs, as well as many commercial third-party payors, for laboratory testing services. In addition to the CLIA certification, our laboratory is CAP-accredited, which is a voluntary program that many molecular diagnostic labs participate in. CAP is a deemed agency by the CMS for the CLIA program. As a condition of CLIA certification, our laboratory is subject to survey and inspection every two years conducted by CAP, in addition to being subject to additional CMS follow up or complaint inspections. Sanctions for failure to comply with CLIA regulations, including proficiency testing violations, may include suspension, revocation, or limitation of a laboratory's CLIA certificate (and exclude persons or entities from owning, operating or directing a laboratory for two years following such revocation), which is necessary to conduct business, as well as the imposition of significant fines or criminal penalties. In addition, we are subject to regulation under certain state laws and regulations governing laboratory licensure (including California, New York, Maryland, Pennsylvania, Rhode Island and the District of Columbia), some of which have enacted laboratory standards that are more stringent than CLIA. Some states require that we hold licenses or permits to test samples from patients in those states, even if our laboratory facilities are not located in those states, and as a result we are also required to maintain standards related to those states' licensure requirements to conduct testing in our laboratory.

If we are found to be out of compliance with state requirements, the applicable state regulator may suspend, restrict or revoke our license or laboratory permit (and, with respect to California, may exclude persons or entities from owning, operating or directing a laboratory for two years following such license revocation), assess civil monetary penalties, or impose specific corrective action plans, among other sanctions. We cannot assure you that the regulators in any state from which we have obtained a required license or permit will find us to be in compliance with the applicable laws of their respective state at all times, which may result in suspension, limitation, revocation or annulment of our laboratory's license for that state or negative impact to our CLIA certificate, censure or civil monetary penalties, and would result in our inability to test samples from

patients in that state. Any such consequences could materially and adversely affect our business by prohibiting or limiting our ability to offer testing.

Any sanction imposed under CLIA, its implementing regulations, or state or foreign laws or regulations governing licensure, or our failure to renew a CLIA certificate, a state or foreign license or accreditation, could have a material adverse effect on our business. If the CLIA certificate of any one of our laboratories is revoked, CMS could seek revocation of the CLIA certificates of our other laboratories based on their common ownership or operation, even though they are separately certified. Changes in state or foreign licensure laws that affect our ability to offer and provide molecular diagnostic services across state or foreign country lines could materially and adversely affect our business. In addition, state and foreign requirements for laboratory certification may be costly or difficult to meet and could affect our ability to receive specimens from certain states or foreign countries.

Companion and complementary diagnostic tests require FDA approval, and we may not be able to secure such approval in a timely manner or at all.

We have entered into a global partnership with Johnson & Johnson to provide our UNITY Fetal Antigen CTA (Clinical Trial Assay) in their AZALEA Phase 3 clinical trial of nivalolumab in pregnancies at risk for severe hemolytic disease of fetus and newborn (HDFN), and a related U.S.-specific partnership regarding development of a companion diagnostic product. We may enter into additional partnerships with other pharmaceutical companies. Our companion and complementary diagnostic products, marketing, sales and development activities and manufacturing processes are subject to extensive and rigorous regulation by the FDA pursuant to the federal FDCA, by comparable agencies in foreign countries, and by other regulatory agencies and governing bodies. Under the FDCA, companion diagnostics must receive FDA clearance or approval before they can be commercially marketed in the United States. The process of obtaining marketing approval or clearance from the FDA or by comparable agencies in foreign countries for new products could:

- take a significant period of time;
 - require the expenditure of substantial resources;
 - involve rigorous pre-clinical testing, as well as increased post-market surveillance;
 - require changes to products; and
 - result in limitations on the indicated uses of products.
- We cannot predict whether or when we will be able to obtain FDA approval for companion diagnostics that we may develop.

Changes in healthcare laws, regulations and policies could increase our costs, decrease our sales and revenue and negatively impact reimbursement for our tests.

There have been in the past, and we anticipate there will continue to be in the future, proposals by legislators at both the federal and state levels and in foreign jurisdictions, regulators and commercial and government payors to reduce healthcare costs while expanding individual healthcare benefits. Certain of these changes could impose additional limitations on the prices we will be able to charge for our tests, the coverage of or the amounts of reimbursement available for our tests from commercial and government payors. For example, the Patient Protection and Affordable Care Act (ACA), adopted in 2010, substantially changed the way healthcare is financed by both commercial third-party payors and government payors, and significantly impacted our industry, required disclosures of financial arrangements with physician customers, required reporting of discovered overpayments, lower thresholds for violations, new government investigative powers, and enhanced

penalties for such violations. On August 2, 2011, the Budget Control Act of 2011 was signed into law, which, among other things, reduced Medicare payments to providers, effective on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2032, unless additional Congressional action is taken.

Government healthcare policy has been and will likely continue to be a topic of extensive legislative and executive activity in the U.S. federal government, particularly given the recent change in administrations, and many U.S. state governments. The current presidential administration is pursuing policies to reduce regulations and expenditures across government including at HHS, the FDA, CMS and related agencies. These actions, presently directed by executive orders or memoranda from the Office of Management and Budget, propose policy changes that create additional uncertainty for our business. These actions, for example, include directives to reduce agency workforce, program cuts, eliminating the Biden administration's executive order that directed HHS to establishing an AI task force and developing a strategic plan, and directing certain federal agencies to enforce existing law regarding hospital and plan price transparency and by standardizing prices across hospitals and health plans. Additionally, in its June 2024 decision in *Loper Bright Enterprises v. Raimondo*, or *Loper Bright*, the U.S. Supreme Court overturned the longstanding *Chevron* doctrine, under which courts were required to give deference to regulatory agencies' reasonable interpretations of ambiguous federal statutes. The *Loper Bright* decision could result in additional legal challenges to current regulations and guidance issued by federal agencies applicable to our operations, including those issued by the FDA. We cannot predict whether future healthcare initiatives will be implemented at the federal or state level or how any such future legislation, regulation or initiative may affect us. Current or potential future federal legislation and the expansion of government's role in the U.S. healthcare industry, changes to the reimbursement amounts paid by third-party payors for our current and future tests, or limited or inadequate funding for regulatory authorities, may adversely affect our test volumes and adversely affect our business, financial condition, results of operations and cash flows.

We are subject to numerous federal and state healthcare statutes and regulations; complying with such laws pertaining to our business is an expensive and time-consuming process, and any failure to comply could result in substantial penalties and a material adverse effect to our business and results of operations.

Our operations are subject to other extensive federal, state, local and foreign laws and regulations, all of which are subject to change. These laws and regulations may include, among others:

- the federal Anti-Kickback Statute (AKS), which prohibits knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, overtly or covertly, in cash or in kind (e.g. provision of free or discounted goods, services or items), in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal health care programs, such as Medicare, unless a safe harbor applies;
- the federal Eliminating Kickbacks in Recovery Act (EKRA), which prohibits knowingly and willfully soliciting or receiving any remuneration (including any kickback, bribe or rebate) directly or indirectly, overtly or covertly, in cash or in kind, in return for referring a patient or patronage to a laboratory; or paying or offering any remuneration (including any kickback, bribe or rebate) directly or indirectly, overtly or covertly, in cash or in kind, to induce a referral of an individual to a laboratory or in exchange for an individual using the services of that laboratory billed to either commercial third-party payors or government payors;
- the Stark Law and similar state laws, which prohibits a physician from making a referral for certain designated health services covered by the Medicare or Medicaid program, including laboratory and pathology services, if the physician or an immediate family member of the physician has a financial relationship with the entity providing the designated health services and prohibits that entity from billing, presenting or

causing to be presented a claim for the designated health services furnished pursuant to the prohibited referral, unless an exception applies;

- the federal Civil Monetary Penalties Law, which prohibits, among other things, the offering or transfer of remuneration to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary's selection of a particular provider, practitioner or supplier of services reimbursable by Medicare or a state healthcare program, unless an exception applies;
- federal and state "Anti-Markup" rules, which, among other things, typically prohibit a physician or supplier billing for molecular diagnostic tests (with certain exceptions) from marking up the price of a purchased test performed by another physician or supplier that does not "share a practice" with the billing physician or supplier;
- the federal government may bring a lawsuit under the False Claims Act (FCA), against any party whom it believes has knowingly or recklessly presented, or caused to be presented, a false or fraudulent request for payment from the federal government, or who has made a false statement or used a false record to get a claim for payment approved. The federal government and a number of courts have taken the position that claims presented in violation of certain other statutes, including the AKS or the Stark Law, can also be considered a violation of the FCA based on the theory that a provider impliedly certifies compliance with all applicable laws, regulations, and other rules when submitting claims for reimbursement;
- the HIPAA fraud and abuse provisions, which created federal criminal statutes that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private insurers, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services;
- federal and state laws related to, among other things, unlawful schemes to defraud, excessive fees for services, unlawful trade practices, insurance fraud, kickbacks, patient inducement and statutory or common law fraud restrict the provision of products, services or items for free or at reduced charge to government or non-government healthcare program beneficiaries;
- other federal and state fraud and abuse laws, such as state anti-kickback, self-referrals, false claims and anti-markup laws, any of which may extend to services reimbursable by any payor, including private insurers; and
- state laws that prohibit other specified practices, such as: billing physicians for tests that they order; providing tests at no or discounted cost to induce adoption; waiving co-insurance, co-payments, deductibles or other amounts owed by patients; billing a state healthcare program at a price that is higher than what is charged to other payors; or employing, exercising control over or splitting fees with licensed medical professionals.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. Any action brought against us for violation of these laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

Numerous states have enacted laws prohibiting business corporations, such as us, from practicing medicine and from employing or engaging physicians and other medical professionals (generally referred to as the prohibition against the corporate practice of medicine), which could include physician laboratory directors and

employees. These laws are designed to prevent interference in the medical decision-making process by anyone who is not a licensed medical professional. For example, California's Medical Board has indicated that determining the appropriate diagnostic tests for a particular condition and taking responsibility for the ultimate overall care of a patient, including making treatment options available to the patient, would constitute the unlicensed practice of medicine if performed by an unlicensed person. Violation of these laws may result in sanctions and civil or criminal penalties. It is possible that governmental authorities may conclude that our business practices, including our consulting and advisory board arrangements with physicians and other healthcare providers, do not comply with current or future corporate practice of medicine or healthcare fraud and abuse statutes, regulations, agency guidance or case law.

The growth of our business, including any international expansion, may increase the potential of violating applicable laws and regulations. Efforts to ensure that our internal operations and business arrangements with third parties comply with applicable laws and regulations will involve substantial costs. Any action brought against us for violation of these or other laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. To the extent our business operations are found to be in violation of any of these laws or regulations, we may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, monetary fines, individual imprisonment, disgorgement of profits, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting or oversight obligations if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with the law and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and pursue our strategy. If any of the healthcare providers or other parties with whom we interact or may interact in the future, are found not to be in compliance with applicable laws and regulations, they may be subject to criminal, civil or administrative sanctions, including exclusions from participation in various healthcare programs, which could also negatively affect our business or revenue. Additionally, we could be required to refund payments received by us, and we could be required to curtail or cease our operations. Any of the foregoing consequences could seriously harm our business, financial condition, and results of operations. In addition, if any of the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to significant civil, criminal and administrative sanctions, including exclusion from government funded healthcare programs.

We are subject to the U.S. Foreign Corrupt Practices Act and other anti-corruption laws, as well as export control laws, import and customs laws, trade and economic sanctions laws and other laws governing our operations.

Our operations are subject to anti-corruption laws, including the U.S. Foreign Corrupt Practices Act of 1977, as amended (FCPA), the U.S. domestic bribery statute contained in 18 U.S.C. §201, the U.S. Travel Act, and other anti-corruption laws that apply in countries where we do business, collectively referred to as Anti-Bribery/Anti-Corruption laws. The FCPA and these other laws generally prohibit us and our employees and intermediaries from authorizing, promising, offering, or providing, directly or indirectly, improper or prohibited payments, or anything else of value, to government officials or other persons to obtain or retain business or gain some other business advantage. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. We are also subject to other laws and regulations governing our international operations, including applicable export control regulations, economic sanctions and embargoes on certain countries and persons, anti-money laundering laws, import and customs requirements and currency exchange regulations, collectively referred to as the Trade Control laws.

While we have adopted policies and practices to meet the requirements of these laws and regulations, there is no assurance that we will be completely effective in ensuring our compliance with all applicable Anti-Bribery/Anti-Corruption laws and Trade Control laws. If we are not in compliance with such laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations and liquidity. Likewise, any investigation of any potential violations of such laws by the United States or other international authorities could also have an adverse impact on our reputation, our business, results of operations and financial condition.

If the validity of an informed consent from a patient intake for any of our tests is challenged, we could be precluded from billing for such testing, forced to stop performing such tests or required to repay amounts previously received, which would adversely affect our business and financial results.

All clinical data and blood samples that we receive for genetic testing are required to have been collected from individuals who have provided appropriate informed consent for us to perform our testing, both commercially and in clinical trials. The collection of data and samples in many different U.S. states results in complex legal questions regarding the adequacy of informed consent and the status of genetic material under different legal systems. The individual's informed consent obtained could be challenged in the future in any particular jurisdiction, and those informed consents could be deemed invalid, unlawful or otherwise inadequate for our purposes. Any findings against us could deny us access to, or force us to stop testing samples in, a particular jurisdiction or could call into question the results of our tests. We could also be precluded from billing third-party payors for tests for which informed consents are challenged, or could be requested to refund amounts previously paid by third-party payors for such tests. We could become involved in legal challenges, which could require significant management and financial resources and adversely affect our revenue and results of operations.

A correction or removal of our products, either voluntarily or at the direction of the FDA or another governmental authority, or the discovery of serious safety issues with our products, could have a significant adverse impact on us.

The FDA has the authority to require the recall of commercialized products that are subject to FDA regulation in the event of material deficiencies or defects in design or manufacture. The authority to require a recall must be based on an FDA finding that there is reasonable probability that the device would cause serious, adverse health consequences or death. The collection kits that are supplied to us by a third party could be subject to a recall. Additionally, our tests may be subject to other types of field actions or corrections, which could impair our ability to produce our products in a cost-effective and timely manner and have an adverse effect on our reputation, results of operations and financial condition. Additionally, we may be subject to liability claims, may be required to bear costs or may take other actions that may have a negative impact on our financial position.

If we initiate a correction or removal for one of our tests, issue a safety alert or undertake a field action or recall to reduce a risk to health imposed by the test, this could lead to increased scrutiny by the FDA and our customers regarding the quality and safety of our tests and to negative publicity, including FDA alerts, press releases or administrative or judicial actions. Furthermore, circulation of any such negative publicity could harm our reputation, be used by competitors against us in competitive situations and cause customers to delay purchase decisions or cancel orders.

Our use of hazardous materials in the development of our tests exposes us to risks related to accidental contamination or injury and requires us to comply with regulations governing hazardous waste materials.

Our operations involve the controlled use of hazardous materials and chemicals. We cannot eliminate the risk of accidental contamination or injury to employees or third parties from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our resources or any applicable insurance coverage we may have. In addition, we are subject on an ongoing basis to federal, state and local regulations governing the use, storage, handling and disposal of these materials and specified hazardous waste materials. We could discover that we or our suppliers are not in material compliance with these regulations. Existing laws and regulations may also be revised or reinterpreted, or new laws and regulations may become applicable to us, whether retroactively or prospectively, that may have a negative effect on our business, financial condition and results of operations. An increase in the costs of compliance with such laws and regulations could harm our business and results of operations.

Even if we receive regulatory approval or certification of our products, we will continue to be subject to extensive regulatory oversight.

Medical devices are subject to extensive regulation by the FDA. The FDA had historically taken the position that it had the authority to regulate LDTs as medical devices under the FD&C Act but exercised enforcement discretion until it recently rescinded LDT regulations indicating that it does not have the authority to require clearance, de novo classification, or approval of LDTs prior to market release. However, if any of our molecular diagnostic products become subject to FDA approval requirements, and are subsequently approved by the FDA, we will be required to timely file various reports. If these reports are not filed timely, regulators may impose sanctions and sales of our products may suffer, and we may be subject to product liability or regulatory enforcement actions, all of which could harm our business. In addition, as a condition of approving a PMA, the FDA may also require some form of post-approval study or post-market surveillance, whereby the applicant conducts a follow-up study or follows certain patient groups for a number of years and makes periodic reports to the FDA on the clinical status of those patients when necessary to protect the public health or to provide additional safety and effectiveness data for the device. The product labeling must be updated and submitted in a PMA supplement as results, including any adverse event data from the post-approval study, become available. Failure to conduct or timely complete post-approval studies in compliance with applicable regulations, update the product labeling, or comply with other post-approval requirements could result in withdrawal of approval of the PMA, which would harm our business and revenue.

The FDA and FTC also regulate the advertising and promotion of medical devices to ensure that their promotional claims made are consistent with the applicable marketing authorizations, that there are adequate and reasonable data to substantiate the claims, and that the promotional labeling and advertising is neither false nor misleading in any respect. If the FDA or FTC determines that any of our promotional claims are false, misleading, not substantiated or not permissible, we may be subject to enforcement actions and we may be required to revise our promotional claims and make other corrections or restitutions. Similar requirements apply in foreign jurisdictions.

The FDA, state and foreign authorities have broad enforcement powers. Our failure to comply with applicable regulatory requirements could result in enforcement action by the FDA, state or foreign regulatory agencies, which may include any of the following sanctions:

- adverse publicity, warning letters, untitled letters, fines, injunctions, consent decrees and civil penalties;
- repair, replacement, refunds, recalls, termination of distribution, administrative detention or seizures of our products;

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- operating restrictions, partial suspension or total shutdown of production;
- customer notifications or repair, replacement or refunds;
- refusing our requests for clearances or approvals of new products, new intended uses or modifications to existing products;
- withdrawals of current clearances, approvals or certifications, resulting in prohibitions on sales of our products;
- refusal to issue certificates needed to export products for sale in other countries; and
- criminal prosecution.

Any of these sanctions could also result in higher than anticipated costs or lower than anticipated sales of our products and have a material adverse effect on our reputation, business, results of operations and financial condition. In addition, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions which may prevent or delay approval or clearance of our current or future products under development. For example, on February 23, 2022, the FDA issued a proposed rule to amend the Quality System Regulation (QSR), which establishes current good manufacturing practice requirements for medical device manufacturers, to align more closely with the International Organization for Standardization (ISO) standards. This proposal has not yet been finalized or adopted. Accordingly, it is unclear the extent to which any proposals, if adopted, could impose increased costs of compliance, or otherwise negatively affect our business. Additionally, in September 2019, the FDA issued revised final guidance describing an optional “safety and performance based” premarket review pathway for manufacturers of “certain, well-understood device types” to demonstrate substantial equivalence under the 510(k) clearance pathway by showing that such device meets objective safety and performance criteria established by the FDA, thereby obviating the need for manufacturers to compare the safety and performance of their medical devices to specific predicate devices in the clearance process. The FDA maintains a list of device types appropriate for the “safety and performance based” pathway and continues to develop product-specific guidance documents that identify the performance criteria for each such device type, as well as recommended testing methods, where feasible. The FDA may establish performance criteria for classes of devices similar to ours, and it is unclear the extent to which such performance standards, if established, could impact our ability to obtain marketing authorization or otherwise create competition that may negatively affect our business.

In addition, FDA regulations and guidance are often revised or reinterpreted by the FDA in ways that may significantly affect our business and our products. Any new statutes, regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of any product candidates or make it more difficult to obtain marketing authorizations for, manufacture, market or distribute any product candidate we are developing. We cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on our business in the future. Such changes could, among other things, require: additional testing prior to seeking marketing authorization, changes to manufacturing methods recalls, replacement or discontinuance of our products or additional record keeping.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be promulgated that could prevent, limit or delay marketing authorization of any product candidates we develop. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may be subject to enforcement action and we may not achieve or sustain profitability.

Risks related to financial and accounting matters

We have identified material weaknesses in our internal control over financial reporting. If our remediation of such material weaknesses is not effective, or if we identify additional material weaknesses in the future or otherwise fail to develop and maintain effective internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable laws and regulations could be impaired.

As a public company, we will be subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, and the rules and regulations of the applicable listing standards of Nasdaq. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting, and financial compliance costs, make some activities more difficult, time-consuming, and costly, and place significant strain on our personnel, systems, and resources.

The Sarbanes-Oxley Act requires, among other things, that we evaluate whether disclosure controls and procedures and internal control over financial reporting were effective. We are continuing to develop and refine our disclosure controls and procedures, internal control over financial reporting, and other procedures that are designed to ensure information required to be disclosed by us in our financial statements and in the reports that we will file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and information required to be disclosed in reports filed or submitted under the Exchange Act is accumulated and communicated to our principal executive and financial officers as appropriate to allow timely decisions regarding required disclosure. In order to maintain and improve the effectiveness of our controls and procedures, we have expended, and anticipate that we will continue to expend, significant resources, including accounting-related costs and significant management oversight.

As a public company, we will be required to evaluate and determine the effectiveness of internal control over financial reporting. Beginning with our second annual report following this offering, we will be required to provide a management report on internal control over financial reporting, and our independent registered public accounting firm may be required to formally attest to the effectiveness of our internal control over financial reporting once we are no longer an "emerging growth company". Neither we nor our independent registered public accounting firm were required to, and therefore did not, perform an evaluation of the effectiveness of our internal control over financial reporting as of or for any period included in our financial statements, nor any period subsequent in accordance with the provisions of the Sarbanes-Oxley Act. However, in connection with the preparation of our financial statements, we identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

The material weaknesses identified pertained to:

- We did not design and maintain an effective control environment commensurate with our financial reporting requirements. Specifically, we lack a sufficient complement of resources with the appropriate knowledge, experience, and training to appropriately analyze, record and disclose accounting matters commensurate with our accounting and reporting requirements. Additionally, the lack of sufficient resources resulted in an inability to consistently establish appropriate segregation of duties in our finance and accounting functions. This material weakness contributed to the following additional material weaknesses:
 - We did not design and maintain effective controls to appropriately analyze, account for, and present and disclose amounts related to certain financial instruments. Specifically, we did not design and maintain controls to appropriately analyze, account for, and present and disclose amounts related to outstanding common stock warrants. Additionally, we did not design and maintain controls to appropriately present

and disclose amounts related to debt instruments. These material weaknesses resulted in immaterial adjustments to the financial statements. Additionally, these material weaknesses could result in a misstatement of account balances or disclosures that would result in a material misstatement to the annual or interim financial statements that would not be prevented or detected.

- We did not design and maintain user access controls to ensure appropriate segregation of duties and to adequately restrict user and privileged access to appropriate personnel in creating and posting journal entries. This material weakness did not result in a misstatement to the financial statements; however, it could result in a misstatement of account balances or disclosures that would result in a material misstatement to the annual or interim financial statements that would not be prevented or detected.

To date, we have taken the following steps to begin to remediate these material weaknesses:

- consulted with experts on technical accounting matters, internal controls, and in the preparation of our financial statements;
- engaged a third party to assist in evaluating segregation of duties risks and design and implement controls to address those risks;
- began to design and implement controls related to restricting user and privileged access to appropriate personnel, including as it relates to creating and posting journal entries;
- engaged a third party to assist management in evaluating the accounting for financial instruments; and
- hired additional accounting, finance, operations, and information technology resources with relevant public company experience, including a Chief Financial Officer, Controller and a Vice President of Information Systems.

While management has made improvements to our control environment and business processes to support and scale with our growing operations, the identified material weaknesses remain un-remediated. We expect our remediation efforts to continue to take place in 2025 and may extend into 2026, and to include the following:

- continue to consult with experts to complete our assessment of segregation of duties risks and implement processes and controls to address, manage and monitor those risks and our restriction of user access, including enhancing the usage of technology within our systems, applications, and tools;
- continue to engage additional experts, as needed, to consult on future complex accounting matters; and
- continue to expand our resources with the appropriate level of expertise within our accounting, finance, operations, and information technology functions, with the addition of positions such as a director of accounting, a technical accountant, a manager of financial planning and analysis, and additional accounting and information technology personnel.

These material weaknesses will not be considered remediated until management completes the design and implementation of the measures described above and the controls operate for a sufficient period of time and management has concluded, through testing, that these controls are effective. This remediation process, including testing the effectiveness of the remediation efforts, may extend into 2026. Additionally, we cannot ensure that we have identified all, or that we will not in the future identify additional material weaknesses. Material weaknesses may still exist when we report on the effectiveness of our internal control over financial reporting as required under Section 404 of the Sarbanes-Oxley Act, beginning with our second annual report after the completion of this offering.

The process of designing and implementing internal control over financial reporting required to comply with the disclosure and attestation requirements of Section 404 of the Sarbanes-Oxley Act will be time consuming and costly. If during the evaluation and testing process we identify additional material weaknesses in our internal control over

financial reporting or determine that existing material weaknesses have not been remediated, our management will be unable to assert that our internal control over financial reporting is effective. If we are unable to assert that our internal control over financial reporting is effective, or when required in the future, if our auditors are unable to express an unqualified opinion as to the effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our Class A common stock could be adversely affected and we could become subject to litigation or investigations by Nasdaq, the SEC, or other regulatory authorities, which could require additional financial and management resources.

Further, upon becoming a public company, significant resources and management oversight will be required. As a result, management's attention may be diverted from other business concerns, which could harm our business, operating results, financial condition, and future prospects.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

We have a significant amount of net operating loss (NOL) carryforwards that can be used to offset potential future taxable income and related income taxes. As of December 31, 2024, we had federal and state NOL carryforwards of \$154.9 million and \$78.6 million, respectively, which, if not utilized, begin to expire in 2036 and 2026, respectively. Federal NOLs incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal NOLs is limited. As of December 31, 2024, we also had federal research and development credit carryforwards of \$4.1 million, which begin to expire in 2041, and state research and development credit carryforwards of \$2.1 million, which do not expire. Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change, by value, in equity ownership over any three-year period), the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income or taxes may be limited. We may have experienced ownership changes in the past, and may experience ownership changes in the future, as a result of shifts in our stock ownership, some of which may not be within our control. Our ability to use these carryforwards could be limited if we experience an "ownership change" or have experienced an "ownership change" in the past.

Future indebtedness could adversely affect our business and growth prospects.

We have a debt facility with availability of up to \$140.0 million, issuable in four separate tranches, pursuant a Note Purchase Agreement, dated as of August 2, 2024, by and among us, the purchasers party thereto, and BWCB SA LLC (an entity affiliated with Oberland Capital), as purchaser's agent, as amended from time to time (the Note Purchase Agreement). As of June 30, 2025, we have drawn \$50 million under the debt facility. The advanced principal accrues interest at a rate of 8.0% per annum. We have the option, but not the obligation, to issue and sell an additional two separate tranches of notes in the amounts of \$35.0 million and \$25.0 million, under the Note Purchase Agreement, as well as an obligation to sell a tranche of notes in the amount of \$30 million before March 31, 2026 as we have achieved the revenue and gross margin thresholds triggering this obligation. The thresholds triggering this tranche are trailing six-month revenue of at least \$112.5 million and a trailing six-month gross margin of at least 45%. These tranches are all subject to the terms and conditions set forth in such Agreement. In the future, any indebtedness we may incur under the Note Purchase Agreement or otherwise could require us to divert funds identified for other purposes for debt service and impair our liquidity. If we cannot generate sufficient cash flow from operations to service our debt, we may need to refinance our debt, dispose of assets or issue equity to obtain necessary funds. We do not know whether we will be able to take any of these actions on a timely basis, on terms satisfactory to us or at all.

Future indebtedness and the cash flow necessary to satisfy such debt have important consequences, including limiting funds otherwise available for financing our capital expenditures by requiring us to dedicate a portion of

our cash flows from operations to the repayment of debt and the interest on this debt, and making us more vulnerable to rising interest rates or in the event of a downturn in our business or in the economy generally.

While we believe that our current debt level is low in comparison to our cash balance, if we increase our debt level by exercising our option to issue and sell additional tranches of notes under our debt facility or by entering into additional debt arrangements in the future, our level of indebtedness may place us at a competitive disadvantage to our competitors that are differently leveraged. Fluctuations in interest rates can increase borrowing costs. Increases in interest rates may directly impact the amount of interest we are required to pay and reduce earnings accordingly. In addition, developments in tax policy, such as the disallowance of tax deductions for interest paid on outstanding indebtedness, could have an adverse effect on our liquidity and our business, financial conditions and results of operations.

We expect to use cash flows from operations to meet our current and future financial obligations for at least the next twelve months, including funding our operations, any debt service requirements and capital expenditures. The ability to make these payments depends on our financial and operating performance, which is subject to prevailing economic, industry and competitive conditions and to certain financial, business, economic and other factors beyond our control.

The terms of our debt facility restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.

The Note Purchase Agreement contains a number of restrictive covenants that impose significant operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interests. The Note Purchase Agreement includes covenants requiring the Company to maintain certain trailing six-month net revenue levels and trailing six-month gross margin ratios, and includes other covenants that restrict on our ability to:

- sell, transfer or otherwise dispose of our assets;
- change our business or executive office;
- consolidate, merge, liquidate or dissolve;
- incur additional indebtedness or other contingent obligations;
- create liens or encumbrances;
- pay dividends on our equity interests or make other payments in respect of capital stock;
- make investments, acquisitions, loans and advances;
- enter into certain transactions with affiliates;
- make payment on any subordinated debt;
- store inventory or equipment with a third-party bailee;
- fail to apply with applicable law; and
- transfer material assets to subsidiaries.

A breach of the covenants or restrictions under the Note Purchase Agreement could result in an event of default. Such a default may allow the noteholders or our other creditors to accelerate the related debt, which may result in the acceleration of any other debt to which a cross-acceleration or cross-default provision applies. In the event any note holder or any other holders of our indebtedness accelerate repayment, we may not have sufficient assets

to repay that indebtedness or be able to borrow sufficient funds to refinance it. Even if we are able to obtain new financing, it may not be on commercially reasonable terms or on terms acceptable to us. As a result of these restrictions, we may be limited in how we conduct our business; unable to raise additional debt or equity financing to operate during general economic or business downturns; or unable to compete effectively or to take advantage of new business opportunities. These restrictions, along with restrictions that may be contained in agreements evidencing or governing other future indebtedness, may affect our ability to execute our growth strategy.

Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, value added or similar taxes and we could be subject to tax liabilities with respect to past or future sales, which could adversely affect our results of operations.

We do not collect sales and use, value added and similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are not applicable or that we are not required to collect such taxes with respect to the jurisdiction. Sales and use, value added and similar tax laws and rates vary greatly by jurisdiction and the application of such laws is subject to uncertainty. Certain jurisdictions in which we do not collect such taxes may assert that such taxes are applicable, which could result in tax assessments, penalties and interest, and we may be required to collect such taxes in the future. Such tax assessments, penalties and interest or future requirements may adversely affect our results of operations.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating results could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP), requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. Actual results could therefore differ materially from these estimates under different assumptions or conditions. It is also possible that interpretation, industry practice and guidance may evolve. If our assumptions change or if actual circumstances differ from our assumptions, our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of analysts and investors, resulting in a decline in the market price of our Class A common stock.

Risks related to this offering and our Class A common stock

No public market for our Class A common stock currently exists, and an active public trading market may not develop or be sustained following this offering.

Prior to this offering, there has been no public market for our Class A common stock. An active public trading market for our Class A common stock may not develop following the completion of this offering or, if developed, it may not be sustained. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The initial public offering price of our Class A common stock will be determined by negotiations between us and the underwriters and may not be indicative of prices that will prevail in the open market following the completion of this offering. The market price of our Class A common stock may decline below the initial public offering price, and you may not be able to resell your shares of our Class A common stock at or above the initial offering price, or at all. The lack of an active trading market may also reduce the fair value of your shares. An inactive market may also impair our ability to raise capital by selling shares of our Class A common stock.

The market price for our Class A common stock may be volatile or may decline regardless of our operating performance, and you may not be able to resell your shares at or above the initial public offering price.

The market price of our Class A common stock may be highly volatile and may fluctuate or decline substantially as a result of a variety of factors, many of which are beyond our control, including:

- actual or anticipated changes or fluctuations in our results of operations;
- market speculation involving us or other companies in our industry;
- investor perceptions of us and the industry in which we operate or our failure to meet the expectations of investors;
- price and volume fluctuations in the overall stock market from time to time;
- actual or anticipated developments in our business or our competitors' businesses or the competitive landscape generally;
- litigation involving us, other companies in our industry or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our or third-party intellectual property or proprietary rights;
- announced or completed acquisitions of businesses or technologies, or other strategic transactions by us or our competitors;
- actual or perceived breaches of, or failures relating to, privacy, data protection or data security;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- actual or anticipated changes in our senior management or key personnel;
- expiration of contractual lock-up agreements and market stand-off agreements with our executive officers, directors, employees and stockholders;
- changes in the size or growth of our target markets;
- economic and market conditions in general, including those resulting from geopolitical tensions, tariffs and other trade actions, war, pandemics, terrorism or responses to these events; and
- the realization of any risks described under this "Risk factors" section, or other risks that may materialize in the future.

Furthermore, the stock market has experienced extreme volatility that in some cases has been unrelated or disproportionate to the operating performance of particular companies. These and other factors may cause the market price and demand for our Class A common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of Class A common stock and may otherwise negatively affect the liquidity of our Class A common stock.

Our dual-class capital structure will have the effect of concentrating voting power with holders of our Class B common stock, who will have significant influence over us and, if acting together, will be able to control matters requiring stockholder approval.

Our Class A common stock, which is the stock we are offering by means of this prospectus, will have one vote per share and our Class B common stock will have 15 votes per share. After the completion of this offering, the

holders of our outstanding Class B common stock, Drs. Atay and Tsao, will together hold _____ % of the voting power of our outstanding capital stock (or _____ % if the underwriters exercise their option to purchase additional shares of our Class A common stock in full). See the section titled “Principal stockholders.” As a result, Drs. Atay and Tsao will be able to exert significant influence over us and, if acting together, will be able to control matters requiring stockholder approval, including the election of our Board of Directors, the adoption of amendments to our Post-IPO Certificate of Incorporation and Post-IPO Bylaws and the approval of any merger, consolidation, sale of all or substantially all of our assets or other major corporate transactions. In addition, if our Co-Founders continue to beneficially own shares representing in excess of 50% of the voting power of our outstanding capital stock and determine to act together in the future, we could become eligible to elect the “controlled company” exemption to the corporate governance rules for publicly listed companies. If we were to become a “controlled company” under the corporate governance rules for publicly listed companies, we would not be required to have a majority of our Board of Directors be independent, nor would we be required to have a compensation committee or an independent nominating function. If we use controlled company exemptions in the future, our status as a controlled company could cause our Class A common stock to be less attractive to certain investors or otherwise cause the market price of our Class A common stock to decline. Further, the interests of Drs. Atay and Tsao may not always coincide with, and in some cases may conflict with, our interests and the interests of our other stockholders. For instance, Drs. Atay and Tsao could attempt to delay or prevent a change in control of our company, even if such change in control would benefit our other stockholders, which could deprive our stockholders of an opportunity to receive a premium for their common stock. This concentration of ownership may also affect the prevailing market price of our common stock due to investors’ perceptions that conflicts of interest may exist or arise. As a result, this concentration of ownership may not be in your best interests.

We cannot predict the impact our dual class structure may have on the market price of our Class A common stock.

We cannot predict whether our dual class structure, combined with the concentrated control of Drs. Atay and Tsao, who will beneficially own all of the outstanding shares of our Class B common stock, will result in a lower or more volatile market price of our Class A common stock, adverse publicity or other adverse consequences. Certain stock index providers have in the past excluded companies with multiple classes of shares of common stock from being added to certain stock indices. If our Class A common stock was ineligible for inclusion in indices with such restrictions mutual funds, exchange-traded funds and other investment vehicles that attempt to passively track those indices may not invest in our Class A common stock.

In addition, several stockholder advisory firms and large institutional investors have been critical of the use of multi-class structures. Such advisory firms may publish negative commentary about our corporate governance practices or our capital structure, which may dissuade large institutional investors from purchasing shares of our Class A common stock.

These actions could make our Class A common stock less attractive to other investors and may result in a less active trading market for our Class A common stock.

If securities or industry analysts do not publish research, if they publish inaccurate or unfavorable research about our business, or if our financial results differ from any guidance we provide to the public, the price of our Class A common stock and trading volume could decline.

The trading market for our Class A common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business, our market, and our competitors. We do not currently have and may never obtain research coverage by securities and industry analysts. We do not have any control

over these analysts. If we fail to meet the expectations of these analysts, our stock price could be adversely affected. If no or few securities analysts commence coverage of us, the trading price for our Class A common stock would be negatively affected. In the event we obtain securities or industry analyst coverage, if one or more of the analysts who cover us downgrade our Class A common stock or publish inaccurate or unfavorable research about our business, the market price of our Class A common stock would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our Class A common stock could decrease, which may cause the market price of our Class A common stock and trading volume to decline.

In addition, the stock prices of many companies in the precision diagnostics industry have declined significantly after those companies failed to meet the financial guidance publicly announced by the companies or the expectations of analysts, and stock prices have even declined significantly after such companies exceeded, or even significantly exceeded, such guidance or expectations. If our financial results fail to meet any guidance we announce, or the expectations of analysts or public investors, or even if our financial results exceed, or even significantly exceed, any such guidance or expectations, or if we reduce any such guidance for future periods, the market price of our Class A common stock may decline.

We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We will have considerable discretion in the application of the net proceeds of this offering, including for any of the purposes described in the section of this prospectus titled “Use of proceeds,” and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Investors will need to rely upon the judgment of our management with respect to the use of such net proceeds. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities, such as money market accounts, certificates of deposit, commercial paper, and guaranteed obligations of the U.S. government, which may not produce income or may lose value. If we do not use the net proceeds that we receive in this offering effectively, our business, financial condition and results of operations could be harmed and the market price of our Class A common stock could decline.

As the initial public offering price is substantially higher than our net tangible book value per share of Class A common stock, you will incur immediate and substantial dilution.

If you purchase Class A common stock in this offering, you will experience substantial and immediate dilution in the pro forma net tangible book value per share after giving effect to this offering of \$ per share as of , 2025, based on the initial public offering price of \$ per share of Class A common stock, the midpoint of the estimated offering price range on the cover page of this prospectus, because the price that you pay will be substantially greater than the pro forma net tangible book value per share of Class A common stock that you acquire. This dilution is due in large part to the fact that our earlier investors paid substantially less than the initial public offering price when they purchased their shares. As of June 30, 2025, we had 8,930,919 shares of our Class A common stock issuable upon the exercise of outstanding options at a weighted average exercise price of \$10.59 per share, 4,623,888 of which were vested as of such date. See the section of this prospectus titled “Dilution” for additional information.

Any additional shares of our Class A common stock that we issue, including under our equity incentive plans, would dilute the percentage ownership and voting power held by the investors who purchase Class A common stock in this offering. In the future, we may also issue additional securities if we need to raise capital, including, in connection with acquisitions, which could constitute a material portion of our then-outstanding shares of common stock. Any such issuance could substantially dilute the ownership and voting power of our existing stockholders and cause the market price of our Class A common stock to decline.

Future sales of substantial amounts of our Class A common stock in the public markets, or the perception that such sales might occur, could reduce the price that our Class A common stock might otherwise attain.

Future sales of a substantial number of shares of our Class A common stock in the public market, particularly sales by our directors, executive officers, and principal stockholders, or the perception that these sales could occur, could adversely affect the market price of our Class A common stock and may make it more difficult for you to sell your Class A common stock at a time and price that you deem appropriate. Upon the completion of this offering, based on the number of shares of our Class A common stock outstanding as of June 30, 2025, and after giving effect to the Preferred Stock Conversion, the Reclassification and the Class B Stock Exchange, as if each event had occurred on June 30, 2025, we will have an aggregate of _____ shares of our Class A common stock outstanding (or _____ shares if the underwriters exercise their option to purchase additional shares from us in full). This includes _____ shares of Class A common stock that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates. The resale of the remaining _____ shares of Class A common stock, or _____ % of our outstanding shares of Class A common stock following this offering, and all of our Class B common stock outstanding, is currently prohibited or otherwise restricted, subject to certain limited exceptions, as a result of securities law provisions, market standoff agreements entered into by certain of our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters in connection with this offering. However, subject to applicable securities law restrictions, these shares will be able to be sold in the public market beginning on the 181st day after the date of this prospectus. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, market stand-off agreements and/or lock-up agreements, as well as Rules 144 and 701 under the Securities Act. For more information, see the section titled “Shares eligible for future sale.”

In addition, following the completion of this offering, holders of 37,706,613 shares of our Class A common stock (including, following the Class B Stock Exchange, shares of our Class A common stock issuable upon the conversion of shares of Class B common stock) will have certain rights to require us to register the sale of Class A common stock held by such stockholders, including in connection with underwritten offerings. Sales of significant amounts of stock in the public market upon expiration of lock-up agreements and market stand-off provisions, the perception that such sales may occur, or early release of any lock-up agreements or market stand-off provisions, could adversely affect prevailing market prices of our Class A common stock or make it more difficult for you to sell your shares of Class A common stock at a time and price that you deem appropriate. See the section titled “Shares eligible for future sale.”

The market price of our Class A common stock may drop significantly when the restrictions on resale by our existing stockholders lapse, including in the event of a partial release under the lock-up agreement or market stand-off provisions, if we register certain of our stockholders’ shares of our Class A common stock for resale, or if there is an expectation that such a lapse of resale restrictions or registration of shares will occur. A decline in the trading price of our Class A common stock might impede our ability to raise capital through the issuance of additional shares of our Class A common stock or other equity securities and may impair your ability to sell shares of our Class A common stock at a price higher than the price you paid for them or at all.

Anti-takeover provisions in our governing documents and under Delaware law could make an acquisition of our company more difficult, limit attempts by our stockholders to replace or remove our current management, and depress the market price of our Class A common stock.

We are a Delaware corporation, and the anti-takeover provisions of Delaware law impose various impediments to the ability of a third party to acquire control of us, even if a change of control would be beneficial to our existing stockholders. In addition, our Post-IPO Certificate of Incorporation and Post-IPO Bylaws will contain

provisions that could have the effect of rendering more difficult, delaying or preventing an acquisition deemed undesirable by our Board of Directors, including transactions in which stockholders might otherwise receive a premium for their shares. Among others, our Post-IPO Certificate of Incorporation and Post-IPO Bylaws will include the following provisions:

- the dual-class structure that provides holders of shares of our Class B common stock with the ability to significantly influence the outcome of matters requiring stockholder approval, even if they own significantly less than a majority of the shares of our outstanding capital stock;
- the delegation to our Board of Directors of the exclusive right to expand the size of our Board of Directors and to elect directors to fill a vacancy created by any such expansion or the resignation, death or removal of a director, which will prevent stockholders from being able to fill vacancies on our Board of Directors;
- the division of our Board of Directors into three classes, with each class serving staggered three-year terms, which may delay the ability of stockholders to change the membership of a majority of our Board of Directors;
- limitations on convening special stockholder meetings once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, which could make it difficult for our stockholders to adopt desired governance changes;
- advance notice procedures, which apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company;
- a prohibition on stockholder action by written consent once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, which means that our stockholders will only be able to take action at a meeting of stockholders;
- no authorization of cumulative voting, which limits the ability of minority stockholders to elect director candidates;
- once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, directors will only be able to be removed for cause and only by the affirmative vote of two-thirds of the voting power of our then-outstanding capital stock;
- once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, certain amendments to our Post-IPO Certificate of Incorporation and Post-IPO Bylaws will require the approval of two-thirds of the voting power of our then-outstanding capital stock; and
- the authorization of undesignated or "blank check" preferred stock, the terms of which may be established and shares of which may be issued without further action by our stockholders, which could be used to significantly dilute the ownership and voting rights of a hostile acquirer.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management. In addition, as a Delaware corporation, we are also subject to Section 203 of the Delaware General Corporation Law (DGCL), which prevents stockholders holding more than 15% of our outstanding capital stock from engaging in certain business combinations unless (i) prior to the time such stockholder became an interested stockholder, the Board of Directors approved the transaction that resulted in such stockholder becoming an interested stockholder, (ii) upon consummation of the transaction that resulted in such stockholder becoming an interested stockholder, the interested stockholder owned 85% of the common

stock or (iii) following Board of Directors approval, the business combination receives the approval of the holders of at least two-thirds of our outstanding common stock not held by such interested stockholder.

Any provision of our Post-IPO Certificate of Incorporation, Post-IPO Bylaws or Delaware law that has the effect of delaying, preventing, or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our common stock if they are viewed by investors as discouraging future takeover attempts or other transactions that may be in the best interests of our stockholders or that may otherwise enable them to obtain a greater return on their investment, which may impair your ability to sell shares of our Class A common stock at a price greater than the price you paid for them or at all.

Our Post-IPO Certificate of Incorporation, which will be in effect at the completion of this offering, will provide that the Court of Chancery of the State of Delaware and the U.S. federal district courts are the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our Post-IPO Certificate of Incorporation, which will be in effect at the completion of this offering, will provide that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the DGCL, our Post-IPO Certificate of Incorporation or our Post-IPO Bylaws or any action asserting a claim against us that is governed by the internal affairs doctrine, unless we consent in writing to the selection of an alternative forum to the extent permitted by law.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, Section 22 of the Securities Act of 1933, as amended (the Securities Act) creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. Our Post-IPO Certificate of Incorporation will further provide that the U.S. federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our Post-IPO Certificate of Incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

We believe these provisions may benefit us by providing increased consistency in the application of Delaware law and federal securities laws by chancellors and judges, as applicable, particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. However, these provisions may result in increased costs to stockholders to bring a claim, may limit investors' ability to bring a claim in a judicial forum that they find favorable, and may have the effect of discouraging lawsuits against our directors and officers.

We do not anticipate paying dividends on our Class A common stock in the foreseeable future. As a result, your ability to achieve a return on your investment will depend on appreciation in the price of our Class A common stock.

We have never declared or paid any dividends on our capital stock, and we do not anticipate paying any cash dividends on our Class A common stock in the foreseeable future. We anticipate that we will retain all available

funds and any future earnings to support operations and to finance the growth and development of our business. Any future determination to pay dividends will be made at the discretion of our Board of Directors, subject to applicable laws, and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions, and capital requirements. Our ability to declare or pay dividends is also subject to the restrictions and limitations set forth in the Note Purchase Agreement. Furthermore, we may also enter into other loan or credit agreements or similar borrowing arrangements that may further restrict our ability to declare or pay dividends on our Class A common stock. Consequently, investors who purchase Class A common stock in this offering may be unable to realize a return on their investment except by selling such shares after price appreciation, which may never occur. Our inability or decision not to pay dividends, particularly when others in our industry have elected to do so, could also adversely affect the market price of our Class A common stock.

General risk factors

Our failure to timely and effectively implement controls and procedures required by Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business.

As a public company, we will be required to provide management's assessment regarding internal control over financial reporting in our second Annual Report on Form 10-K. The standards required for a public company under Section 404(a) of the Sarbanes-Oxley Act are significantly more stringent than those required of us as a private company. In addition, at such time as we are no longer an "emerging growth company," we would be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act requiring our auditors to provide an opinion on the effectiveness of our internal controls over financial reporting. While we have begun implementation of such controls and procedures, management may not be able to effectively and timely implement controls and procedures that adequately respond to the increased regulatory compliance and reporting requirements that became applicable after the completion of this offering and, when applicable, upon our ceasing to be an emerging growth company. If we are not able to implement the additional requirements of Section 404 in a timely manner or with adequate compliance, we and our auditors may not be able to assess whether our internal controls over financial reporting are effective, which may subject us to adverse regulatory consequences and could harm investor confidence and the market price of our Class A common stock.

In addition to the material weaknesses in internal control over financial reporting identified in connection with the preparation of our financial statements, subsequent testing by us or our independent registered public accounting firm may reveal additional deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. During the evaluation and testing process of our internal controls, if we identify additional material weaknesses in our internal control over financial reporting, we will be unable to certify that our internal control over financial reporting is effective. We cannot assure you that there will not be additional material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have additional material weaknesses or a significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our Class A common stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

We are an “emerging growth company,” and we cannot be certain if the reduced reporting and disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies,” including the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. Pursuant to Section 107 of the JOBS Act, as an emerging growth company, we have elected to use the extended transition period for complying with new or revised accounting standards until those standards would otherwise apply to private companies. As a result, our financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make our common stock less attractive to investors. In addition, if we cease to be an emerging growth company, we will no longer be able to use the extended transition period for complying with new or revised accounting standards.

We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year following the fifth anniversary of this offering, (ii) the last day of the first fiscal year in which our annual gross revenue is \$1.235 billion or more, (iii) the date on which we have, during the previous rolling three-year period, issued more than \$1.0 billion in non-convertible debt securities, and (iv) the date on which we are deemed to be a “large accelerated filer.”

We cannot predict if investors will find our Class A common stock less attractive if we choose to rely on these exemptions. For example, if we do not adopt a new or revised accounting standard, our future operating results may not be as comparable to the operating results of certain other companies in our industry that adopted such standards. If some investors find our Class A common stock less attractive as a result, there may be a less active trading market for our Class A common stock, and the market price of our Class A common stock may be more volatile.

The requirements of being a public company may strain our resources, divert management’s attention, and affect our ability to attract and retain qualified Board of Directors members.

As a public company listed in the U.S., we will incur significant additional legal, accounting, and other expenses. In addition, changing laws, regulations, and standards relating to corporate governance and public disclosure, including regulations implemented by SEC and Nasdaq, may increase legal and financial compliance costs and make some activities more time consuming. These rules might also make it more difficult for us to obtain certain types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. We cannot predict or estimate the amount of additional costs we will incur as a public company or the specific timing of such costs, and any such costs may adversely affect our business, financial condition and results of operations.

These laws, regulations, and standards are subject to varying interpretations, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If, notwithstanding our efforts, we fail to comply with new laws, regulations, and standards, regulatory authorities may initiate legal proceedings against us and our business may be adversely affected.

In addition, as a result of our disclosure obligations as a public company, we will have reduced strategic flexibility and will be under pressure to focus on short-term results, which may adversely affect our ability to achieve our long-term goals. As a result of disclosure of information in this prospectus and in filings required of a public company, our business and financial condition will become more visible, which may result in threatened or actual litigation, including by stockholders and competitors. If such claims are successful, our business and operating results could be adversely affected, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and adversely affect our business and operating results.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon the completion of this offering, we will become subject to the periodic reporting requirements of the Exchange Act. We must design our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. For example, our directors or executive officers could inadvertently fail to disclose a new relationship or arrangement causing us to fail to make a required related party transaction disclosure. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our Class A common stock may be volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

Special note regarding forward-looking statements

This prospectus includes forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future operating results and financial position, our business strategy and plans, market growth, and our objectives for future operations, are forward-looking statements. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “design,” “intend,” “expect,” “forecast,” “could,” “plan,” “potential,” “predict,” “seek,” “target,” “should,” “would,” or the negative version of these words and similar expressions are intended to identify forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term business operations and objectives, and financial needs. Forward-looking statements contained in this prospectus include, statements about:

- the level of demand for any of our products, which may vary significantly;
- our ability to increase the adoption of our products in the prenatal and oncology markets and in large healthcare systems;
- our ability to generate persuasive clinical validity and utility evidence;
- our ability to expand our portfolio of molecular diagnostic tests;
- our ability to use AI effectively and efficiently;
- our ability to execute our reimbursement strategy and expand coverage of our tests;
- our ability to replicate positive results from trials or studies conducted by us or third parties in current or future trials or studies;
- the potential for our UNITY Fetal Antigen CTA to become the first NIPT to have a companion diagnostics indication pending;
- the successful completion of Johnson & Johnson’s AZALEA Phase 3 clinical trial;
- the implementation of our business model and strategic plans;
- the size and growth potential of the total addressable markets for our current and future products and our ability to serve those markets;
- our ability to realize the benefits of current and future collaborations for the development of our products;
- our ability to maintain, expand and protect our intellectual property;
- developments relating to our competitors and our industry;
- existing regulations and regulatory developments in the United States and other jurisdictions;
- general economic, industry, and market conditions, including tariffs and inflation;
- our ability to attract, hire, and retain our key personnel and additional qualified personnel;
- our ability to remediate our material weaknesses in our internal control over financial reporting;
- our anticipated use of our existing cash and cash equivalents and the net proceeds from this offering;

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- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing; and
- other risks and uncertainties, including those listed in the section titled “Risk factors.”

We caution you that the foregoing list may not contain all of the forward-looking statements made in this prospectus.

These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described in the section titled “Risk factors.” Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, performance or achievements. The forward-looking statements made in this prospectus are given only as of the date on which the statements are made. We undertake no obligation to update any of these forward-looking statements for any reason after the date of this prospectus or to conform these statements to actual results or to changes in our expectations, except as required by law.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into or review of all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance, and events and circumstances may be materially different from what we expect.

Market, industry and other data

This prospectus contains estimates, projections and other information concerning our industry, our business and the markets for our products, including data regarding the estimated size of those markets, their projected growth rates, the perceptions and preferences of patients and physicians regarding certain therapies and other patient data and reimbursement data, as well as market research, estimates and forecasts prepared by our management. We obtained the industry, market and other data throughout this prospectus from our own internal estimates and research, as well as from publicly available information, industry publications and research, surveys and studies conducted by third-parties, including governmental agencies. This information involves important assumptions and limitations, and you are cautioned not to give undue weight to such estimates.

Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to a high degree of uncertainty and risk, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information based on various factors, including those discussed in the section titled “Risk factors.” These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

Use of proceeds

We estimate that the net proceeds to us from this offering will be approximately \$ _____ million, or \$ _____ million if the underwriters exercise their option to purchase additional shares in full, based assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, net proceeds to us by \$ _____ million, assuming that the number of shares offered by us as set forth on the cover page of this prospectus remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares offered by us would increase or decrease, as applicable, net proceeds to us by approximately \$ _____ million, assuming an initial public offering price of \$ _____ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to increase our financial flexibility, increase our visibility in the marketplace, and create a public market for our Class A common stock. We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, for working capital and other general corporate purposes, including to fund our growth, research and development initiatives, technology development, working capital, and operating expenses. However, we do not currently have specific planned uses for the proceeds.

We may also use a portion of our net proceeds to acquire or invest in complementary products, technologies, or businesses. However, we currently have no agreements or commitments to complete any such transactions.

Our expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. Our management will have broad discretion over the use of the net proceeds from this offering. See the section titled "Risk factors—Risks related to this offering and our Class A common stock—We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively." Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in short-term, interest-bearing, investment-grade securities, certificates of deposit, or government securities.

Dividend policy

We have never declared or paid any dividends on our capital stock, and we do not currently intend to pay any cash dividends on our Class A common stock and Class B common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to support operations and to finance the growth and development of our business. Any future determination to pay dividends will be made at the discretion of our Board of Directors, subject to applicable laws, and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions, and capital requirements. In addition, the terms of the Note Purchase Agreement place restrictions on our ability to pay cash dividends on our capital stock. Furthermore, we may, from time to time, enter into other loan or credit agreements or similar borrowing arrangements that may further restrict our ability to declare or pay dividends on our Class A common stock and Class B common stock.

Capitalization

The following table sets forth our cash and cash equivalents and our capitalization as of June 30, 2025:

- on an actual basis;
- on an as adjusted basis to give effect to (i) the Preferred Stock Conversion, (ii) the Reclassification, (iii) the Class B Stock Exchange, (iv) the conversion of the A-6 Warrant to a warrant to purchase common stock and the related reclassification of the warrant liability to stockholders' equity and (v) the filing and effectiveness of our Post-IPO Certificate of Incorporation, all of which will occur immediately prior to the completion of this offering; and
- on a pro forma as adjusted basis to reflect (i) the pro forma adjustments set forth above and (ii) the issuance and sale of shares of Class A common stock in this offering at an assumed initial public offering price of \$ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma and pro forma as adjusted information below is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read the information in this table together with the sections titled "Management's discussion and analysis of financial condition and results of operations" and "Description of capital stock" and our financial statements and the related notes included elsewhere in this prospectus.

(in thousands, except for share and per share amounts)	As of June 30, 2025		
	Actual	Pro forma	Pro forma as adjusted ⁽¹⁾
Cash and cash equivalents	\$ 188,958	\$	\$
Long-term debt	52,072		
Redeemable convertible preferred stock, par value \$0.00001 per share; 29,544,989 shares authorized, 29,084,235 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	\$ 419,409	\$	\$
Stockholders' (deficit) equity:			
Preferred stock, par value \$0.00001 per share; no shares authorized, no shares issued and outstanding, actual; shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted			
Common stock, par value \$0.00001 per share; 51,100,000 shares authorized, 11,085,044 shares issued and outstanding, actual; no shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	—		
Class A common stock, par value \$0.00001 per share; no shares authorized, no shares issued and outstanding, actual; shares authorized, pro forma and pro forma as adjusted, shares issued and outstanding, pro forma, and shares issued and outstanding, pro forma as adjusted	—		
Class B common stock, par value \$0.00001 per share; no shares authorized, no shares issued and outstanding, actual; shares authorized, shares issued and outstanding, pro forma and pro forma as adjusted	—		
Additional paid-in capital	36,182		
Accumulated deficit	(286,435)		
Total stockholders' (deficit) equity	(250,253)		
Total capitalization	\$ 221,228	\$	\$

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- (1) Each \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders' (deficit) equity and total capitalization by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each 1.0 million share increase or decrease in the number of shares offered by us would increase or decrease, as applicable, pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders' (deficit) equity and total capitalization by approximately \$ _____ million, assuming that the assumed initial offering price to the public remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The number of shares of our common stock issued and outstanding, pro forma and pro forma as adjusted, in the table above is based on 35,616,629 shares of our Class A common stock and 4,552,650 shares of our Class B common stock outstanding as of June 30, 2025, after giving effect to the Preferred Stock Conversion, the Reclassification and the Class B Stock Exchange, in each case as if they had occurred on June 30, 2025, and excludes:

- 8,930,919 shares of our Class A common stock issuable upon the exercise of stock options outstanding as of June 30, 2025 under our 2018 Plan, at a weighted-average exercise price of \$10.59 per share;
- 1,224,549 shares of our Class A common stock issuable upon the exercise of outstanding stock options that were granted subsequent to June 30, 2025 under our 2018 Plan, at a weighted-average exercise price of \$28.88 per share;
- up to 9,660 shares of our Class A common stock issuable upon the exercise of the A-6 Warrant for an exercise price of \$2.5879 per share;
- up to 80,357 shares of our Class A common stock issuable upon the exercise of the 2021 Common Warrant for an exercise price of \$2.80 per share;
- up to 41,209 shares of our Class A common stock issuable upon the exercise of the 2022 Common Warrant for an exercise price of \$10.92 per share;
- _____ shares of our Class A common stock reserved for future issuance under our 2025 Plan, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, as well as any future increases in the number of shares of our Class A common stock reserved for issuance under the 2025 Plan; and
- _____ shares of our Class A common stock reserved for future issuance under the ESPP, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, as well as any future increases in the number of shares of our Class A common stock reserved for issuance under the ESPP.

Dilution

If you invest in our Class A common stock in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share of our Class A common stock and the pro forma as adjusted net tangible book value per share of our Class A common stock immediately after this offering.

Our historical net tangible book value (deficit) as of June 30, 2025 was \$(249) million, or \$(22.46) per share. Our historical net tangible book value (deficit) per share represents our total tangible assets less our total liabilities and redeemable convertible preferred stock (which is not included within stockholders' (deficit) equity), divided by the number of shares of common stock outstanding as of June 30, 2025.

Our pro forma net tangible book value as of June 30, 2025, was \$ million, or \$ per share. Our pro forma net tangible book value per share represents our total tangible assets less our total liabilities, divided by the number of shares of Class A and Class B common stock outstanding as of June 30, 2025, after giving effect to: (i) the Preferred Stock Conversion, (ii) the conversion of the A-6 Warrant to a warrant to purchase common stock and the related reclassification of the warrant liability to stockholders' equity, and (iii) the filing and effectiveness of our Post-IPO Certificate of Incorporation, all of which will occur immediately prior to the completion of this offering.

Our pro forma as adjusted net tangible book value represents our pro forma net tangible book value after giving further effect to the sale of shares of Class A common stock in this offering at an assumed initial public offering price of \$ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Our pro forma as adjusted net tangible book value as of June 30, 2025, was \$ million, or \$ per share. This amount represents an immediate increase in pro forma as adjusted net tangible book value of \$ per share to our existing stockholders and an immediate dilution of \$ per share to new investors participating in this offering. We determine dilution per share to investors participating in this offering by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by investors participating in this offering.

The following table illustrates this dilution on a per share basis to new investors (without giving effect to any exercise by the underwriters of their option to purchase additional shares):

Assumed initial public offering price per share		\$
Historical net tangible book value (deficit) per share as of June 30, 2025	\$ (22.46)	
Increase in net tangible book value per share as of June 30, 2025 attributable to the pro forma adjustments described above		
Pro forma net tangible book value per share as of June 30, 2025		
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to new investors purchasing Class A common stock in this offering		\$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing.

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Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the pro forma as adjusted net tangible book value per share by \$ per share and the dilution per share to investors participating in this offering by \$ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each 1.0 million share increase in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase the pro forma as adjusted net tangible book value per share by \$ and decrease the dilution per share to investors participating in this offering by approximately \$, assuming the assumed initial public offering price of \$ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Each 1.0 million share decrease in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by \$ and increase the dilution per share to new investors participating in this offering by approximately \$, assuming the assumed initial public offering price of \$ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option to purchase up to additional shares in full, the pro forma as adjusted net tangible book value of our Class A common stock would increase to \$ per share, representing an immediate increase in the pro forma net tangible book value per share to existing stockholders of \$ per share and an immediate dilution of \$ per share to investors participating in this offering, based on the assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, as of June 30, 2025, on the pro forma as adjusted basis described above, the number of shares of our Class A common stock, the total consideration and the average price per share (i) paid to us by our existing stockholders and (ii) to be paid by investors purchasing shares of our Class A common stock in this offering at an assumed initial public offering price of \$ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, before deducting underwriting discounts and commissions and estimated offering expenses payable by us.

(in thousands, except share and per share data and percentages)	Shares purchased		Total consideration		Weighted-average price per share
	Number	Percent	Amount	Percent	
Existing stockholders		%	\$	%	\$
New investors					\$
Total		100%	\$	100%	

The presentation in this table regarding ownership by existing stockholders does not give effect to any purchases that existing stockholders may make through our directed share program or otherwise purchase in this offering. If the underwriters exercise their option to purchase additional shares of Class A common stock in full, the number of shares held by the existing stockholders after this offering would be reduced to shares, or % of the total number of shares of our Class A common stock outstanding after this offering, and the number of shares held by new investors would increase to shares, or % of the total number of shares of our Class A common stock outstanding after this offering.

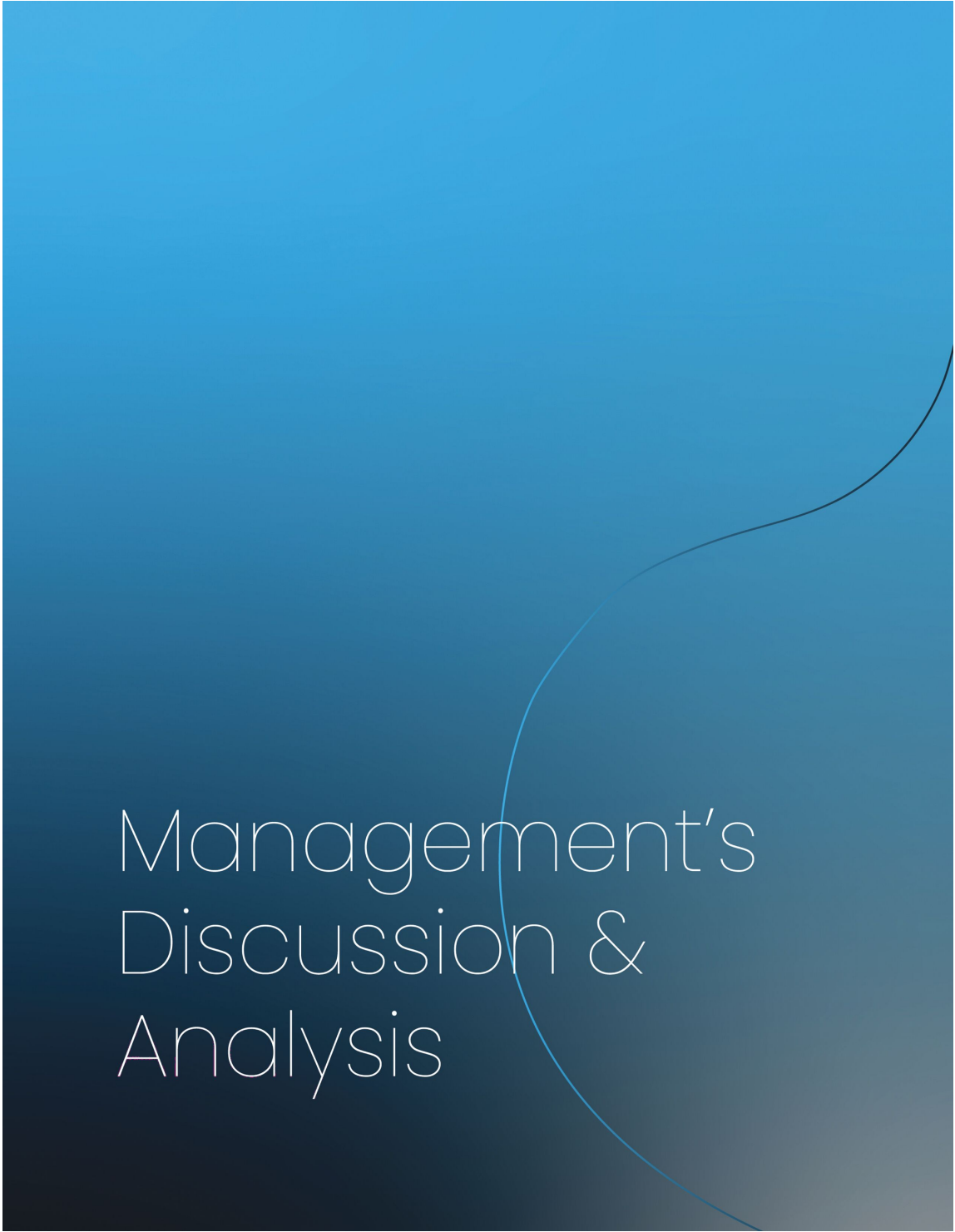
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The foregoing discussion and calculations above (other than the historical net tangible book value calculations) are based on 35,616,629 shares of our Class A common stock and 4,552,650 shares of our Class B common stock outstanding as of June 30, 2025, after giving effect to the Preferred Stock Conversion, the Reclassification and the Class B Stock Exchange, in each case as if they had occurred on June 30, 2025, and excludes:

- 8,930,919 shares of our Class A common stock issuable upon the exercise of stock options outstanding as of June 30, 2025 under our 2018 Plan, at a weighted-average exercise price of \$10.59 per share;
- 1,224,549 shares of our Class A common stock issuable upon the exercise of outstanding stock options that were granted subsequent to June 30, 2025 under our 2018 Plan, at a weighted-average exercise price of \$28.88 per share;
- up to 9,660 shares of our Class A common stock issuable upon the exercise of the A-6 Warrant for an exercise price of \$2.5879 per share;
- up to 80,357 shares of our Class A common stock issuable upon the exercise of the 2021 Common Warrant for an exercise price of \$2.80 per share;
- up to 41,209 shares of our Class A common stock issuable upon the exercise of the 2022 Common Warrant for an exercise price of \$10.92 per share;
- shares of our Class A common stock reserved for future issuance under our 2025 Plan, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, as well as any future increases in the number of shares of our Class A common stock reserved for issuance under the 2025 Plan; and
- shares of our Class A common stock reserved for future issuance under our ESPP, which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part, as well as any future increases in the number of shares of our Class A common stock reserved for issuance under the ESPP.

Any remaining shares available for issuance under our 2018 Plan will be added to the shares reserved under our 2025 Plan in effect following the completion of this offering and we will cease granting awards under the 2018 Plan.

To the extent that outstanding options or warrants are exercised, new options or other securities are issued under our equity incentive plans, or we issue additional shares of Class A common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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Management's Discussion & Analysis

Management’s discussion and analysis of financial condition and results of operations

The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements as of and for the years ended December 31, 2024 and 2023 and the related notes included elsewhere in this prospectus. This discussion and analysis as well as other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, including information with respect to our plans and strategy for our business. You should carefully read the sections titled “Special note regarding forward-looking statements” and “Risk factors” to gain an understanding of the factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

BillionToOne is transforming healthcare by redefining molecular diagnostics. Our revolutionary smNGS platform achieves what was once thought impossible—detecting and precisely quantifying genetic targets with single-molecule sensitivity. At the heart of this technological breakthrough lies our patented QCTs, enabling measurements at the physical limit of detection—the single DNA molecule. This leap forward addresses a fundamental limitation in healthcare—the inability to detect sparse but clinically crucial disease signals in cfDNA.

Founded with the mission to remove the fear of the unknown through powerful and accessible smNGS-based diagnostics, we have swiftly transitioned from an R&D-focused company to a proven commercial organization. Since launching UNITY, our first prenatal product in 2019, we have expanded our offerings first within prenatal genetics, and then to oncology diagnostics. To date, we have processed more than one million smNGS-based tests. Today, we test approximately 1 in 11 babies during pregnancy in the United States, a metric that is continuing to increase rapidly every year. UNITY is the first sgNIPT that uses cfDNA to provide fetal risk assessment for recessive conditions such as SCD and CF without requiring a paternal sample or invasive procedures such as amniocentesis. Since then, we have expanded our UNITY offering to cover comprehensive prenatal genetic needs from a single maternal blood draw. In 2024, our unique fetal antigen tests resulted in national medical guideline changes, enabling us to position our tests as “the new standard in prenatal care,” further contributing to both test volume and ASP growth, as we leveraged the guideline changes to contract with more insurance companies. By detecting and identifying an extensive array of severe but actionable genetic disorders during pregnancy, we enable substantially better outcomes for newborns via earlier therapeutic and other clinical interventions.

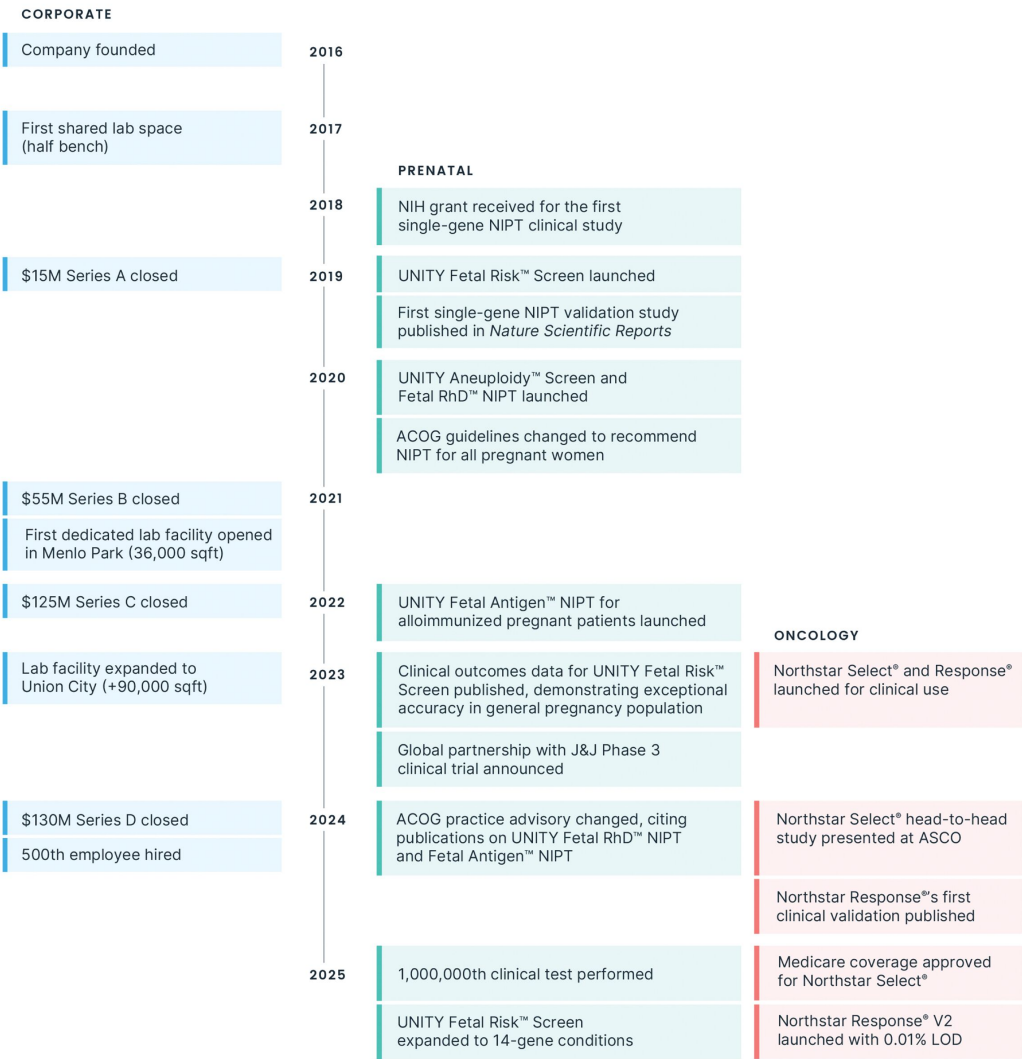
In the oncology setting, ultrasensitive tests with real-time insights are required to effectively detect, diagnose, and treat patients with a diverse range of mutations and solid tumor types across the cancer care continuum. In 2023, we successfully leveraged our smNGS platform to launch two complementary pan-cancer liquid biopsy tests – Northstar Select and Northstar Response. Our Northstar Select is used to guide therapy selection and has been shown to detect over 50% more actionable solid tumor mutations than conventional liquid biopsies.²³ Based on our knowledge of all widely available tests, Northstar Response is the only methylation-based assay that quantifies the amount of cancer (tumor burden) at the single molecule level without requiring a tissue biopsy, enabling real-time monitoring of patient response to therapy with unprecedented precision. Our Northstar tests give physicians extraordinary visibility into cancer profile and treatment response, enabling more informed and earlier treatment decisions that can fundamentally alter patient outcomes.

²³ Bower, X., Wignall, J., Varga, M. G., Zhu, J., O’Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhard, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. (2025). Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling. *The Journal of Liquid Biopsy*, 100322.

Our business momentum is evidenced by our rapidly scaling commercial success and improving operational efficiency. Of approximately one million smNGS-based tests that we have processed since our initial launch, over 50% of them, or approximately 508,000 tests, were processed within the last 12 months ended June 30, 2025. For the year ended December 31, 2024, we generated revenue of \$152.6 million, representing 113% year-over-year growth, with a gross margin of 53% and net loss of \$41.6 million. We have incurred losses since inception, including a net loss of \$41.6 million and \$4.2 million for the year ended December 31, 2024 and six months ended June 30, 2025, respectively, and we had an accumulated deficit of \$286.4 million as of June 30, 2025. Our loss from operations for the six months ended June 30, 2024 and 2025 was \$22.8 million and \$3.9 million, respectively. Our business model has demonstrated improving operational leverage, which has enabled us to reach, on a non-GAAP income from operations basis, positive operating income after adjusting for stock-based compensation expense for the six months ended June 30, 2025. During this period, we generated revenue of \$125.5 million, representing 82% year-over-year revenue growth as compared to the six months ended June 30, 2024, with a gross margin of 65%. This translated to a non-GAAP net operating income of \$1.2 million for the six months ended June 30, 2025 compared to a non-GAAP net operating loss of \$18.9 million for the six months ended June 30, 2024, which represented an improvement of approximately \$20.1 million.

Since our founding, we have developed and commercially launched multiple products and achieved a number of significant milestones as depicted in the chart below.

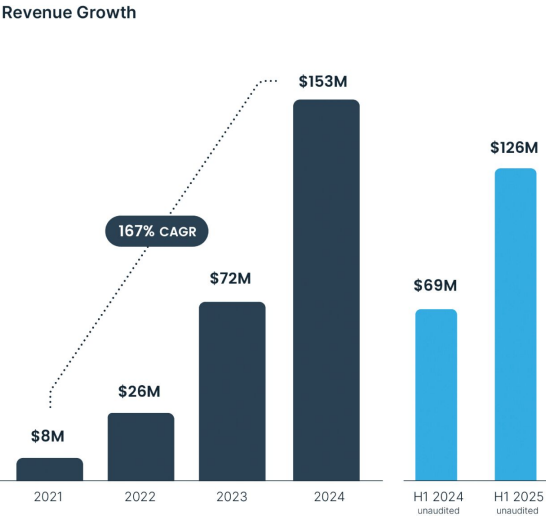
Key Corporate & Commercialization Milestones



ACOG: American College of Obstetricians and Gynecologists
ASCO: American Society of Clinical Oncology
AACR: American Association for Cancer Research

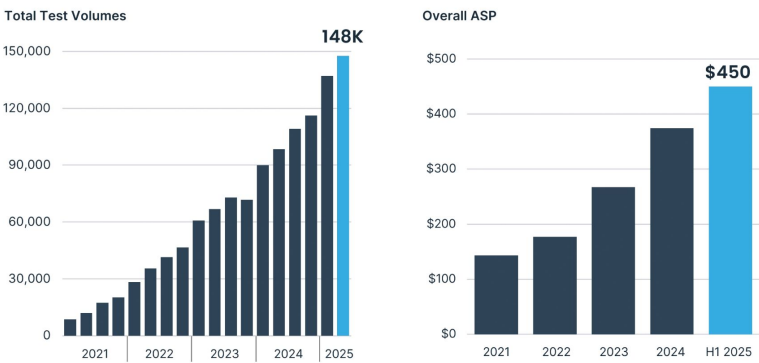
Our business model and key performance metrics

Our revenue is driven by selling and performing molecular diagnostic tests ordered by physicians and other providers. We generally bill the patients' insurance carrier, the patient, or a combination of both upon delivery of the test results. We first commercialized our prenatal products in 2019 and our oncology products in early 2023. Our revenue has grown rapidly from \$8.1 million in 2021 to \$152.6 million in 2024. Our pace of growth remains strong, as revenue grew 113% year-over-year in 2024 and 82% year-over-year in the six months ended June 30, 2025.

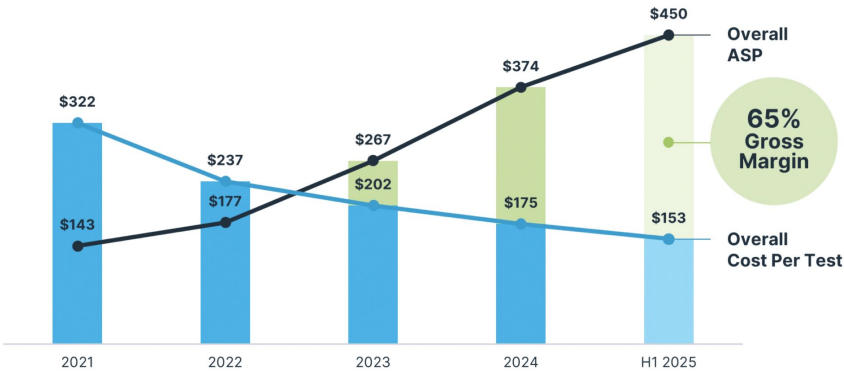


Our revenue is the function of two inputs: the number of tests ordered and the ASP that we can achieve through reimbursement. There is a flywheel effect between these two factors. The more tests that we process, the easier it becomes for us to contract with third-party payors and become an in-network provider. This increases our ASP for our tests, as the denial rate of our tests significantly decreases once we become an in-network provider. As we become an in-network provider, it becomes easier for our sales representatives to convince ordering providers to use our tests.

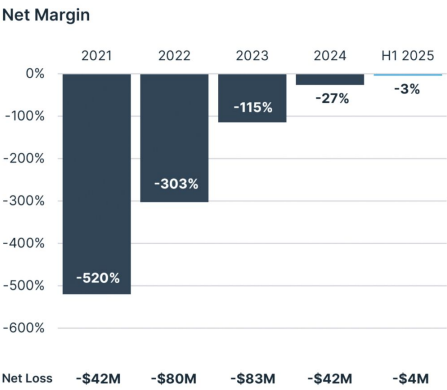
We believe the in-network status results in a better patient and provider experience, with fewer requirements for prior authorization and lower patient payment responsibilities. The impact of this flywheel can be seen in the results of concurrent increases of ASP and test volumes, which enable us to grow our revenue at a rapid rate. For example, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024, our test volumes grew 52% year-over-year while ASPs grew 22% year-over-year, contributing to the 86% year-over-year increase in our clinical test revenue.



We believe that the combined effect of ASP increases, COGS decreases, and improved operational efficiency has been the main driver in decreases in our net losses. Our net losses decreased from \$82.7 million in the year ended December 31, 2023 to \$41.6 million in the year ended December 31, 2024, despite our heavy investments in the growth of our sales force, new product launches, and clinical studies.



Overall ASP is the weighted average ASP across all of our prenatal and oncology products. It is computed by dividing revenue for our prenatal and oncology tests by the number of tests that are delivered and billable.
Overall Cost Per Test is the weighted average cost per test across all of our prenatal and oncology products. It is computed by dividing cost of goods sold for our prenatal and oncology tests by the number of tests that are accessioned.



Since increasing test volume drives each of these factors, either directly or indirectly, we believe that our net loss margin can continue to improve for at least the next twelve months, as long as we can continue to drive increased test volumes. However, such improvement will require continuous investments in sales force, further innovation, and new product launches, necessitating a balance between reaching profitability and investing for growth. While we are nearing operating profitability and positive cashflow, we will continue to optimize for long-term growth over short-term increases in profitability.

The market for our products is large and expanding. We have only partially penetrated the NIPT market, and in oncology, we have only just begun. We believe the superiority of our products, combined with our investments in our sales force, marketing infrastructure, enhancements to existing tests, increases in our ASP, and new product development will result in further revenue growth over the coming years.

Our strategy is to target large existing markets with our products. We believe the unique capabilities of our smNGS platform enable us to launch superior products in these markets and capture significant market share. We have successfully demonstrated this strategy in the prenatal market, and we are in the earlier phases of repeating this success in the oncology market with our therapy selection (Northstar Select) and therapy response monitoring (Northstar Response) products. We anticipate launching our first assay for MRD detection in 2026, and we believe our smNGS technology has the potential to support our entry into the early cancer detection market longer term.

Key factors affecting our results of operations and performance

We believe certain factors have influenced, and will continue to influence, our operating performance and results of operations. While each of these factors presents significant opportunities for our business, they also pose important risks and challenges that we must successfully address to sustain and grow our business and improve our results of operations. Our ability to successfully address the factors below is subject to various risks and uncertainties, including those described under the section titled "Risk factors."

- Market adoption and commercial success**
Our success and future growth depend on maintaining and expanding market acceptance and achieving commercial success in our prenatal and oncology product lines. This requires our sales teams to develop and maintain relationships with obstetricians, maternal-fetal medicine specialists, oncologists, and other providers. In addition, our sales teams must be able to convincingly communicate the clinical

utility and value of our tests in enabling personalized patient care. The commercial success of our existing tests and any new tests we develop will depend upon factors such as clinical evidence supporting their effectiveness, inclusion in clinical practice guidelines, adoption by the medical community, favorable coverage by third-party payors, and our ability to differentiate our offerings in competitive markets. In addition, our ability to maintain and expand our sales and marketing capabilities to support increased adoption of our molecular diagnostic solutions will be another key factor to our success. Our strategies to support our products' adoption and our commercial success include:

- **Increase geographic coverage:** Each field sales representative can effectively cover a small geographic region. Adding additional sales representatives enables our sales team to effectively access and convert new clinics in additional geographic regions.
- **Greater penetration within a covered territory:** As the account access, provider education, and onboarding of a new ordering provider within a clinic takes time, our sales representatives often onboard one clinic at a time. Approximately 35% of our sales team members have been in their territories for less than 18 months. As our sales representatives mature, we expect them to further penetrate their territories. Even our most tenured continue to onboard new clinics.
- **Expansion within a clinic:** Once an ordering provider within a clinic first starts to use our tests, we often see expansion of our tests to other providers within the clinic. We believe that our unique product offerings and exceptional end-to-end service drive this adoption. Our cohort analysis indicates that the net test retention, as defined by the total number of tests that are received from a cohort of clinics first onboarded in a particular quarter, even after accounting for any account or provider churn, is over 100% after a year for the majority of quarterly cohorts.²⁴
- **Effective marketing execution to drive adoption:** We support our field sales team with marketing collaterals, digital campaigns, webinars, and other marketing channels to help educate physicians about our products and the unique advantages and value propositions that they provide.
- **Our ability to continue innovating our test portfolio:** We are focused on continually innovating our product portfolio and capitalizing on opportunities created by our smNGS platform. This enhances our competitive position and positions us for long-term growth.
- **Payor coverage, contracting, and more effective reimbursement operations**

Our ASPs and revenue depend heavily on our success in achieving and maintaining broad coverage and adequate reimbursement for our molecular diagnostic tests from third-party payors. Third-party reimbursement for our tests represented more than 90% of our revenue for each of the years ended December 31, 2023 and 2024, and we expect government and commercial third-party payors to continue to be our primary source of payments. Coverage and reimbursement by third-party payors, including commercial health insurers, managed care organizations, and government healthcare programs such as Medicare and Medicaid, can be limited and uncertain for the types of specialized molecular diagnostic tests we offer. Each payor makes its own determination as to whether to establish a policy to cover our tests as well as the amount it will reimburse for such tests. Payors make these determinations based on factors that include medical necessity, clinical utility, and cost-effectiveness. Reimbursement rates vary significantly by test-type, payor, and coverage determination.

²⁴ Our cohort analysis was conducted by reviewing the last 18 quarters of prenatal sales data, as of June 30, 2025. A "cohort" is defined as the group of clinics that began ordering our tests in that specific quarter. We tracked each cohort to determine if test orders increased or decreased over its first year. Net test retention is greater than 100% if the total number of tests ordered in the cohort's fourth full quarter as a customer is higher than in its first full quarter. Out of 18 cohorts, 12 cohorts had net test retention over 100%.

We believe our tests provide significantly greater value than the established Medicare Clinical Laboratory Fee Schedule (CLFS) rates. The current CLFS price established for our sgNIPT is \$1,153.62. However, when accounting for the testing cost savings and the savings from earlier clinical intervention made possible by our sgNIPT compared to traditional NIPT, a peer-reviewed study estimated the true value of our test to range from \$2,336 (on a healthcare cost-neutral basis, i.e., where the cost savings from reduced time, specialist referrals, fewer paternal and follow-on tests are passed through to the price of the test) to \$7,233 (the equivalent cost to identify one affected pregnancy via sequential carrier screening, i.e., where the cost savings from dramatically increasing the number of affected pregnancies identified are passed through to the price of the test).²⁵ We note that CMS determines the price of a test primarily based on an analysis of the costs to provide a test, rather than the intrinsic value it may provide.

While our ASPs have significantly increased over time, they are, in aggregate, still less than approximately 50% of the CLFS rates for our tests. This is primarily because (i) we are not in-network with all payors, (ii) when we get in-network with a payor, we may agree to a rate that is less than 100% of the CLFS in return for more consistent in-network payments for our services, and (iii) not all of our tests are considered covered benefits by all payors. As we increase contracting and coverage of our tests, we believe that ASPs can continue to increase over time.

Historically, our market access and reimbursement teams have pursued strategies to increasing our ASPs by expanding our payor coverage and reimbursement. We believe these strategies will continue to grow our ASPs over time.

Examples include:

- **Strategic contracting with third-party payors:** We prioritize entering into contracts with major commercial insurance companies and other third-party payors. These contracts typically result in higher, more reliable reimbursement rates for our products compared to non-contracted arrangements, where reimbursement can be significantly lower or, in some cases, not provided at all. Historically, expanding our network of contracted payors has been a major driver of higher reimbursement rates, which support increased ASPs. As of December 31, 2024, our payor contracts encompass approximately 225 million covered lives within the United States, which we expect will continue to grow as we enter into additional agreements. This extensive payor network not only enhances access to our diagnostic tests for patients but also provides greater predictability and stability in our revenues.
- **Securing unique reimbursement and procedural codes:** A critical aspect of our market access strategy is to obtain specific reimbursement and procedural codes for our tests, rather than using the generic codes that may not fully capture the uniqueness and value that our tests provide. These codes facilitate appropriate billing and reimbursement from payors and drive broader clinical adoption. For instance, our UNITY Carrier Screen was assigned a PLA code, 0449U, which has received CMS pricing of \$1,825, effective January 1, 2025. Similarly, our Northstar Select and Northstar Response products received PLA codes 0487U and 0486U, respectively, with CMS pricing of \$2,920 and \$1,644 respectively. As our codes of 0449U and 0487U have been added to the coverage policies of payors, including Medicare for the latter, our ASPs have increased.
- **Expanding payor coverage criteria and clinical utility:** Changes in payor policies, such as the expansion of coverage criteria or the recognition of new indications, can have a pronounced effect on

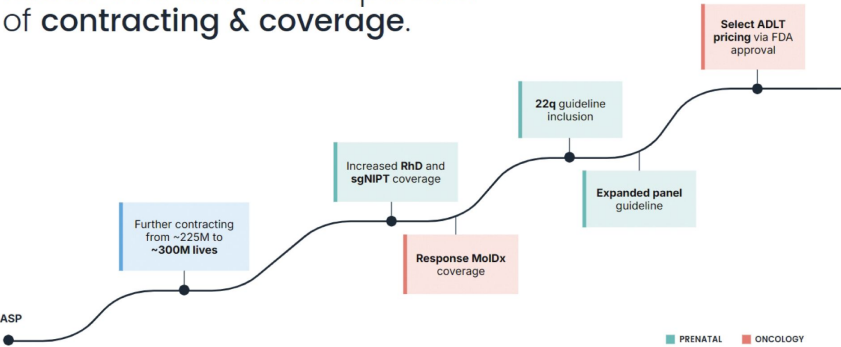
²⁵ Riku, S., Herman, M., et al. (2022). Reflex single-gene non-invasive prenatal testing is associated with markedly better detection of fetuses affected with single-gene recessive disorders at lower cost. *Journal of Medical Economics*.

our revenues and ASPs. In 2024, several payors began covering additional tests within our prenatal panel, specifically those for 22q11.2 deletion syndrome (22q microdeletion), RhD NIPT, and fetal antigen NIPT. Most recently, Geisinger issued a positive coverage policy for the sgNIPT component of our Fetal Risk Screen for recessive conditions. The inclusion of these tests in positive coverage policies has directly contributed to a notable improvement in the Overall ASP for our prenatal product portfolio.

Moreover, we achieved a significant milestone earlier this year with the receipt of a positive coverage determination from Medicare's MoIDX for Northstar Select. As a result, Medicare coverage for Northstar Select began on February 14, 2025, expanding access for eligible patients. We plan to submit additional dossiers to MoIDX for further coverage evaluations for Northstar Response, which, if successful, would significantly increase our ASPs in the future.

Our continued engagement with medical societies and generation of clinical utility evidence may also facilitate the inclusion of our tests in future clinical practice guidelines. For instance, even with more recent expansions, 22q11.2 microdeletion that we provide is only reimbursed in a minority of cases. We believe a change in the guidelines by ACOG would likely drive a much higher approval rate for this add-on by payors, substantially increasing the Overall ASP for our tests. Achieving guideline inclusion is a benefit for patients, and it is a significant catalyst for expanded reimbursement which can further elevate our ASPs.

We believe ASP can increase further over time with expansion of **contracting & coverage**.



• **Internalizing and strengthening our reimbursement capabilities & incorporating automation and AI to reimbursement operations:**

To further optimize our reimbursement outcomes, in July 2023, we transitioned from relying on third-party vendors to managing our reimbursement function in-house. We have invested in building a high-performing, specialized team dedicated to all aspects of reimbursement, including claims management, appeals, and payor relations. This team's expertise and commitment have enabled a more consistent, and accurate billing and appeal process, along with the rapid identification and resolution of reimbursement issues. Since bringing this capability in-house, we have achieved dramatically improved results, evidenced by a significant and sustained increase in ASPs over the past two years.

In addition, we have integrated our internal systems end-to-end, automated many of the repetitive reimbursement procedures, and incorporated AI for significant efficiency improvements (e.g., using large language models (LLMs) to read, categorize, and react to thousands of correspondence from insurance companies that we receive every day), allowing our team to significantly increase their productivity. For example, this has allowed us to respond to or correct 50% more claims by insurance companies with only a 15% corresponding increase in headcount.

This strategic move not only streamlines our operations and improves cash flow but also allows us to better advocate for the value of our diagnostic tests with payors by providing rapid feedback and responding proactively to evolving reimbursement trends.

- **Relentless focus on reducing costs and increasing operational efficiency**

Our financial results depend upon our ability to support current and future levels of demand for our prenatal screening and oncology diagnostic tests while maintaining discipline around our cost structure. Historically, we have been able to grow the size of our operational team much more slowly than our test volume increases. This has led to significantly increased operational leverage and efficiencies on a per-test basis and has been a driver in improving our net loss margin.

We actively seek ways to continuously reduce our costs-per-test and improve our gross profit margin, long-term profitability, and return on investment. In the last approximately three years, we have reduced COGS per test by more than 50% through automation and optimization of laboratory workflows, successful negotiations with suppliers, and re-design and re-validation of assays with more optimized chemistry or higher-throughput sequencing. For example, AI-supported accessioning of test requisitions reduced the average accessioning time from more than three minutes to 60 seconds, saving significant labor costs, and allowing us to shift our highly talented laboratory personnel to higher impact activities. These reductions have been important contributors to the growth of our gross profit margin over time to 65% gross profit margin in the first half of 2025.

Nevertheless, as our test volumes grow, we have made and will continue to make significant investments in state-of-the-art infrastructure to support our growth. In 2023 we successfully expanded our laboratory operations from a single facility with 36,000 square feet in Menlo Park, CA by adding a second laboratory facility in Union City, CA with 90,000 square feet. We estimate that these facilities can support a further four times revenue growth from \$266.3 million annualized run-rate (ARR) as of June 30, 2025 to almost \$1.1 billion ARR.

To further support our growth beyond our current facilities, we have also entered a lease for the construction of 220,000 square feet of laboratory space in Austin, Texas with favorable terms and tenant improvement package. We expect to occupy this facility in 2027, and open in 2028. Once the facility is fully utilized, we expect our potential testing capacity to be nearly triple our current capabilities.

In addition, we must simultaneously enhance our customer service capabilities, improve our billing and administrative processes, expand our quality assurance programs, incorporate new laboratory equipment and automation, and implement new technology systems, all while maintaining competitive turnaround times. As such, our expenses may increase. In order to maintain cost discipline, we will continue to re-design and optimize our processes, integrate AI into our workflows, and increasingly automate both our laboratory and non-laboratory operations. We believe that our continued focus in optimization, automation, and AI for higher operational efficiencies will drive further productivity gains.

- **Continued research and development and new product innovation**

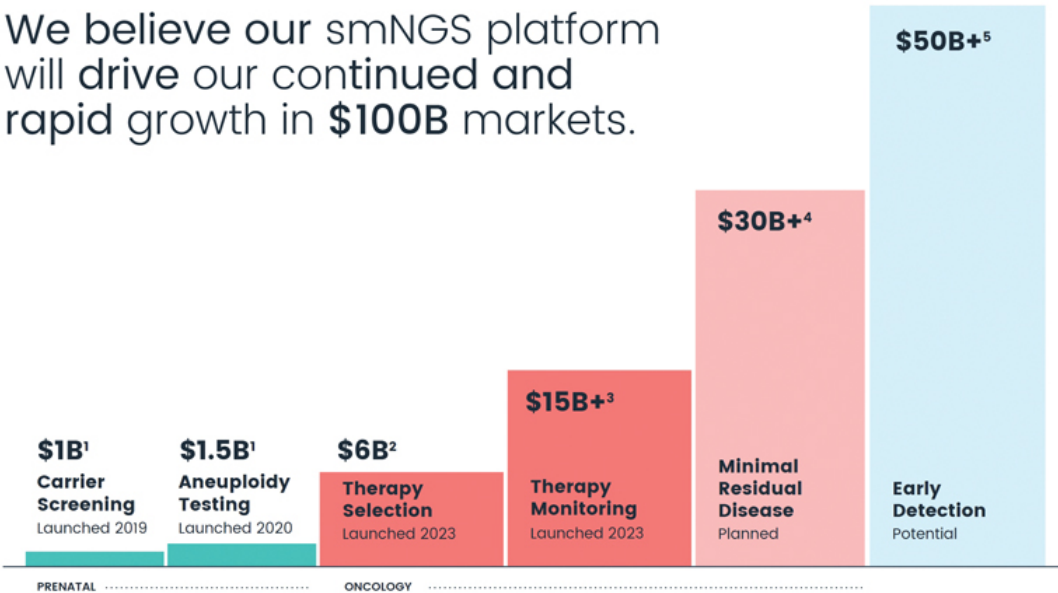
We expect to maintain significant levels of investment in research and development as we continue to develop new molecular diagnostic assays, enhance existing tests, and expand our testing capabilities into new clinical applications within our prenatal screening and oncology diagnostics product lines. These investments include costs for new test development, costs to validate new assays or to improve current assays, clinical studies to demonstrate utility and support reimbursement efforts, and development costs for new testing methodologies and platforms. Our ability to develop new products, obtain regulatory approvals for such products when required, successfully launch new products into the market, and drive adoption by healthcare providers will continue to play a key role in our competitive position and financial results. We believe these investments are critical to maintaining our technological leadership, supporting physician adoption, and driving favorable coverage decisions by payors across both our prenatal and oncology product lines. We incurred \$22.4 million, \$36.6 million, \$16.1 million and \$22.2 million in research and development expenses during the years ended December 31, 2023 and 2024 and the six months ended June 30, 2024 and 2025, respectively.

Some of our earlier prenatal product innovations include our UNITY Complete Portfolio, which encompasses our original five gene UNITY Fetal Risk Screen, UNITY Aneuploidy Screen, UNITY Fetal RhD NIPT, and UNITY Fetal Antigen NIPT. We continue to innovate within our prenatal product portfolio. For example, we recently launched a 14-gene version of our UNITY Fetal Risk Screen panel, which screens for more conditions than our existing five-gene guideline-focused screening panel. We estimate the 14-gene version of UNITY Fetal Risk Screen will expand the serviceable addressable market for UNITY by 70%, as some physicians prefer larger panels.²⁶ We plan to continue innovating novel screening and diagnostic products for the prenatal market.

We are innovating within our oncology portfolio of products as well. For example, earlier this year, we launched a new version of our Northstar Response test, called Response V2, which provides significant improvements in precision and sensitivity over our original Response product. Importantly, Response V2's limit of detection at 0.01% tumor allele fraction already matches that of the leading tumor informed MRD assay. This level of sensitivity suggests our potential ability to develop a highly competitive tumor-naïve MRD assay using our smNGS platform. Longer-term we believe we may be able to develop products for even larger segments of the oncology diagnostic market, which we estimate represents an annual market opportunity of over \$100 billion in the United States alone. Half of this addressable market includes early detection, an area in which we have not yet begun specific product development or commercial sales, but we believe will be strongly enabled by our existing technology platform.

²⁶ This estimate is based on a survey of over 100 OB/GYNs and MFMs conducted on our behalf in 2023 about their use of carrier screening panels. In response to a survey question about which panel sizes OB/GYNs and MFMs use for carrier screening, 35% of respondents indicated they use a panel covering 2-5 conditions, and 25% of respondents indicated they use a panel covering 6-15 conditions. Therefore, based on the survey responses, we estimate the 14-gene UNITY panel could potentially expand the serviceable addressable market for UNITY by 70% compared to the 5-gene panel.

We believe our smNGS platform will drive our continued and rapid growth in **\$100B** markets.



(1) Estimated \$2.5 billion prenatal market assumes two tests per pregnancy (per ACOG guidelines, which also support the use of NIPT for all pregnancies regardless of maternal age or prior risk), over 3.5 million births annually in the United States (per publicly available 2023 CDC data), and an ASP of over \$400 per test (consistent with our historical ASP).

(2) Estimated \$6 billion therapy selection market assumes 800,000 late-stage cancer patients are diagnosed every year (based on (i) 2,000,000 new cancer cases, excluding non-melanoma skin cancers, in the United States (per publicly available 2025 data from the American Cancer Society) and (ii) approximately 40% of cancers detected are late-stage (per publicly available 2025 data from the CDC)), two tests per patient (consistent with our internal user data), and an ASP of \$4,000 per test (based on industry benchmarks ranging from approximately \$3,000 to over \$5,000 per test).

(3) Estimated over \$15 billion therapy monitoring market assumes 800,000 late-stage cancer patients are diagnosed every year (based on the same assumptions outlined in (2) above), testing occurs six times per year (consistent with suggested industry intervals for tests with a similar purpose, such as CT scans), an 18-24 month average survival for late-stage cancer patients (based on our analysis of publicly available 2025 data from the American Cancer Society), and an ASP of \$1,600 per test consistent with the CMS price of our test of \$1,644.

(4) Estimated over \$30 billion minimal residual disease market assumes 18.6 million cancer survivors (based on publicly available 2025 data from the American Cancer Society), two to three tests per patient per year (which we believe is a reasonable assumption for monitoring of this type), and an ASP of \$1,000 per test based on the publicly disclosed ASP of competitor MRDs. We are developing a tissue-free, pan-cancer MRD test, which we expect to be commercially available in 2026.

(5) Estimated over \$50 billion early detection market assumes eligible patients would include anyone over approximately 40 years of age, which is estimated at 157 million people in the United States (based on our analysis of the most recent U.S. census data), one-third of eligible patients would use an annual test (analogizing publicly reported industry usage of other tests that are recommended on an annual basis as part of a regular physical exam, such as mammograms and prostate cancer tests), and an ASP of \$1,000 per test based on publicly disclosed CMS prices of competing early detection assays ranging from \$600 to \$1,500. Longer term, we believe that our smNGS-based technology could address the sensitivity challenges of early-stage cancer detection. While we have not yet started development in this area, the research work for MRD and our Select and Response tests is a necessary precursor to early detection development. We also believe that there is significant potential for our smNGS platform to accommodate products in this area. We believe the molecular information provided by our tests can assist in predicting the diagnostic pathway that can confirm the presence and tissue of origin of cancer. Given the capabilities of our existing tests and stated focus of our development efforts, we believe it is reasonable to include early detection in our calculation of total addressable market opportunity.

Key components of results of operations

Revenue

The majority of our revenue is derived from sales of our prenatal test, UNITY, and a smaller portion is derived from sales of our liquid biopsy oncology tests, Northstar. Specifically, in 2024, 96% of our revenues were from our prenatal tests, 2% of our revenues were from our oncology tests, and 2% of our revenue was from our clinical trial support services. Additionally, during the six months ended June 30, 2025, 93% of our revenue was

from our prenatal tests, 6% of our revenue was from our oncology tests, and 1% of our revenue was from our clinical trial support services. We market our products to health clinics and physicians or a combination of the insurance carrier and patient for fees. Revenue for tests is recognized when test results are delivered to the ordering physician.

For many health clinics and physicians, the payment we ultimately receive depends upon the rate of reimbursement from insurance carriers. We may also negotiate rates with patients, if the patient is responsible for payment. Our efforts in obtaining reimbursement based on individual claims, including pursuing appeals or reconsiderations of claim denials, may take a substantial amount of time, and bills may not be paid for many months or, in some cases, ultimately may not receive payment.

We expect our revenue to increase over time as we expand our sales efforts, introduce new products, and contract with more payors. In addition, positive reimbursement decisions from insurance carriers would eliminate much of the uncertainty around payment and increase our overall revenue growth from ordering physicians.

We also derive revenue from a strategic partnership with Johnson & Johnson that utilizes our testing capabilities as part of a project to perform clinical trials. Revenue from this strategic partnership agreement is recognized as services are performed and tests are delivered, as well as upon the achievement of certain milestones including (i) receipt of approval of the trial, which was achieved in 2023, (ii) various patient enrollment milestones, and (iii) subsequent full trial completion. Our revenue derived from this agreement has not been material to our results of operations.

Cost of revenue

Our cost of revenue consists primarily of expenses related to materials and consumables, test kits, personnel-related expenses such as salaries, stock-based compensation and related benefits for its operations and support personnel, shipping costs, overhead allocations, depreciation expense, facilities-related expenses and other services used in connection delivering the Company's services.

Gross profit and gross margin

Gross profit represents revenue less cost of revenue. Gross margin is gross profit expressed as a percentage of revenue. Our gross profit has been, and may in the future be, influenced by several factors, including test volumes and prices paid for our tests, changes in materials and consumables costs, laboratory processing costs, personnel costs, shipping, and logistics costs.

Operating expenses

Research and development expenses

Research and development expenses include costs incurred to develop our technology, clinical samples and conduct clinical studies to develop and support our products. These costs consist primarily of personnel-related expenses such as salaries and related benefits for our product development employees. Research and development expenses also include non-personnel costs such as materials and consumables used for research, clinical third-party services and consulting expenses, and an allocation of our general overhead expenses. These costs are expensed in the period as incurred.

We believe that continued investment in our products is important to our future growth and, as a result, we expect our research and development costs to increase in absolute dollars and moderately decline as a percentage of revenue over time if our revenue increases.

Selling, general and administrative expenses

Selling, general and administrative expenses consist primarily of personnel-related expenses such as salaries and related benefits for our sales, marketing, and general and administrative employees. Selling, general and administrative expenses also include commission payments, marketing related expenses in promoting our brand and tests, and training costs for the sales employees.

We expect selling, general and administrative expenses to increase in absolute dollars as we increase our sales and marketing personnel, increase product offerings, grow our operations and incur additional expenses associated with operating as a public company. These expenses as a result of operating as a public company include expenses necessary to comply with the rules and regulations applicable to companies listed on Nasdaq and related compliance and reporting obligations pursuant to the rules and regulations of the SEC, as well as higher expenses for general and director and officer insurance, investor relations and other professional services.

Interest income

Interest income consists of income earned on our short-term cash and cash equivalents and marketable securities.

Interest expense

Interest expense is attributable to our borrowing with Western Alliance Bank, including the amortization of the debt discount. The debt with Western Alliance Bank was repaid in full in August 2024 with the proceeds from the new Oberland Capital debt. Interest on our finance leases is also recorded in interest expense.

Net gain on extinguishment of debt

Net gain on extinguishment of debt relates to the extinguishment of the Western Alliance Bank debt and 2022 Convertible Notes.

We elected to prepay the outstanding amount of the Western Alliance Bank debt in August 2024 and wrote-off the unamortized debt issuance costs incurred before prepayment fees in connection with the extinguishment.

The 2022 Convertible Notes were amended such that the 2022 Convertible Notes converted into a round of preferred equity not originally contemplated in the agreement which we concluded was accounted for as a debt extinguishment. The gain on extinguishment consisted of the difference between the fair value of preferred equity received and the carrying amount of the 2022 Convertible Notes.

Change in fair value of term loan

Change in fair value of term loan relates to the Oberland Capital debt where we elected the fair value option under ASC 825 and is accounted for at fair value on a recurring basis. We also elected to record interest expense related to the Oberland Capital debt as change in fair value of term loan.

Change in fair value of convertible notes

Change in fair value of convertible notes relates to convertible debt where we elected the fair value option under ASC 825 and is accounted for at fair value on a recurring basis. We also elected to record interest expense related to the convertible debt as change in fair value of convertible notes.

Other expense, net

Other expense, net is comprised of the change in fair value of our liabilities related to warrants for common stock and redeemable convertible preferred stock and various income or expense items of a non-recurring nature.

Provision for income taxes

Provision for income taxes consists of U.S. federal, state, and foreign income taxes. We maintain a full valuation allowance on our federal and state deferred tax assets as we have concluded that it is not more likely than not that the deferred tax assets will be realized.

We account for uncertain tax positions in accordance with ASC 740-10, *Accounting for Uncertainty in Income Taxes*. We recognize the tax effects of an uncertain tax position only if it is more likely than not to be sustained based solely on its technical merits as of the reporting date and only in an amount more likely than not to be sustained upon review by the tax authorities. Interest and penalties related to uncertain tax position are classified in the financial statements as income tax expense.

Results of operations

The following table sets forth information derived from our statements of operations for each of the periods presented (in thousands):

	Years ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Revenue	\$ 71,729	\$ 152,582	\$ 69,086	\$ 125,536
Cost of revenue ⁽¹⁾	54,421	71,667	34,105	44,098
Gross profit	17,308	80,915	34,981	81,438
Operating expenses:				
Research and development ⁽¹⁾	22,414	36,596	16,050	22,181
Selling, general and administrative ⁽¹⁾	64,389	91,465	41,751	63,199
Total operating expenses	86,803	128,061	57,801	85,380
Loss from operations	(69,495)	(47,146)	(22,820)	(3,942)
Other income (expense):				
Interest income	3,456	5,819	2,196	2,957
Interest expense	(3,272)	(2,386)	(1,917)	(72)
Net gain on extinguishment of debt	—	7,289	8,635	—
Change in fair value of term loan	—	(3,137)	—	(3,102)
Change in fair value of convertible notes	(12,921)	(835)	(835)	—
Other income (expense), net	(442)	(1,145)	(443)	39
Total other income (expense)	(13,179)	5,605	7,636	(178)
Loss before provision for income taxes	(82,674)	(41,541)	(15,184)	(4,120)
Provision for income taxes	9	29	5	114
Net loss	\$ (82,683)	\$ (41,570)	\$ (15,189)	\$ (4,234)

(1) Includes stock-based compensation expense as follows (in thousands):

	Years ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Cost of revenue	\$ 683	\$ 1,183	\$ 564	\$ 738
Research and development	1,450	2,341	1,166	1,571
Selling, general and administrative	2,721	4,838	2,175	2,797
Total stock-based compensation expense	\$ 4,854	\$ 8,362	\$ 3,905	\$ 5,106

The following table sets forth our financial statements of operations data expressed as a percentage of revenue:

	Years ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Revenue	100%	100%	100%	100%
Cost of revenue	76%	47%	49%	35%
Gross margin	24%	53%	51%	65%
Operating expenses:				
Research and development	31%	24%	23%	18%
Selling, general and administrative	90%	60%	60%	50%
Total operating expenses	121%	84%	84%	68%
Loss from operations	(97)%	(31)%	(33)%	(3)%
Other income (expense):				
Interest income	5%	4%	3%	2%
Interest expense	(5)%	(2)%	(3)%	—%
Net gain on extinguishment of debt	—%	5%	12%	—%
Change in fair value of term loan	—%	(2)%	—%	(2)%
Change in fair value of convertible notes	(18)%	(1)%	(1)%	—%
Other expense, net	(1)%	(1)%	(1)%	—%
Total other (expense) income	(18)%	4%	11%	—%
Loss before provision for income taxes	(115)%	(27)%	(22)%	(3)%
Provision for income taxes	—%	—%	—%	—%
Net loss	(115)%	(27)%	(22)%	(3)%

Comparison of six months ended June 30, 2024 and 2025

Revenue

	Six months ended June 30,		\$ Change	% Change
	2024	2025		
	(dollars in thousands)			
Revenue	\$ 69,086	\$ 125,536	\$ 56,450	82%

Revenue increased \$56.5 million, or 82%, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024, primarily as a result of a 52% increase in the number of tests processed and a 22% increase in our Overall ASP.

We derive our revenue primarily from the number of tests processed and results delivered to the ordering physician. All tests processed are accessioned in our laboratories.

The increase in test volume was driven by higher volumes of our prenatal tests primarily as a result of expansion of our sales force for our prenatal products. In addition, volumes for both our Northstar Select and Northstar Response oncology tests increased as a result of expansion of our oncology sales force. The increase in our ASP per test was driven by several factors. Over the last 12 months we increased the number of contracts we have with payors for our prenatal tests which drove increases in ASP in the first half of 2025 compared to the same period in the prior year. In addition, during the second half of 2024 we began to benefit from a new proprietary PLA code for our prenatal tests, as when utilized the new PLA code is typically reimbursed at a higher rate than the codes for which we previously billed, which contributed to an increase in ASPs during the first half of 2025. We also benefited from an increased attachment and ordering rate of 22q11.2 micro deletion testing (our 22q test) along with our aneuploidy test and the resulting incremental reimbursement, and coverage of our RhD test from more payors. Furthermore, our ASPs for our Northstar Select oncology test increased as Medicare began to reimburse for this test during the first quarter of 2025, and we began to bill for our Northstar Response oncology test for the first time at the beginning of 2025.

Cost of revenue

	Six months ended June 30,		\$ Change	% Change
	2024	2025		
	(dollars in thousands)			
Cost of revenue	\$34,105	\$44,098	\$ 9,993	29%

Cost of revenue increased \$10.0 million, or 29%, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024. The increase was primarily due to an increase of \$5.4 million in expenses associated with testing samples and supplies used in processing tests, phlebotomy, and related shipping costs, driven by a higher volume of tests processed; and an increase of \$4.6 million in labor and consulting related expenses, including stock-based compensation. Increase in costs during the six months ended June 30, 2025 compared to the six months ended June 30, 2024 are related to higher test volumes and an increase in product support.

Gross profit and gross margin

	Six months ended June 30,		\$ Change	% Change
	2024	2025		
	(dollars in thousands)			
Gross profit	\$ 34,981	\$ 81,438	\$ 46,457	133%
Gross margin	51%	65%		

Gross profit increased \$46.5 million, or 133%, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024. The increase was primarily due to an increase in tests processed and a higher ASP in conjunction with a lower cost per test as we continued to actively reduce variable expenses and increase efficiency from our fixed costs.

Gross margin increased from 51% for the six months ended June 30, 2024 to 65% for the six months ended June 30, 2025 for the reasons described above.

The increase in our Overall ASP contributed to approximately 72% of the improvement of our gross margin for the six months ended June 30, 2025 as compared to the six months ended June 30, 2024. Decreases in Overall Cost Per Test contributed to approximately 28% of the improvement in gross margin for the six months ended June 30, 2025.

For the six months ended June 30, 2025, approximately 54% of our cost of goods sold consisted of variable costs and the remainder was fixed costs; during the six months ended June 30, 2025 approximately 56% of the improvement in our Overall Cost Per Test as compared to the six months ended June 30, 2024 was the result of improvements in variable costs.

Operating expenses

Research and development expenses

	Six months ended June 30,		\$ Change	% Change
	2024	2025 (dollars in thousands)		
Research and development	\$ 16,050	\$ 22,181	\$ 6,131	38%

Research and development expenses increased \$6.1 million, or 38%, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024. The increase was primarily due to a \$4.6 million increase in personnel costs, a \$1.9 million increase in materials, equipment expenses and overhead allocations, and a \$0.4 million increase in stock-based compensation expense, partially offset by a decrease of \$0.7 million in expenses related to clinical studies. The net increase in research and development expenses was primarily driven by a net increase in R&D headcount of 35 employees during the periods presented to support our product development and innovation efforts.

Selling, general and administrative expenses

	Six months ended June 30,		\$ Change	% Change
	2024	2025 (dollars in thousands)		
Selling, general and administrative	\$ 41,751	\$ 63,199	\$ 21,448	51%

Selling, general and administrative expenses increased \$21.4 million, or 51%, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024. The increase was primarily due to a \$15.9 million increase in salaries, commissions and related expenditures, a \$2.7 million increase in facilities and other costs, a \$2.2 million increase in professional and consulting fees, and a \$0.6 million increase in stock-based compensation expense. These increases were driven by a net increase of 112 employees during the periods presented to support our sales and marketing strategies.

Interest income

	Six months ended June 30,		\$ Change	% Change
	2024	2025 (dollars in thousands)		
Interest income	\$ 2,196	\$ 2,957	\$ 761	35%

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Interest income increased by \$0.8 million, or 35%, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024. The increase was primarily due to higher average cash and cash equivalents balances.

Interest expense

	Six months ended June 30,		\$ Change	% Change
	2024	2025		
	(dollars in thousands)			
Interest expense	\$ (1,917)	\$ (72)	\$ 1,845	(96)%

Interest expense decreased \$1.8 million, or 96%, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024. The decrease was attributable to the payoff of the Western Alliance Bank debt in August 2024; the principal on this debt was no longer outstanding during 2025. The only interest expense recorded during the six months ended June 30, 2025 related to interest charges on finance leases as we elected the fair value option to account for the Oberland debt which results in the financing costs of the loan to be included as part of the change in fair value of term loan.

Net gain on extinguishment of debt

	Six months ended June 30,		\$ Change	% Change
	2024	2025		
	(dollars in thousands)			
Net gain on extinguishment of debt	\$ 8,635	\$ —	\$ (8,635)	(100)%

Net gain on extinguishment of debt was \$8.6 million for the six months ended June 30, 2024. This was due to an \$8.6 million gain on extinguishment of the 2022 Convertible Notes due to a modification of the class of preferred stock into which the 2022 Convertible Notes ultimately converted. We did not record an extinguishment of debt during the six months ended June 30, 2025.

Change in fair value of term loan

	Six months ended June 30,		\$ Change	% Change
	2024	2025		
	(dollars in thousands)			
Change in fair value of term loan	\$ —	\$ (3,102)	\$ (3,102)	—%

Change in fair value of term loan decreased \$3.1 million for the six months ended June 30, 2025 compared to the six months ended June 30, 2024. The decrease was due to interest expense of \$2.0 million and a change in fair value of the Oberland debt of \$1.1 million, of which \$0.6 million is related to changes in the fair value of the debt and \$0.5 million is associated with the revenue participation payment.

Change in fair value of convertible notes

	Six months ended June 30,		\$ Change	% Change
	2024	2025		
	(dollars in thousands)			
Change in fair value of convertible notes	\$ (835)	\$ —	\$ 835	—%

Change in fair value of convertible notes decreased \$0.8 million for the six months ended June 30, 2025 compared to the six months ended June 30, 2024. The decrease was due to a change in fair value of the 2022 Convertible Notes that were extinguished in 2024.

Other income (expense), net

	Six months ended			
	June 30,		\$ Change	% Change
	2024	2025		
	(dollars in thousands)			
Other income (expense), net	\$ (443)	\$ 39	\$ 482	(109)%

Other income (expense), net increased \$0.5 million, or 109%, for the six months ended June 30, 2025 compared to the six months ended June 30, 2024, which was primarily driven by an increase in the fair value of our common stock warrant liability of \$0.4 million for the six months ended June 30, 2024 as compared to a decrease in fair value of our common stock warrants of \$0.1 million for the six months ended June 30, 2025 and a loss on disposal of subsidiary of \$0.1 million that occurred in the first half of 2024 and did not repeat in the first half of 2025.

Comparison of years ended December 31, 2023 and 2024

Revenue

	Year ended			
	December 31,		\$ Change	% Change
	2023	2024		
	(dollars in thousands)			
Revenue	\$ 71,729	\$ 152,582	\$ 80,853	113%

Revenue is comprised of revenue from our sales of our prenatal and oncology tests and our strategic partnership with Johnson & Johnson. Revenue increased \$80.9 million, or 113%, for the year ended December 31, 2024 compared to the year ended December 31, 2023, primarily as a result of a 52% increase in the number of tests processed and a 41% increase in our Overall ASP.

We derive our revenue primarily from the number of tests processed and results delivered to the ordering physician. All tests processed are accessioned in our laboratories.

The increase in the number of tests processed in 2024 was driven by an increase in the number of field sales representatives for our prenatal products, the introduction of our oncology products and growth in the number of our oncology field sales representatives, and increased productivity per field sales representative. The differentiation of our products in the marketplace, as well as strong execution by our sales, sales operations, marketing, and laboratory operations teams also contributed to the increase.

The increase in our ASP per test was driven by several factors. We increased the number of contracts we have with payors for our prenatal tests which drove increases in ASP in 2024. In addition, during the second half of 2024 we began to benefit from a new PLA code for our prenatal tests, as when utilized the new PLA code is typically reimbursed at a higher rate than the codes for which we previously billed. We also benefited from increased utilization of our 22q test and the resulting incremental reimbursement, and coverage of our RhD test from more payors. Furthermore, we began billing for our Northstar Select oncology test at the beginning of 2024, which benefited our revenue and Overall ASP.

We believe our plans to continue to expand our field sales force for our prenatal products and oncology products will benefit our test volumes. In addition, we believe our Overall ASP will benefit from the opportunity to enter into contracts with additional payors for our prenatal tests, as well as the recent coverage decision by MolDx for Northstar Select, which should result in lower denial rates by Medicare Advantage payors. We plan to submit additional dossiers to MolDX for further coverage evaluations for Northstar Response, which, if successful, would significantly increase our ASPs in the future.

Cost of revenue

	Year ended December 31,		\$ Change	% Change
	2023	2024		
	(dollars in thousands)			
Cost of revenue	\$ 54,421	\$ 71,667	\$ 17,246	32%

Cost of revenue increased \$17.2 million, or 32%, for the year ended December 31, 2024 compared to the year ended December 31, 2023. The increase was primarily due to an increase of \$9.2 million in expenses associated with testing samples and supplies used in processing tests, phlebotomy, and related shipping costs, driven by a higher volume of tests processed; an increase of \$8.0 million in labor, overhead, equipment depreciation and other related costs driven by headcount growth for the year ended December 31, 2023 to the year ended December 31, 2024 to support the higher test volumes; and an increase in product support. While our cost of revenue increased year-over-year as a result of higher test volumes, as part of our long-term strategy we are focused on reducing costs per test in order to improve efficiency.

Gross profit and gross margin

	Year ended December 31,		\$ Change	% Change
	2023	2024		
	(dollars in thousands)			
Gross profit	\$ 17,308	\$ 80,915	\$ 63,607	368%
Gross margin	24%	53%		

Gross profit increased \$63.6 million, or 368%, for the year ended December 31, 2024 compared to the year ended December 31, 2023. The increase was primarily due to an increase in tests processed a higher ASP and lower costs per test.

Gross margin increased from 24% for the year ended December 31, 2023 to 53% for the year ended December 31, 2024 for the reasons described above.

The increase in our Overall ASP contributed to approximately 80% of the improvement in our gross profit margin in 2024. In addition, as part of our long term strategy we are focused on reducing costs per test for each of our offerings, which if successful will result in a reduction in our Overall Cost Per Test. A decrease in our Overall Cost Per Test contributed to approximately 20% of the improvement in our gross profit margin in 2024. In 2024, approximately 54% of our cost of goods sold consisted of variable costs and the remainder was fixed costs; during the year, approximately 57% of the improvement in our Overall Cost Per Test was the result of improvements in variable costs.

We anticipate that cost initiatives and leveraging fixed costs should continue to reduce our Overall Cost Per Test.

Operating expenses

Research and development expense

	Year ended December 31,			
	2023	2024	\$ Change	% Change
	(dollars in thousands)			
Research and development	\$ 22,414	\$ 36,596	\$ 14,182	63%

Research and development expenses increased \$14.2 million, or 63%, for the year ended December 31, 2024 compared to the year ended December 31, 2023. The increase was primarily due to a \$6.4 million increase in salaries and related expenditures, which included a \$0.9 million increase in stock-based compensation expense, a \$5.1 million increase in overhead allocation, facilities and equipment depreciation, a \$2.0 million increase in expense related to clinical studies, and a \$0.7 million increase in consulting and other costs. These increases were primarily driven by a net increase in R&D headcount of 24 employees from December 31, 2023 to December 31, 2024 to support our product development and innovation efforts.

Selling, general and administrative expenses

	Year ended December 31,			
	2023	2024	\$ Change	% Change
	(dollars in thousands)			
Selling, general and administrative	\$ 64,389	\$ 91,465	\$ 27,076	42%

Selling, general and administrative expenses increased \$27.1 million, or 42%, for the year ended December 31, 2024 compared to the year ended December 31, 2023. The increase was primarily due to a \$22.2 million increase in salaries, commissions and related expenditures, which included a \$2.1 million increase in stock-based compensation expense, a \$2.4 million increase in professional fees, a \$0.8 million increase in marketing costs and a \$1.7 million increase in facilities and other costs. These increases were driven by a net increase of 74 employees from the year ended December 31, 2023 to the year ended December 31, 2024 to support our sales and marketing strategies.

Interest income

	Year ended December 31,			
	2023	2024	\$ Change	% Change
	(dollars in thousands)			
Interest income	\$ 3 456	\$ 5 819	\$ 2 363	68%

Interest income increased \$2.4 million, or 68%, for the year ended December 31, 2024 compared to the year ended December 31, 2023. The increase was primarily due to higher average cash and cash equivalents balances.

Interest expense

	Year ended December 31,			
	2023	2024	\$ Change	% Change
	(dollars in thousands)			
Interest expense	\$ (3,272)	\$ (2,386)	\$ 886	(27)%

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Interest expense decreased \$0.9 million, or 27%, for the year ended December 31, 2024 compared to the year ended December 31, 2023. The decrease was attributed to incurring a full year's worth of interest in 2023 on the Western Alliance Bank debt compared to only a partial year of interest that was incurred in 2024, as the Western Alliance debt was replaced by the Oberland Capital debt in August 2024. The Oberland Capital debt was accounted for using the fair value method and interest expense related to the Oberland Capital debt was recorded in the change in fair value of term loan.

Net gain on extinguishment of debt

	Year ended December 31,		\$ Change	% Change
	2023	2024		
	(dollars in thousands)			
Net gain on extinguishment of debt	\$ —	\$ 7,289	\$ 7,289	—%

Net gain on extinguishment of debt was \$7.3 million for the year ended December 31, 2024. We did not record an extinguishment of debt for the year ended December 31, 2023. This was due to an \$8.6 million gain on extinguishment of the 2022 Convertible Notes due to a modification of the class of preferred stock into which the 2022 Convertible Notes ultimately converted. This gain was partially offset by a \$1.3 million loss on extinguishment of the Western Alliance Bank debt.

Change in fair value of term loan

	Year ended December 31,		\$ Change	% Change
	2023	2024		
	(dollars in thousands)			
Change in fair value of term loan	\$ —	\$ (3,137)	\$ (3,137)	—%

Change in fair value of term loan decreased \$3.1 million, for the year ended December 31, 2024 compared to the year ended December 31, 2023. The decrease was due to a change in fair value of the Oberland debt of \$1.5 million in addition to the interest expenses associated with the Oberland debt of \$1.6 million, which we elected to record with the change in the fair value of the loan.

Change in fair value of convertible notes

	Year ended December 31,		\$ Change	% Change
	2023	2024		
	(dollars in thousands)			
Change in fair value of convertible notes	\$ (12,921)	\$ (835)	\$ 12,086	(94)%

Change in fair value of convertible notes decreased \$12.1 million, or 94%, for the year ended December 31, 2024 compared to the year ended December 31, 2023. The decrease was due to a change in fair value of the 2022 Convertible Notes that were extinguished in 2024; we elected to include interest expense in the change in fair value of the convertible notes.

Other expense, net

	Year ended December 31,		\$ Change	% Change
	2023	2024		
	(dollars in thousands)			
Other expense, net	\$(442)	\$(1,145)	\$ (703)	159%

Other expense, net increased \$0.7 million, or 159%, for the year ended December 31, 2024 compared to the year ended December 31, 2023, which was primarily driven by increases in the fair value of our common stock warrant liability of \$0.5 million, loss from divestiture of subsidiary of \$0.1 million and a loss on disposal of fixed assets of \$0.1 million for the year ended December 31, 2024.

Non-GAAP financial measures

We use certain non-GAAP financial measures to supplement our financial statements, which are presented in accordance with GAAP. These non-GAAP financial measures include EBITDA, Adjusted EBITDA, non-GAAP operating loss, and non-GAAP net loss. We use these non-GAAP financial measures for financial and operational decision-making and as a means to assist us in evaluating period-to-period comparisons. By excluding the impact of certain items that we believe do not directly reflect our underlying operations, we are of the opinion that EBITDA, Adjusted EBITDA, non-GAAP operating loss and non-GAAP net loss provide meaningful supplemental information regarding our performance. Accordingly, we believe these non-GAAP financial measures are useful to investors and others because they allow for additional information with respect to financial measures used by management in its financial and operational decision-making and forecasting. These metrics also provide investors and other users of our financial information with additional tools to compare business performance across companies and periods, while eliminating the effects of items that may vary for different companies for reasons unrelated to core operating performance. However, there are a number of limitations related to the use of non-GAAP financial measures, and these non-GAAP measures should be considered in addition to, not as a substitute for or in isolation from, our financial results prepared in accordance with GAAP. Other companies, including companies in our industry, may calculate these non-GAAP financial measures differently or not at all, which reduces their usefulness as comparative measures.

EBITDA

We define EBITDA as net loss adjusted for income taxes, interest income, interest expense, and depreciation and amortization expense. A reconciliation of net loss, the most directly comparable GAAP financial measure, to EBITDA is presented below (in thousands):

	Years ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Net loss	\$ (82,683)	\$ (41,570)	\$ (15,189)	\$ (4,234)
Income taxes	9	29	5	114
Interest (income)	(3,456)	(5,819)	(2,196)	(2,957)
Interest expense	3,272	2,386	1,917	72
Depreciation and amortization	5,874	7,040	3,432	3,540
EBITDA	\$ (76,984)	\$ (37,934)	\$ (12,031)	\$ (3,465)

Adjusted EBITDA

We define Adjusted EBITDA as net loss adjusted for income taxes, interest income, interest expense, depreciation and amortization expense, and certain other items which include significant non-cash items events

that are highly variable, significant in size, and that we do not believe are indicative of ongoing or future business operations, which include: stock-based compensation expense; net gain on extinguishment of debt; change in fair value of term loan; and change in value of convertible notes. A reconciliation of net loss, the most directly comparable GAAP financial measure, to Adjusted EBITDA is presented below (in thousands):

	Years ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Net loss	\$ (82,683)	\$ (41,570)	\$ (15,189)	\$ (4,234)
Income taxes	9	29	5	114
Interest (income)	(3,456)	(5,819)	(2,196)	(2,957)
Interest expense	3,272	2,386	1,917	72
Depreciation & amortization	5,874	7,040	3,432	3,540
Stock compensation expense	4,854	8,362	3,905	5,106
Net (gain) on extinguishment of debt	—	(7,289)	(8,635)	—
(Increase)/decrease in fair value of term loan	—	3,137	—	3,102
(Increase)/decrease in fair value of convertible notes	12,921	835	835	—
Adjusted EBITDA	\$ (59,209)	\$ (32,889)	\$ (15,926)	\$ 4,743

Non-GAAP loss from operations

We define non-GAAP operating loss as operating loss presented in accordance with GAAP, adjusted to exclude stock-based compensation expenses.

A reconciliation of loss from operations, the most directly comparable GAAP financial measure, to non-GAAP loss from operations is presented below (in thousands):

	Years ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Loss from operations	\$ (69,495)	\$ (47,146)	\$ (22,820)	\$ (3,942)
Stock-based compensation expense	4,854	8,362	3,905	5,106
Non-GAAP income (loss) from operations	\$ (64,641)	\$ (38,784)	\$ (18,915)	\$ 1,164

Non-GAAP net loss

We monitor non-GAAP net loss income for planning and performance measurement purposes. We define non-GAAP net loss as net loss reported on our statements of operations, excluding the impact of stock-based compensation expenses, net gain on extinguishment of debt, change in fair value of the term loan, and change in fair value of convertible notes. We exclude fair value adjustments related to debt, which can fluctuate significantly and do not directly reflect our underlying operations. Our calculation of non-GAAP net loss does not currently include the tax effects of the stock-based compensation expense adjustment because such tax effects have not been material to date.

A reconciliation of net loss, the most directly comparable GAAP financial measure, to non-GAAP net loss is presented below (in thousands):

	Years ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Net loss	\$ (82,683)	\$ (41,570)	\$ (15,189)	\$ (4,234)
Stock-based compensation expense	4,854	8,362	3,905	5,106
Net gain on extinguishment of debt	—	(7,289)	(8,635)	—
Change in fair value of term loan	—	3,137	—	3,102
Change in fair value of convertible notes	12,921	835	835	—
Non-GAAP net income (loss)	\$ (64,908)	\$ (36,525)	\$ (19,084)	\$ 3,974

Quarterly Results of Operations

The following tables summarize our selected unaudited statements of operations and comprehensive loss data for each of the six periods indicated, with the final period ended June 30, 2025. The information for each of these quarters is prepared on the same basis as our audited annual financial statements and reflects, in the opinion of management, all adjustments of a recurring nature that are necessary for the fair statement of each period. The following data should be read in conjunction with our audited annual financial statements included elsewhere in this prospectus. Historical results are not necessarily indicative of the results that may be expected for the full fiscal year or any other period.

	March 31,		June 30,		September 30,		December 31,		Three months ended	
	2024		2024		2024		2024		March 31,	June 30,
									2025	2025
	(in thousands)									
Revenue	\$ 32,927	\$	36,159	\$	38,419	\$	45,077	\$	58,963	\$ 66,573
Cost of revenue	16,477		17,628		18,204		19,358		20,991	23,107
Gross profit	16,450		18,531		20,215		25,719		37,972	43,466
Operating expenses:										
Research and development	7,243		8,807		9,550		10,996		10,430	11,751
Selling, general and administrative	20,462		21,289		23,299		26,415		29,857	33,342
Total operating expenses	27,705		30,096		32,849		37,411		40,287	45,093
Operating loss	(11,255)		(11,565)		(12,634)		(11,692)		(2,315)	(1,627)
Other income (expense):										
Interest income	837		1,359		1,952		1,671		1,506	1,451
Interest expense	(941)		(976)		(422)		(47)		(40)	(32)
Net loss on extinguishment of debt	—		8,635		(1,346)		—		—	—
Change in fair value of term loan	—		—		(2,283)		(854)		(3,092)	(10)
Change in fair value of convertible notes	(337)		(498)		—		—		—	—
Other (expense) income, net	(174)		(269)		(171)		(531)		53	(14)
Total other income (expense)	(615)		8,251		(2,270)		239		(1,573)	1,395

	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024	Three months ended	
					March 31, 2025	June 30, 2025
	(in thousands)					
Loss before income taxes	(11,870)	(3,314)	(14,904)	(11,453)	(3,888)	(232)
Provision for income taxes	—	5	—	24	100	14
Net loss	<u>\$ (11,870)</u>	<u>\$ (3,319)</u>	<u>\$ (14,904)</u>	<u>\$ (11,477)</u>	<u>\$ (3,988)</u>	<u>\$ (246)</u>

The following table sets forth disaggregation of revenue by oncology, prenatal and clinical trial support services, as well as total test volume, for each of the six periods indicated (dollars in thousands):

	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024	Three months ended	
					March 31, 2025	June 30, 2025
Prenatal	\$ 31,554	\$ 34,525	\$ 36,601	\$ 43,220	\$ 56,076	\$ 60,852
Oncology	342	370	1,138	1,094	2,177	4,947
Clinical trial support services	1,031	1,263	680	763	710	774
Total revenue	<u>\$ 32,927</u>	<u>\$ 36,159</u>	<u>\$ 38,419</u>	<u>\$ 45,077</u>	<u>\$ 58,963</u>	<u>\$ 66,573</u>
Total test volume	89,290	97,623	107,934	114,959	137,101	147,587

The following table sets forth our financial statements of operations data expressed as a percentage of revenue for each of the six periods indicated:

	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024	Three months ended	
Percentage of revenue data					March 31, 2025	June 30, 2025
Revenue	100%	100%	100%	100%	100%	100%
Cost of revenue	50%	49%	47%	43%	36%	35%
Gross margin	50%	51%	53%	57%	64%	65%
Operating expenses:						
Research and development	22%	24%	25%	24%	18%	18%
Selling, general and administrative	62%	59%	61%	59%	51%	50%
Total operating expenses	84%	83%	86%	83%	68%	68%
Operating loss	(34)%	(32)%	(33)%	(26)%	(4)%	(2)%
Other income (expense), net	(2)%	23%	(6)%	1%	(3)%	2%
Loss before income taxes	(36)%	(9)%	(39)%	(25)%	(7)%	—%
Provision for income taxes	—%	—%	—%	—%	—%	—%
Net loss	<u>(36)%</u>	<u>(9)%</u>	<u>(39)%</u>	<u>(25)%</u>	<u>(7)%</u>	<u>—%</u>

Note: Certain figures may not sum due to rounding.

Quarterly revenue trends

Total revenues increased sequentially in each of the quarters presented primarily due to an increase in the number of total tests processed combined with an increase in Overall ASP during the periods presented.

Quarterly cost of revenue trends

Our cost of revenue has increased over the past six quarters as expenses related to testing samples increased due to the increase in number of tests we have processed over the past six quarters. We also increased headcount to support the processing of higher test volumes, which also contributed to the increase in cost of revenue. During this time, while cost of revenue increased, our Overall Cost Per Test declined.

Quarterly gross profit trends

Our gross profit has increased steadily over the past six quarters, as a result of higher volumes of tests processed and an increase in our Overall ASP during the past six quarters. Concurrently, our average cost per test has declined as we reduced variable costs per test, such as reagents and materials, and, through increased test volumes and scale efficiencies, lowered fixed costs per test during the periods presented.

Quarterly operating expense trends

Our quarterly operating expenses have steadily increased over the past six quarters, primarily driven by growth in headcount as we continue to invest in scaling the business. These investments are focused on research and development to enhance our existing technologies and create new product offerings, as well as expanding sales and marketing resources to support future revenue growth.

Quarterly other income (expense), net trends

Our quarterly other income (expense), net fluctuates each period primarily due to changes in fair value of our term loan, interest expense, and certain discrete events such as the gain on extinguishment of our convertible note of \$8.6 million in the second quarter of 2024 and the loss on extinguishment of our Western Alliance debt facility of \$1.3 million in the third quarter of 2024.

EBITDA

The following table sets forth our quarterly EBITDA for each of the six periods indicated, reconciled against net loss, the most directly comparable GAAP financial measure (in thousands):

	Three months ended					
	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024	March 31, 2025	June 30, 2025
Net loss	\$ (11,870)	\$ (3,319)	\$ (14,904)	\$ (11,477)	\$ (3,988)	\$ (246)
Income taxes	—	5	—	24	100	14
Interest (income)	(837)	(1,359)	(1,952)	(1,671)	(1,506)	(1,451)
Interest expense	941	976	422	47	40	32
Depreciation & amortization	1,687	1,745	1,809	1,799	1,793	1,747
EBITDA	<u>\$ (10,079)</u>	<u>\$ (1,952)</u>	<u>\$ (14,625)</u>	<u>\$ (11,278)</u>	<u>\$ (3,561)</u>	<u>\$ 96</u>

Adjusted EBITDA

The following table sets forth our quarterly adjusted EBITDA for each of the six periods indicated, reconciled against net loss, the most directly comparable GAAP financial measure (in thousands):

	Three months ended					
	March 31, 2024	June 30, 2024	September 30, 2024	December 31, 2024	March 31, 2025	June 30, 2025
Net loss	\$ (11,870)	\$ (3,319)	\$ (14,904)	\$ (11,477)	\$ (3,988)	\$ (246)
Income taxes	—	5	—	24	100	14
Interest (income)	(837)	(1,359)	(1,952)	(1,671)	(1,506)	(1,451)
Interest expense	941	976	422	47	40	32
Depreciation & amortization	1,687	1,745	1,809	1,799	1,793	1,747
Stock compensation expense	1,795	2,110	2,150	2,307	2,374	2,732
Net (gain) loss on extinguishment of debt	—	(8,635)	1,346	—	—	—
Change in fair value of loan	—	—	2,283	854	3,092	10
Change in fair value of convertible notes	337	498	—	—	—	—
Adjusted EBITDA	\$ (7,947)	\$ (7,979)	\$ (8,846)	\$ (8,117)	\$ 1,905	\$ 2,838

Liquidity and capital resources

Since our inception, we have financed our operations primarily through the issuance of convertible notes, redeemable convertible preferred stock, debt, and cash generated from the sale of our products. As of December 31, 2024, our principal sources of liquidity were cash and cash equivalents of \$191.5 million and working capital of \$199.4 million. Cash and cash equivalents are comprised of cash held in sweep accounts, checking accounts, lock-box accounts and money market funds. Our principal use of cash is to fund operations and invest in research and development to support our growth.

We have generated significant losses from operations and negative cash flows from operating activities in the past as reflected in our accumulated deficit of \$286.4 million as of June 30, 2025. We believe that our current cash and cash equivalents will be sufficient to fund our operations for at least the next 12 months. Our future capital requirements, however, will depend on many factors, including our growth rate, the timing and extent of our sales and marketing and research and development expenditures, the continuing market acceptance of our products, and the use of cash to fund potential mergers or acquisitions. In the event that additional financing is required from outside sources, we may seek to raise additional funds through equity, equity-linked arrangements, and debt. If we are unable to raise additional capital when desired and at reasonable rates, our business, results of operations, and financial condition could be adversely affected.

Oberland Capital note purchase agreement

We have a debt facility with availability of up to \$140.0 million, issuable in four separate tranches, pursuant to a Note Purchase Agreement, dated as of August 2, 2024, by and among us, the purchasers party thereto, and BWCB SA LLC (an entity affiliated with Oberland Capital), as purchaser's agent. The advanced principal accrues interest at a rate of 8.0% per annum. The first tranche of \$50.0 million was advanced on September 1, 2024, with a maturity date of August 31, 2031, interest-only payments through August 31, 2031 and a lump sum payment due on August 31, 2031. The term loan advances are secured by a lien on our assets. We are required to sell a tranche of notes in the amount of \$30.0 million prior to March 31, 2026 as we achieved the revenue and gross margin thresholds triggering this obligation on June 30, 2025 based on our results for the first half of

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2025. The thresholds triggering this tranche are trailing six-month revenue of at least \$112.5 million and a trailing six-month gross margin of at least 45%. The terms of this tranche are identical to those of the first \$50 million tranche.

We have the option at any time to prepay all of the then-outstanding notes, and Oberland Capital has the option to redeem the notes upon a change in control, an event of default, or maturity. The repayment amount of the note shall equal (1) 130% of the principal amount if the payment is made within 24 months of issuance; (2) 145% of the principal amount if the payment is made within 36 months of issuance; (3) if the payment is made within 48 months, an amount that would generate an internal rate of return (IRR) for the purchasers of 12.25%; (4) if the payment is made within 60 months of issuance, an amount that would generate an IRR for the purchasers of 11.75%; (5) if the payment is made thereafter but prior to maturity, an amount that would generate an IRR for the purchasers of 11.25%; and (6) if the payment is made at maturity, an amount that would generate an IRR for the purchasers of 10.0%.

Beginning with the fiscal quarter ended March 31, 2025, excluding any fiscal quarter in which our aggregate cash and cash equivalents is greater than 1.1 times the aggregate principal amount of the notes issued under the Note Purchase Agreement, we are required to maintain trailing six-month net revenue based on a schedule that gradually increases up to \$120.0 million after the year ending December 31, 2026, and a trailing six-month gross margin (as defined in the Note Purchase Agreement) of not less than 30%. As of December 31, 2024, we were in compliance with all financial covenants in the agreement. The Note Purchase Agreement also contains a revenue participation provision, under which, for any fiscal quarter, 0.01% of net revenue for such fiscal quarter (up to \$100.0 million of net revenue for each fiscal year) per each \$1.0 million principal amount of the notes will be payable to Oberland Capital. The revenue participation payments are additional financing costs of the loan and are included in the computation of the internal rate of return measures described in the preceding paragraph. Beginning with the fiscal year beginning January 1, 2025, we are required to make revenue participation payments under the Note Purchase Agreement.

Cash flows

The following table summarizes our cash flows for the periods presented (in thousands):

	Years ended December 31,		Six months ended June 30,	
	2023	2024	2024	2025
Net cash provided by (used in) operating activities	\$ (53,672)	\$ (41,375)	\$ (23,167)	\$ 3,807
Net cash provided by (used in) investing activities	82,838	(5,433)	(1,780)	(5,221)
Net cash provided by (used in) financing activities	13,405	141,017	128,941	(1,105)

Operating activities

Net cash used in operating activities for the six months ended June 30, 2024 of \$23.2 million included net loss of \$15.2 million, a \$9.9 million decrease in accounts receivable due to timing of customer payments, a \$3.2 million decrease in other non-current assets, a \$1.8 million decrease in operating lease liabilities and a \$0.6 million decrease in deferred revenue. These cash flow uses were partially offset by increases of \$2.7 million in accrued compensation and employee benefits, \$1.6 million in accrued expenses and other current liabilities, \$0.6 million in accrued commissions, all of which increased due to the growth of the business and the timing of payment, as well as non-cash charges of \$2.5 million primarily consisting of stock-based compensation, depreciation and amortization and change in fair value of convertible notes, partially offset by a gain on extinguishment of debt.

Net cash provided by operating activities for the six months ended June 30, 2025 of \$3.8 million included increases of \$4.2 million in accrued compensation and employee benefits, \$3.3 million in accounts payable, and

\$2.4 million in accrued expenses and other current liabilities, all of which increased due to the timing of payment, as well as non-cash charges of \$11.7 million primarily consisting of stock-based compensation, depreciation and amortization and change in fair value of term loan. These cash flows were partially offset by net loss of \$4.2 million, decrease in accounts receivable of \$5.7 million due to timing of customer payments, a decrease in inventory of \$5.0 million due to build up for anticipated demand, a decrease of \$2.1 million of related to operating lease liabilities and a decrease of deferred revenue of \$0.6 million.

Net cash used in operating activities for the year ended December 31, 2023 of \$53.7 million included net loss of \$82.7 million, a \$2.6 million decrease in accounts receivable due to higher product sales and timing of customer payments, and a \$1.4 million decrease in inventory due to build up for anticipated demand. These cash flow uses were partially offset by an increase of \$3.0 million in deferred revenue related to our strategic partnership agreement, \$2.2 million in prepaid expenses and other non-current assets due to timing of payment, \$2.0 million in accounts payable and other accrued expenses also due to timing of payment, and non-cash charges of \$25.2 million primarily consisting of change in fair value of convertible notes, depreciation and stock-based compensation.

Net cash used in operating activities for the year ended December 31, 2024 of \$41.4 million included net loss of \$41.6 million, a \$15.6 million decrease in accounts receivable due to higher product sales and timing of customer payments, a \$4.0 million decrease in other non-current assets and prepaid expenses, and a \$1.5 million decrease in inventory due to build up for anticipated demand. These cash flow uses were partially offset by an increase of \$6.8 million in accrued compensation, commissions and other employee benefits due to increased employee headcount and increased sales which increased commissions and bonuses, \$3.1 million in accounts payable and other accrued expenses due to increased testing volumes and timing of payments and non-cash charges of \$17.0 million primarily consisting of stock-based compensation, depreciation and amortization, amortization of operating right-of-use assets, change in fair value of 2022 Convertible Notes which were partially offset by the gain on extinguishment of debt.

Investing activities

Net cash used in investing activities for the six months ended June 30, 2024 of \$1.8 million was the result of \$1.8 million in purchases of property and equipment.

Net cash used in investing activities for the six months ended June 30, 2025 of \$5.2 million was the result of \$5.2 million in purchases of property and equipment.

Net cash provided by investing activities for the year ended December 31, 2023 of \$82.8 million was the result of \$90.0 million proceeds from maturities of certificates of deposit, partially offset by \$6.2 million in purchases of property and equipment and \$1.0 million deposits paid for financing leases.

Net cash used in investing activities for the year ended December 31, 2024 of \$5.4 million was the result of \$5.4 million in purchases of property and equipment.

Financing activities

Net cash provided by financing activities for the six months ended June 30, 2024 of \$128.9 million was the result of \$130.0 million in proceeds from Series D redeemable convertible preferred stock and \$0.6 million in proceeds from exercise of stock options, partially offset by \$1.2 million principal payments on finance lease liabilities and a \$0.5 million repurchase of common stock outstanding.

Net cash used in financing activities for the six months ended June 30, 2025 of \$1.1 million was the result of \$1.0 million principal payments on finance lease liabilities and \$0.6 million in payments for deferred offering costs related to this offering, partially offset by \$0.5 million in proceeds from exercise of stock options.

Net cash provided by financing activities for the year ended December 31, 2023 of \$13.4 million was the result of \$15.0 million in proceeds from issuance of debt and \$0.4 million in proceeds from exercise of stock options, partially offset by \$2.1 million of principal payments on finance lease liabilities.

Net cash provided by financing activities for the year ended December 31, 2024 of \$141.0 million was the result of \$130.0 million in proceeds from Series D redeemable convertible preferred stock, \$49.8 million in net proceeds from issuance of debt, \$1.1 million in proceeds from exercise of stock options, partially offset by \$36.7 million repayment of debt upon extinguishment and the related exit fee, \$2.4 million principal payments on finance lease liabilities and \$0.5 million repurchase of common stock outstanding.

Contractual obligations and commitments

Operating lease commitments. Our operating lease commitments primarily include our labs and corporate offices. As June 30, 2025, we had fixed lease payment obligations of \$72.2 million, with \$9.0 million to be paid within 12 months and the remainder thereafter.

Finance lease commitments. Our finance lease commitments primarily relate to equipment used in our labs. As of June 30, 2025, we had fixed lease payment obligations of \$1.7 million, with \$1.0 million to be paid within 12 months and the remainder thereafter.

Off-balance sheet arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet financing arrangements or any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities, that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Quantitative and qualitative disclosures about market risk

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates, inflation and foreign currency exchange rates.

Interest rate risk

We are exposed to market risk related to changes in interest rates. We had cash and cash equivalents of \$97.3 million, \$191.5 million and \$189.0 million as of December 31, 2023 and 2024 and June 30, 2025, respectively. Our cash and cash equivalents consist of cash held in sweep accounts, checking accounts, and lock-box accounts. The cash and cash equivalents are primarily for working capital purposes. Such interest earning instruments carry a degree of interest rate risk. Our financing arrangement with Western Alliance Bank subjected us to variable amount of interest on the principal balance outstanding, the debt was extinguished in 2024. Our debt facility with Oberland Capital is at a fixed rate of interest. The effect of a hypothetical 10% change in interest rates would not have had a material impact on our financial statements for the years ended December 31, 2023 and 2024 or the six months ended June 30, 2025.

Inflation risk

We do not believe that inflation has had a material effect on our business, financial condition, or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through increases in revenue as increases in inflation rates may also negatively affect

demand for our product offerings, and our ability to raise capital and cashflow. Our inability or failure to fully offset any such higher costs could harm our business, financial condition, and results of operations.

Foreign currency exchange rate fluctuations

Our operations are currently conducted almost entirely in the United States as international markets contribute less than 1% of our revenue. If we choose to expand internationally, our results of operations and cash flows may become subject to fluctuations due to changes in foreign currency exchange rates. In periods when the U.S. dollar declines in value as compared to the foreign currencies in which we incur expenses, our foreign currency-based expenses will increase when translated into U.S. dollars. In addition, future fluctuations in the value of U.S. dollar may affect the price at which we sell our tests outside the United States. To date, our foreign currency risk has been minimal.

Critical accounting estimates

We prepare our financial statements in conformity with GAAP. The preparation of financial statements in conformity with GAAP required certain estimates and assumptions to be made that may affect our financial statements. Accounting policies that have a significant impact on our results are described in Note 2 to our financial statements included elsewhere in this prospectus. The accounting policies discussed in this section are those that we consider to be the most critical. We consider an accounting policy to be critical if the policy is subject to a material level of judgment and if changes in those judgments are reasonably likely to materially impact our results.

We base our estimates and judgments on reasonably available information. Our estimates and assumptions may affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results may differ from those estimates and such differences may be material to the financial statements.

We continue to monitor and assess our critical estimates in light of developments, and as new events occur and additional information is obtained, our estimates may change materially in future periods.

Revenue

We generate revenue primarily from our prenatal and oncology testing services, which are referred to as testing services or test results. We consider the patient as our customer, that requests our test service through their physician. Test results are the single performance obligation being provided to customers. Testing service revenue is recognized at a point in time when test results are delivered to the ordering physician. We generally bill an insurance carrier, Medicaid or a patient or a combination of both upon delivery of test results. test results. The amount of revenue recognized reflects the consideration we expect to be entitled to receive in exchange for the test results.

We recognize revenue upon transfer of control of promised goods and services in an amount that reflects the consideration we expect to be entitled to receive in exchange for those goods and services. Under ASC 606, Revenue from Contracts with Customers (ASC 606), we apply the following five-step approach: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when, or as, a performance obligation is satisfied.

We recognize revenue applying estimated consideration to be received for the performance obligations delivered to customers and their representatives. In accordance with ASC 606, we apply the constraint on

variable consideration and include such amounts in the transaction price only to the extent that it is probable that a significant reversal of cumulative revenue will not occur when the associated uncertainty is resolved.

We apply the expected value method of estimating variable consideration. The total consideration we expect to collect in exchange for our products is an estimate and is largely variable in nature. Consideration includes reimbursement from both patients and insurance carriers. We establish variable consideration by considering historical payment trends for tests delivered, test reimbursement disallowances, and contractual arrangements in place, among other factors, which is adjusted for current expectations. Current expectations of cash collections factor in changes in reimbursement rate trends, historical events not expected to recur, and future known changes such as anticipated contractual pricing changes or changes to insurance coverage. We also consider hindsight, where applicable, in estimates established for variable consideration and update those estimates when actual experience supports doing so. In establishing variable consideration, we consider payors with similar reimbursement characteristics together. We monitor cash collections against the estimated variable consideration over the expected cash collection period and any difference is recognized as an adjustment to estimated revenues after such estimated cash collection period has closed.

We enter into contracts with third-party payors including insurance carriers and Medicaid to set the pricing for tests provided to patients. Due to the nature of these third-party payor contract arrangements, the total consideration we expect to collect for test results is variable as they are dependent on the terms negotiated with the third-party payor. The predominance of our revenue is derived from payments by third-party insurance carriers. Additionally, we entered into an agreement with Johnson & Johnson in 2023 to utilize our testing capabilities as part of a project to perform a clinical trial. This arrangement involved the performance of testing and related regulatory consulting services. Revenue for this contract is primarily recognized proportionally as services are performed. Revenue derived from this contract is not material to our results of operations.

Stock-based compensation

We measure stock-based compensation expense for all stock-based payment awards based on the estimated fair value of the awards on the date of grant. The fair value of each stock option granted is estimated using the Black-Scholes Model. The model requires us to make assumptions and judgments about the variable inputs used in the Black-Scholes Model, including expected term, the volatility of our common stock, and assumed risk-free interest rate. Stock-based compensation is recognized net of actual forfeitures on a straight-line basis over the requisite service period of the awards. We account for forfeitures as they occur.

We have granted awards to employees that vest based on continued service (service conditions). Stock-based compensation expense is recognized on a straight-line basis over the service period.

Common stock valuations

The fair value of the common stock underlying our stock-based awards has historically been determined by our Board of Directors, with input from management and contemporaneous third-party valuations. We believe that our Board of Directors has the relevant experience and expertise to determine the fair value of our common stock. Given the absence of a public trading market of our common stock, and in accordance with the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held Company Equity Securities Issued as Compensation, our Board of Directors exercised reasonable judgment and considered numerous objective and subjective factors to determine the best estimate of the fair value of our common stock at each grant date. These factors include:

- the results of contemporaneous valuations performed at periodic intervals by a third-party valuation firm;

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- the prices, rights, preferences, and privileges of our redeemable convertible preferred stock relative to those of our common stock;
- the prices of our redeemable convertible preferred stock and common stock sold to investors in arms-length transactions;
- our actual operating and financial performance and estimated trends and prospects for our future performance;
- our stage of development;
- the likelihood of achieving a liquidity event, such as an initial public offering, direct listing, or sale of our company, given prevailing market conditions;
- the lack of marketability involving securities in a private company;
- the market performance of comparable publicly traded companies; and
- U.S. and global capital market conditions.

In valuing our common stock, the fair value of our business was determined using various valuation methods, including combinations of the income approach and the market approach with input from management. The income approach involves applying an appropriate risk-adjusted discount rate to projected cash flows based on forecasted revenue and costs. The market approach estimates value based on a comparison of the subject company to comparable public companies in a similar line of business. From the comparable companies, a representative market value multiple was determined, which was applied to our operating results to estimate the enterprise value of our company.

Once the enterprise value was determined under the market approach, we derived the equity value of our company and used a hybrid method that considered both an option pricing model (OPM) and the probability weighted expected return method (PWERM) to allocate that value among the various classes of securities to arrive at the fair value of the common stock. The OPM is based on the Black-Scholes-Merton option valuation model, which allows for the identification for a range of possible future outcomes, each with an associated probability. The OPM is appropriate to use when the range of possible future outcomes is difficult to predict and thus creates highly speculative forecasts. PWERM involves a forward-looking analysis of the possible future outcomes of the enterprise including an IPO as well as non-IPO market-based outcomes. After the equity value is determined and allocated to the various classes of shares, a discount for lack of marketability (DLOM) is applied to arrive at the fair value of ordinary shares. A DLOM is applied based on the theory that as an owner of a private company stock, the stockholder has limited opportunities to sell this stock and any such sale would involve significant transaction costs, thereby reducing overall fair market value.

In addition, we also considered any secondary transactions involving our capital stock. In our evaluation of those transactions, we considered the facts and circumstances of each transaction to determine the extent to which they represented a fair value exchange. Factors considered include transaction volume, timing, whether the transactions occurred among unrelated parties, and whether the transaction involved investors with access to our financial information.

Application of these approaches involves the use of estimates, judgment, and assumptions that are highly complex and subjective, such as those regarding our expected future revenue, expenses, and future cash flows, discount rates, market multiples, the selection of comparable companies, and the probability of possible future events. Changes in any or all of these estimates and assumptions or the relationships between those assumptions impact our valuations as of each valuation date and may have a material impact on the valuation of our common stock.

For valuations after the completion of this offering, our Board of Directors will determine the fair value of each share of underlying common stock based on the closing price of our common stock as reported on the date of grant. Future expense amounts for any particular period could be affected by changes in our assumptions or market conditions.

Recent accounting pronouncements

For more information, please see Note 1 to our financial statements included elsewhere in this prospectus.

Emerging growth company status

We are an “emerging growth company” as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use this exemption from new or revised accounting standards until the earlier of the date we (i) qualify for treatment as an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided for emerging growth companies. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Internal control over financial reporting

Neither we nor our independent registered public accounting firm were required to, and therefore did not, perform an evaluation of our internal control over financial reporting as of or for any period included in our financial statements, nor any period subsequent in accordance with the provisions of the Sarbanes-Oxley Act. However, in connection with the preparation of our financial statements, we identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

The material weaknesses identified pertained to:

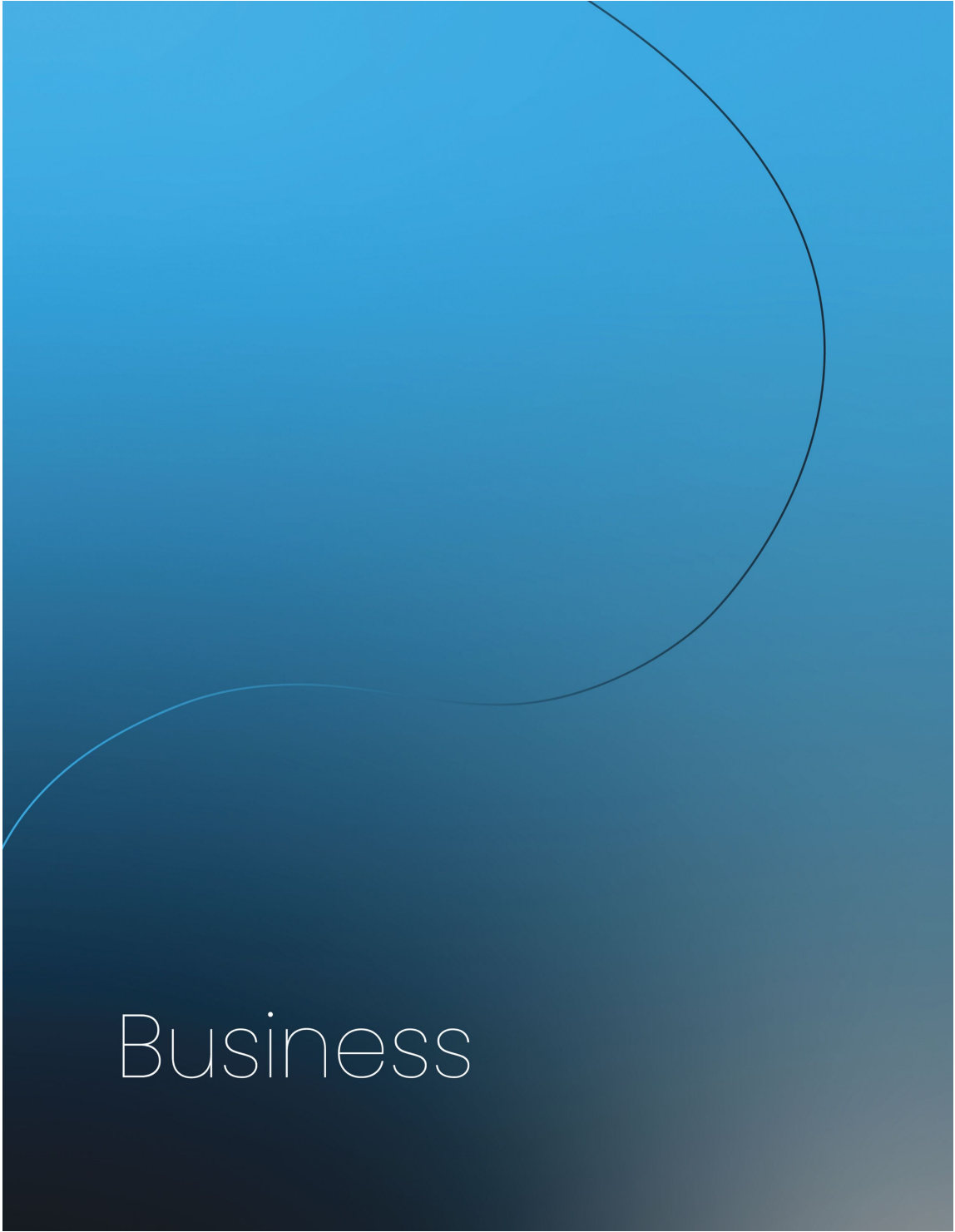
- We did not design and maintain an effective control environment commensurate with our financial reporting requirements. Specifically, we lack a sufficient complement of resources with the appropriate knowledge, experience, and training to appropriately analyze, record and disclose accounting matters commensurate with our accounting and reporting requirements. Additionally, the lack of sufficient resources resulted in an inability to consistently establish appropriate segregation of duties in our finance and accounting functions. This material weakness contributed to the following additional material weaknesses:
 - We did not design and maintain effective controls to appropriately analyze, account for, and present and disclose amounts related to certain financial instruments. Specifically, we did not design and maintain controls to appropriately analyze, account for, and present and disclose amounts related to outstanding common stock warrants. Additionally, we did not design and maintain controls to appropriately present and disclose amounts related to debt instruments. These material weaknesses resulted in immaterial adjustments to the financial statements. Additionally, these material weaknesses could result in a misstatement of account balances or disclosures that would result in a material misstatement to the annual or interim financial statements that would not be prevented or detected.
 - We did not design and maintain user access controls to ensure appropriate segregation of duties and to adequately restrict user and privileged access to appropriate personnel in creating and posting journal

entries. This material weakness did not result in a misstatement to the financial statements; however, it could result in a misstatement of account balances or disclosures that would result in a material misstatement to the annual or interim financial statements that would not be prevented or detected.

We have taken certain measures to remediate the material weaknesses described above, including:

- consulted with experts on technical accounting matters, internal controls, and in the preparation of our financial statements;
- engaged a third party to assist in evaluating segregation of duties risks and design and implement controls to address those risks;
- began to design and implement controls related to restricting user and privileged access to appropriate personnel, including as it relates to creating and posting journal entries;
- engaged a third party to assist management in evaluating the accounting for financial instruments; and
- hired additional accounting, finance, operations, and information technology resources with relevant public company experience, including a Chief Financial Officer, Controller and a Vice President of Information Systems.

We will not be able to fully remediate these material weaknesses until these steps have been completed and have been operating effectively for a sufficient period of time. Additionally, as stated above, we have not performed an evaluation of our internal control over financial reporting. Accordingly, we cannot ensure that we have identified all, or that we will not in the future have additional, material weaknesses. While we are aiming to complete these remediation efforts by the end of 2025, these remediation efforts or testing their effectiveness may extend into 2026. Material weaknesses may still exist when we report on the effectiveness of our internal control over financial reporting as required under Section 404 of the Sarbanes-Oxley Act, beginning with our second annual report after the completion of this offering. If we are unable to remediate the material weaknesses or if we identify additional material weaknesses in the future or otherwise fail to develop and maintain effective internal control over financial reporting, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business.



Business

Overview

BillionToOne is transforming healthcare by redefining molecular diagnostics. Our revolutionary single molecule NGS (smNGS) platform achieves what was once thought impossible—detecting and precisely quantifying genetic targets with single-molecule sensitivity. At the heart of this technological breakthrough lies our patented QCTs, enabling measurements at the physical limit of detection—the single DNA molecule. This leap forward addresses a fundamental limitation in healthcare—the inability to detect sparse but clinically crucial disease signals in cfDNA.

Our superior technology platform has enabled us to build category-defining prenatal and oncology products. Our products reveal actionable insights from a simple blood draw that are fundamentally changing how diseases are diagnosed and treated, leading to a paradigm shift in personalized medicine.²⁷ We believe our novel smNGS platform technologies combined with our AI-enhanced integrated workflow, allows us to push the technology frontier forward and deliver on the full promise of non-invasive liquid biopsy, which we estimate has an annual market opportunity of over \$100 billion in the United States alone. Half of this addressable market includes early detection, an area in which we have not yet begun specific product development or commercial sales, but we believe will be strongly enabled by our existing technology platform.

Founded with the mission to remove the fear of the unknown through powerful and accessible smNGS-based diagnostics, we have swiftly transitioned from an R&D-focused company to a proven commercial organization. In 2019, we launched our first prenatal product, UNITY. UNITY is the first non-invasive prenatal test (NIPT) that uses cfDNA to provide fetal risk assessment for recessive conditions such as sickle cell disease and cystic fibrosis without requiring a paternal sample or invasive procedures such as amniocentesis. Since then, we have established ourselves as a leader in the prenatal testing market and expanded our UNITY offering to cover comprehensive prenatal genetic needs from a single maternal blood draw.²⁸ While we know of competitors working to develop and launch competing NIPTs for recessive conditions, we believe the differentiation of our smNGS technology and five years of accumulated data and publications will allow us to maintain our competitive advantage as this type of testing becomes the standard of care and significantly improves patient outcomes.

In the oncology setting, ultrasensitive tests with real-time insights are required to effectively detect, diagnose, and treat patients with a diverse range of mutations and solid tumor types across the cancer care continuum. In 2023, we successfully leveraged our smNGS platform to launch two complementary pan-cancer liquid biopsy tests – Northstar Select and Northstar Response. Our Northstar Select test is used to guide therapy selection and has been shown to detect over 50% more actionable solid tumor mutations than conventional liquid biopsies.²⁹ Based on our knowledge of all widely available tests, Northstar Response is the only methylation-based assay that quantifies the amount of cancer (tumor burden) at the single molecule level without requiring a tissue biopsy, enabling real-time monitoring of patient response to therapy with unprecedented precision. Our Northstar tests give physicians extraordinary visibility into cancer profile and treatment response, enabling more informed and earlier treatment decisions that can fundamentally alter patient outcomes.

Our business momentum is evidenced by our rapidly scaling commercial success and improving operational efficiency. Of approximately one million smNGS-based tests that we have processed since our initial launch, over 50% of them, or approximately 508,000 tests, were processed within the last 12 months ended June 30,

²⁷ Our smNGS platform overcomes the technical noise that restrains the traditional NGS testing methods used by other diagnostic companies. Please see "Business — Our Technology" for more information.
²⁸ This is based on (i) our 2024 prenatal testing revenue as compared to the publicly disclosed prenatal testing revenue of Myriad Genetics, one of the largest laboratories for prenatal diagnostic testing, and (ii) ACOG practice advisory changes for RhD and fetal antigen NIPT have specifically cited our publications, resulting in changes to the standard of care.
²⁹ Bower, X., Wignall, J., Varga, M. G., Zhu, J., O'Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhard, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. (2025). Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling. The Journal of Liquid Biopsy, 100322.

2025. For the year ended December 31, 2024, we generated revenue of \$152.6 million, representing 113% year-over-year growth, with a gross margin of 53% and net loss of \$41.6 million. We have incurred losses since inception, including a net loss of \$41.6 million and \$4.2 million for the year ended December 31, 2024 and six months ended June 30, 2025, respectively, and we had an accumulated deficit of \$286.4 million as of June 30, 2025. Our loss from operations for the six months ended June 30, 2024 and 2025 was \$22.8 million and \$3.9 million, respectively. Our business model has demonstrated improving operational leverage, which has enabled us to reach, on a non-GAAP income from operations basis, positive operating income after adjusting for stock-based compensation expense for the six months ended June 30, 2025. During this period, we generated revenue of \$125.5 million, representing 82% year-over-year revenue growth as compared to the six months ended June 30, 2024, with a gross margin of 65%. This translated to a non-GAAP net operating income of \$1.2 million for the six months ended June 30, 2025 compared to a non-GAAP net operating loss of \$18.9 million for the six months ended June 30, 2024, which represented an improvement of approximately \$20.1 million.

Backed by our commitment to continued innovation and high-quality execution, we aim to lead the next wave of advancements in precision diagnostics, delivering profound benefits to patients, providers, and the broader healthcare system.

Our Four Pillars of Differentiation

At BillionToOne, we are building a different type of molecular diagnostics company, backed by our four pillars of differentiation described below. We believe these competitive advantages are difficult for others to replicate and uniquely position us to redefine the industry.

Our breakthrough technology platform. Our revolutionary platform achieves absolute quantification at the single molecule level, enabling us to: (i) accurately quantify genetic targets by eliminating biases introduced from next-generation sequencing (NGS);³⁰ (ii) precisely measure and analyze intermediate biochemical reactions to optimize the performance of our assays; and (iii) reduce sequencing costs by obtaining a higher quality signal at each genomic location analyzed.³¹ Moreover, we believe our design-based R&D approach allows us to harness this technology and accurately predict the clinical performance of a novel assay before testing a single patient sample, which we believe accelerates time-to-market and significantly improves our commercial launch success rate.³² Collectively, these platform capabilities enable us to build better products while we simultaneously decrease costs.

Our category-defining products. As demonstrated in multiple analytical and clinical studies, as well as peer reviewed publications, we have leveraged our smNGS platform to create differentiated prenatal and oncology products with 10 times greater precision versus other available tests. For example, our UNITY test has extended NIPT from detecting one million-plus base pair conditions to single base pair conditions. This advancement is already starting to impact the treatment options for babies affected by these severe recessive conditions. In addition, our Northstar Select and Response tests deliver superior sensitivity and precision, respectively, and

³⁰ PCR amplification during library preparation for NGS introduces significant biases and errors, including primer binding bias, mis-priming errors, non-specific binding, and amplification bias. When this inefficiency is amplified exponentially over several cycles, it leads to notable inaccuracies in sequencing results. Our QCTs act as a control when we conduct amplification and allow us to identify and remove the biases.

³¹ The cost of NGS scales with the total number of reads required per sample. In standard NGS, additional reads for each genomic location or sequencing of additional genomic locations may be needed to average out the noise associated with amplification biases. However, with QCTs, such biases are removed during analysis, increasing the overall signal quality. This can enable the laboratory to achieve the same diagnostic accuracy with significantly fewer total reads, reducing costs. For example, a typical test for aneuploidy NIPT screen may require interrogation of more than 10,000 genomic locations to average out the amplification bias that is present across locations whereas the same diagnostics may be possible by interrogation of a few hundred loci when control spike-ins and QCTs are used.

³² Because our technology platform is quantitative, we can often mathematically model and accurately predict assay performance in advance when designing new smNGS assays.

can generate clinically relevant insights for late-stage cancer therapy selection and response monitoring that may otherwise have been missed or delayed through conventional liquid biopsy tests and/or imaging tools. We believe that each of our products has the potential to become the standard of care in its respective market. Furthermore, we believe our competitive moat will strengthen over time as we continue to enhance and expand our portfolio of ultrasensitive tests.

Our ability to deliver rapid growth at scale. The differentiated nature of our products and our relentless commitment to improving the patient and provider experience have resulted in recurring use of our tests with extremely low customer churn. Our existing accounts have created a stable and growing revenue base with increasing penetration, and we see similar adoption trends in new clinics, as we continue our expansion within existing and new territories. Additionally, while our current products already address an estimated annual market opportunity of over \$20 billion in the United States, we believe that our R&D pipeline could eventually expand this annual addressable market to over \$100 billion. Half of this addressable market includes early detection, an area in which we have not yet begun specific product development or commercial sales, but we believe will be strongly enabled by our existing technology platform. We believe this market setup, along with our scaling business, provides a significant opportunity for us to grow over the near and long-term horizon.

Our superior efficiency. We believe our capital efficiency and emerging profitability set us apart from other molecular diagnostics companies especially at our scale. Since inception we have produced a track record of cost efficiency, demonstrated by limiting our accumulated deficit of \$282.2 million as of December 31, 2024. This figure is a small fraction of the accumulated deficits reported by certain of our public company competitors (Caris Life Sciences, Guardant Health, Natera, and Tempus AI) as of the same date.³³ The important factors resulting in this efficiency are (i) our gross margin of 65% for the three months ended June 30, 2025, which has increased 14 percentage points year-over-year, (ii) our high sales efficiency driven by differentiated products, with our annualized revenue run-rate per sales representative at over \$1.8 million for the three months ended June 30, 2025, and (iii) disciplined operational practices supplemented by automation and AI. Going forward, our financial discipline will continue to be integral to our innovation efforts. By prioritizing efficiency, we have been able to consistently invest in R&D and commercial expansion while reducing losses over time and achieving profitability. In doing so, we believe we have established a differentiated financial profile that positions us for sustainable value creation.

Background on cfDNA and the limitations of traditional NGS technologies

cfDNA represents one of the most promising biomarkers in modern precision medicine. cfDNA is continuously shed from all tissues into the bloodstream and has a short half-life of approximately one to two hours. This transient nature gives cfDNA a unique capability to provide a real-time snapshot of cellular turnover and can be used to diagnose and monitor disease, as both genetic and epigenetic properties of cfDNA directly reflect the originating tissue.

Despite its potential, the detection of cfDNA is fundamentally challenging due to its limited quantity in blood and short half-life. Certain conditions that stem from large scale genetic changes or generate abundant quantities of cfDNA in the bloodstream can be identified by previous testing approaches. However, other serious conditions may have lower DNA shedding rates which can result in very few relevant DNA fragments in the blood. These conditions are nearly undetectable with previous cfDNA detection techniques. For example, even in a late-stage cancer patient, there may only be one mutated cell-free tumor DNA molecule found in one tube of blood.

While traditional NGS has revolutionized genomic medicine over the past decade, it faces inherent limitations when applied to the analysis of cfDNA. Conventional NGS technologies are primarily limited to presence or

³³ These competitors consist of different size companies, based on revenues, with product offerings that may not be directly comparable to our product offerings.

absence detection. For example, within germline testing, which includes nearly unlimited input DNA material, the clinically relevant changes are detected at around 50% additional disease burden. However, in cfDNA applications, these clinically relevant changes can be at the level of 0.01% of cfDNA in blood. These applications require ultrasensitive quantification at the single molecule level that we believe is only possible with our smNGS platform.³⁴ Further complicating the challenge, cfDNA samples undergo numerous enzymatic, amplification, and other biochemical steps prior to sequencing. Each of these steps introduces technical noise that makes it harder for traditional sequencing technologies to accurately quantify the absolute and relative abundance of cfDNA sequences in the biological specimen, resulting in lower sensitivity and specificity.

Our Proprietary Single-Molecule
Next-Generation Sequencing Platform (smNGS)

We have developed a transformative technology platform that redefines the possibilities of cfDNA analysis. In the past, the significant advancements from polymerase chain reaction (PCR) to Sanger Sequencing to NGS expanded molecular diagnostics from being limited to infectious disease testing and human genome mapping to now becoming standard of care for genetic screening. Today, we are experiencing another step change as we believe our smNGS platform enables the absolute quantification of cfDNA and we believe overcomes the technical noise that restrains the traditional NGS testing methods used by other diagnostic companies. This breakthrough capability enables our non-invasive diagnostic tests to achieve performance characteristics previously only possible with invasive tissue biopsies from the affected organ.

The cornerstone of our platform is its ability to resolve and quantify individual DNA molecules with absolute precision. This single-molecule resolution provides extraordinary visibility into the biological signals present in a sample, even when the target DNA represents just one molecule among billions. Beyond mere detection, our technology enables absolute quantification of cfDNA, eliminating the reliance on relative measurements that has constrained previous approaches. This quantitative foundation allows us to transform every aspect of our operations in a measurable way, from research and development to clinical testing and quality control. While traditional diagnostic approaches have often relied on trial-and-error experiments to screen for incremental improvements, our smNGS platform does not. The quantitative nature of the data that our smNGS platform generates is critical to our success in creating ultrasensitive, differentiated molecular diagnostics.

Perhaps most significantly, we believe, our smNGS technology transcends the precision-versus-scale tradeoff that has limited legacy diagnostic methods. Conventional genetic analysis techniques, such as NGS and digital droplet PCR (ddPCR), typically sacrifice either sensitivity or multiplexing, i.e., ability to interrogate many genomic loci at the same time, forcing compromises in clinical utility. We believe our platform eliminates this constraint, delivering both high sensitivity and broad genomic coverage simultaneously. This unique capability allows us to provide physicians and patients with more actionable information from cfDNA that was previously possible only with more invasive diagnostics.³⁵

Our smNGS platform is powered by several patented technologies, most notably the use of synthetic DNA fragments, called QCTs. QCTs encode the molecular information in sequencing data which are subsequently decoded using proprietary machine learning and bioinformatic algorithms, enabling us to precisely quantify cfDNA. The precision and multiplexability of QCT-powered assays make them ideal for addressing clinically significant challenges where sensitivity of rare-variant detection or quantification necessary for longitudinal

³⁴ Stasik, S., Mende, M., Schuster, C., et al. Sensitive Quantification of Cell-Free Tumor DNA for Early Detection of Recurrence in Colorectal Cancer. *Front Genet.* (2021);12:811291.
³⁵ Tsao, D. S., Silas, S., Landry, B. P., Itzep, N. P., Nguyen, A. B., Greenberg, S., Kanne, C. K., Sheehan, V. A., & Lo, Y. H. (2019). A novel high-throughput molecular counting method with single basepair resolution enables accurate single-gene NIPT. *Scientific Reports*, 9, 14382.

measurements is essential. The power of QCTs is best exemplified when the clinical problem itself is quantitative, as in the case of fetal risk assessment of recessive conditions during pregnancy and monitoring of response to therapy in a cancer patient.

QCTs and our other smNGS technologies also serve as the backbone of our technical operations. We leverage this quantitative foundation to track samples throughout our workflows, to drive continuous operational improvement, and to support robust quality controls. For instance, QCTs detect cross-contamination down to the level of <0.001% and thereby enable the creation of carefully constructed and automated end-to-end laboratory workflows, including special laboratory infrastructure, that prevent such cross-contamination that could otherwise be a bottleneck on sensitivity and specificity of an assay.³⁶

The financial impact of our technology platform is substantial. We believe the ability to quantify biomarkers enables us to rationally design and engineer superior diagnostic tests optimized for clinical performance, scalability, and cost of goods sold (COGS). Our smNGS platform therefore drives our differentiated financial performance both by enabling the development of unique products and by de-risking clinical studies before dedicating significant resources. Our platform is a key differentiator versus our peers in the molecular diagnostics space and is protected by a robust and growing collection of patents and proprietary know-how.

Our Solution & Suite of Products

Our product portfolio of ultrasensitive tests touches everyone from the beginning of life, with prenatal genetic testing, to the end of life, with cancer therapy selection and response monitoring.

We launched our initial prenatal product, UNITY, in 2019. Today, we believe it is becoming the new standard of care, as evidenced by two recent ACOG practice advisory changes that cited our publications in support of the change. With UNITY, we have leap-frogged the resolution of cfDNA testing from one million base-pair chromosomal abnormalities to single base-pair recessive conditions. In this highly competitive market with increasing commoditization, our differentiated UNITY Fetal Risk Screen remains the only cfDNA test for these conditions. with peer-reviewed clinical publications.

We have more recently entered the oncology market, initially focusing on addressing the highest unmet need areas of therapy selection and response monitoring in late-stage cancer patients. We intend to expand our oncology test offerings into testing of earlier stage cancer patients, including through MRD testing and potentially for early cancer detection. We are in the late stages of development of our first assay for MRD detection, and we anticipate launching this assay in 2026. While we have not yet started development in this area, the research work that we have done for Northstar Response and MRD is a necessary precursor for early detection development. In particular, we believe that a sensitive tissue-free MRD test, which we have already de-risked by the recent launch of an ultra-sensitive response monitoring assay (Northstar Response v2), which can detect tumor DNA in blood down to a limit of detection (LOD) of 0.01%, can be technically equivalent to an early detection test for cancer. We expect that any products we launch for MRD will be laboratory developed tests (LDTs), and the products would not

³⁶ See our patent for "Quality Control Templates for Ensuring the Validity of Sequencing-Based Assays" U.S. Patent No. 11,629,381. See section entitled "Intellectual Property" for more information.

be subject to FDA approval requirements.³⁸ Longer term, we believe that our smNGS-based technology could address the sensitivity challenges of early-stage cancer detection; however, we have not yet started development in this area.³⁷

To date, we have launched multiple products across these large addressable markets. We performed approximately 508,000 smNGS-based tests in the last 12 months ended June 30, 2025, with significant room to further grow test volume in both markets.

Prenatal products

PRENATAL



- Fetal Risk Screen: Inherited conditions
- Aneuploidy Screen: Chromosomal + microdeletion conditions
- Fetal RhD + Fetal Antigen NIPT: Non-alloimmunized and alloimmunized pregnancies

Traditional prenatal screening focuses on assessing a fetus' risk for larger chromosomal changes. However, many common and severe conditions are the result of much smaller genetic changes, in single base pairs. These recessively inherited conditions, including SCD, alpha thalassemia, beta-thalassemia, CF, and SMA, are collectively more common than aneuploidy conditions like Down syndrome. Yet these conditions cannot be directly tested with traditional NIPT since each condition requires the precise quantification of fetal cfDNA.

Given the technical challenges of directly assessing the fetal risk for these conditions, current medical guidelines recommend that every pregnant patient is offered carrier screening, with father screening then required if the mother is found to be a carrier. However, studies estimate that fewer than half of fathers complete the recommended screening due to barriers related to cost, availability, and willingness. As a result, approximately 58% of pregnancies affected by these recessive conditions are undetected by traditional screening workflows.³⁹

Our UNITY Fetal Risk Screen directly addressed these challenges and is the first test that uses cfDNA to provide precise fetal risk assessments for recessive conditions without requiring a paternal sample. In addition, it reports fetal aneuploidy and 22q11.2 microdeletion, enabling complete genetic insights from a single maternal blood draw. We estimate the prenatal market represents an annual opportunity of over \$2.5 billion in the United States.⁴⁰

³⁸ Each of our genetic tests is an LDT. The FDA had historically taken the position that it had the authority to regulate LDTs as medical devices under the Federal Food, Drug, and Cosmetic Act but exercised enforcement discretion until it recently rescinded LDT regulations indicating that it does not have the authority to require clearance, de novo classification, or approval of LDTs prior to market release. As a result, our molecular diagnostic products are not currently subject to FDA approval requirements. While LDT tests do not require FDA approval currently, they are subject to state regulatory requirements, such as under New York States CLEP, which reviewed LDTs for accuracy. See "Risk Factors—Risks related to legal and regulatory matters—Our tests are currently marketed as LDTs, and future changes in FDA enforcement of LDTs could subject our operations to much more significant regulatory requirements." See also "Business—Government regulations—New York laboratory licensing."

³⁷ While we have not yet started development in this area, the research work for MRD and our Select and Response tests is a necessary precursor to early detection development. We also believe that there is significant potential for our smNGS platform to accommodate products in this area. We believe the molecular information provided by our tests can assist in predicting the diagnostic pathway that can confirm the presence and tissue of origin of cancer.

³⁹ Riku, S., Herman, M., et al. (2022). Reflex single-gene non-invasive prenatal testing is associated with markedly better detection of fetuses affected with single-gene recessive disorders at lower cost. Journal of Medical Economics.

⁴⁰ See "Management's discussion and analysis of financial condition and results of operations—Key factors affecting our results of operations and performance" for more information regarding how these total addressable markets are calculated, including material assumptions.

Oncology products

ONCOLOGY


NORTHSTAR

- **Select:** Cancer treatment selection
- **Response:** Cancer treatment response monitoring
- **Minimum Residual Disease (MRD):** Cancer detection & surveillance post-surgery
In Development

Non-invasive liquid biopsy tests are a rapidly growing approach to detect and measure tumor DNA, driven by the increasing focus on molecular-targeted cancer treatments. However, current imaging and conventional liquid biopsy approaches present critical shortcomings, including missed actionable mutations and delays in detecting treatment response and progression.

In 2023, we entered the oncology market with two complementary products that leverage our smNGS platform to address these unmet needs. Northstar Select, our ultrasensitive liquid biopsy test, provides insights into appropriate therapies for stage III or IV cancer patients. In a head-to-head study presented at American Society of Clinical Oncology (ASCO) annual meeting in 2024, our test demonstrated superior performance by detecting 51% more pathogenic and actionable SNVs and 109% more CNVs than conventional liquid biopsies.⁴¹ Northstar Select targets the therapy selection cancer diagnostics market, which we estimate is an annual United States market opportunity of over \$6 billion.⁴²

We simultaneously launched Northstar Response, the only tissue-free, pan-cancer, smNGS-based liquid biopsy test that precisely measures thousands of genomic loci uniquely methylated in cancer to provide insight into dynamic changes in therapy response. Validation studies showed Northstar Response’s consistent ability to detect changes in tumor fraction across more than 10 different cancer types, in some cases as much as six months earlier than indicated by imaging scans. Northstar Response targets the cancer therapy response diagnostics market, which we estimate is an annual United States market opportunity of over \$15 billion.⁴²

The clinical value of our oncology portfolio is validated by physician adoption. More than 95% of oncologists who order our tests utilize both Northstar Select and Northstar Response in tandem, highlighting their complementarity in guiding cancer care.

Additional opportunities in oncology

We are actively developing additional diagnostic products to address critical needs across the cancer care continuum. Our current development efforts focus on MRD detection, leveraging our platform’s exceptional sensitivity to identify trace amounts of tumor DNA following curative-intent surgery in earlier stage cancers. We are developing a tissue-free, pan-cancer MRD test, which we expect to be commercially available in 2026. We estimate the annual United States market opportunity for MRD to be over \$30 billion.⁴² Longer term, we believe that our smNGS-based technology could address the sensitivity challenges of early-stage cancer detection. While we have not yet started development in this area, the research work that we have done for Northstar

⁴¹ Bower, X., Wignall, J., Varga, M. G., Zhu, J., O’Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhard, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. (2025). Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling. *The Journal of Liquid Biopsy*, 100322.

⁴² See “Management’s discussion and analysis of financial condition and results of operations—Key factors affecting our results of operations and performance” for more information regarding how these total addressable markets are calculated, including material assumptions.

Response and MRD is a necessary precursor for early detection development. In particular, we believe that a sensitive tissue-free MRD test, which we have already de-risked by the recent launch of an ultra-sensitive response monitoring assay (Northstar Response v2), which can detect tumor DNA in blood down to a limit of detection (LOD) of 0.01%, can be technically equivalent to an early detection test for cancer.⁴³ We estimate the annual United States market opportunity for early detection to be over \$50 billion.⁴²

Our vision of powering AI-enabled personalized medicine for all

Healthcare today stands at an inflection point, poised for transformation through the convergence of unprecedented molecular insights and AI. Despite significant advances in precision medicine, particularly in oncology where treatments have evolved from being organ-based to increasingly being mutation-based, response rates for many marketed targeted therapies can be as low as single-digit percentages in their indicated patient populations. Similarly, pregnancy care follows one-size-fits-all standardized protocols despite unique patient biology. Even with broader technological advances, clinicians still cannot reliably predict or prevent major complications like preterm birth, preeclampsia, and gestational diabetes. This sobering reality underscores a fundamental challenge: many current approaches to precision medicine often rely on single biomarkers that fail to capture the full complexity of disease biology and individual patient variation. We believe that these important problems can be addressed in the future with the combination of AI and smNGS technology.

We believe AI-enabled personalized medicine can revolutionize healthcare delivery across all specialties. Truly personalized medicine requires the (i) characterization of the disease specific to each patient beyond the presence of the single mutation marker to quantification of disease biology of individuals at the single-molecule level, and (ii) integration of this characterization with multi-modal clinical history, powered by AI. We have already built products for this characterization, and we are starting to integrate our diagnostics with this multi-modal clinical history.

Our approach to building AI-enabled precision medicine will begin with our ability to generate extraordinarily precise molecular data. As we continue to generate unique data via our smNGS platform, we are building a differentiated and clinically actionable genomics dataset. Our advantage stems from two key factors: first, our biomarker measurements achieve single-molecule precision and sensitivity, capturing the key disease-causing molecular signatures in cfDNA; and second, our response monitoring assay provides an objective measurement of how a patient is responding to a therapy. AI has recently unlocked widespread access to and analysis of multimodal patient clinical history data. This powerful combination positions us to harness AI for identifying distinct patient subgroups based on their specific biomarker profiles and for predicting how each subgroup will respond to different therapeutic approaches. By mapping these response patterns with extraordinary granularity, we believe we will be able to deliver personalized treatment recommendations based on each person's unique biology that maximize efficacy while minimizing adverse effects — moving precision medicine from aspiration to clinical reality.

While our AI-enabled vision represents the future of our platform, our commercial success today demonstrates the fundamental value of our existing products. Our existing products in prenatal and oncology have already demonstrated strong growth from zero to \$266.3 million annualized revenue run-rate (ARR) in five years as of June 30, 2025. As we expand into new and larger markets, we believe that our foundational smNGS platform will position us to become a generational healthcare company.

⁴³ Both MRD and early-detection assays are designed to detect minute amounts of cancer DNA in blood (e.g., at levels of 0.01% or even lower). Given the trade off between specificity and sensitivity (LOD), this higher specificity can be, in principle, achieved by changing the calling threshold. As a part of our five-year strategic plan, we have included the necessary R&D funding for development of an early detection test that builds upon our earlier work.

Our Technology

The BillionToOne smNGS platform leverages proprietary and patent-protected technologies that allow us to detect previously undetectable diseases and support physicians developing and managing treatment plans for patients. Our platform integrates our patented QCTs, proprietary machine learning algorithms embedded in sophisticated bioinformatics systems, and a quantitative, iterative, engineering-oriented assay design. These complementary technologies achieve single-molecule precision with large scale multiplex capabilities, bypassing the tradeoff between precision and scale that limits traditional NGS methods.

We developed our smNGS platform specifically to address the fundamental challenge of cfDNA scarcity. cfDNA is the extracellular DNA found in blood plasma that is released by all tissues as a part of both normal and pathological cellular processes. cfDNA offers non-invasive windows into the genetic make-up and disease status of different tissues throughout the body. However, the concentration of cfDNA is typically very low, and the amount of cfDNA from any given source, such as a fetus or a tumor, is even lower. For a pregnant patient, typically only 2% to 15% of the cfDNA in a standard blood draw is of fetal origin.⁴⁴ For a cancer patient, approximately between 0.01% to 1% of the cfDNA is derived from a tumor, depending on cancer stage.⁴⁵ Notably, there is often only one cfDNA molecule present at any given genomic location associated with disease, even in advanced cancer patients.

Breakthrough performance capabilities

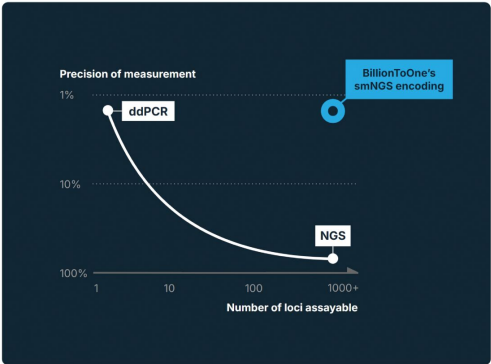
Our smNGS platform performs absolute quantification of different DNA species down to the level of a single DNA molecule. In addition, smNGS can interrogate thousands of loci simultaneously on the same sample. The cumulative number of cfDNA molecules corresponding to disease can then be summed across all of these loci, thereby amplifying the scarce disease signal by thousands. This capability is especially important for applications such as tissue-free response monitoring or MRD. In contrast, traditional methods are only able to achieve modest relative quantification, far from single molecule level, precluding any applications that require precise quantification.

In comparison to other DNA analysis methods, smNGS uniquely combines precise measurements with a high degree of multiplexing, as depicted in the figure below. ddPCR, the only other established method of performing absolute quantification, is limited to multiplexing no more than one to four probes, making it impractical for clinical testing that requires interrogating more than one hundred loci to cover even a few genes of interest.

Traditional NGS methods have transformed many areas of clinical testing due to their ability to multiplex across thousands of loci, such as enabling a single clinical test to cover multiple genes. However, these NGS methods face significant limitations when applied to cfDNA analysis. The scarcity of cfDNA necessitates amplification by a factor of millions before it can be sequenced.⁴⁶ This amplification occurs at different rates across different genomic loci, which introduces significant biases that challenge traditional NGS methods,

⁴⁴ Hou, Y., Yang, J., Qi, Y., et al. Factors affecting cell-free DNA fetal fraction: statistical analysis of 13,661 maternal plasmas for non-invasive prenatal screening. *Hum Genomics*. (2019);13(1):62.
⁴⁵ Dang, D. K., & Park, B. H. (2022). Circulating tumor DNA: current challenges for clinical utility. *Journal of Clinical Investigation*, 132(12), e154941
⁴⁶ Bronkhorst, A. J., & Holdenrieder, S. (2023). The changing face of circulating tumor DNA (ctDNA) profiling: Factors that shape the landscape of methodologies, technologies, and commercialization. *Medizinische Genetik*, 35(4), 201-235.

even for relative quantification. Moreover, these NGS methods struggle with the easiest copy number analyses, such as the ability to distinguish one copy of a gene versus two copies, as may be needed for a standard germline or carrier testing. Consequently, the gold standard for clinical testing of copy number analysis is pre-NGS technologies, such as microarray and multiplex ligation-dependent probe amplification. The identification of these copy number changes in cfDNA requires detecting a change that is more than 100 times smaller, since the fraction of cfDNA that is derived from the fetus or the tumor can constitute less than 1% of the total cfDNA. Only our smNGS platform can detect CNVs in cfDNA at these levels today. Similarly, smNGS is needed for determining fetal risk in single-gene recessive conditions and precisely quantifying response to therapy, as these problems require absolute quantification of a low cfDNA signal against a high background originating from other tissues.



The components of our platform

Our smNGS platform seamlessly integrates several tools and patented technologies, as depicted in the figure below.

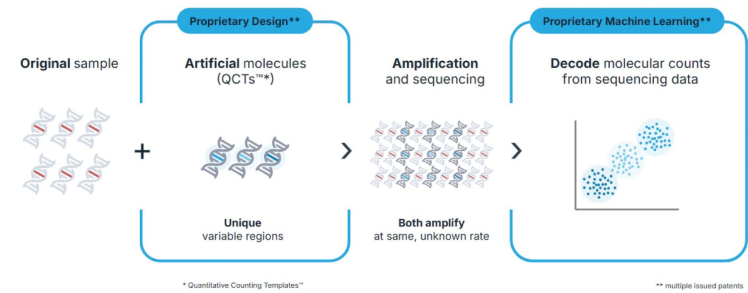


Quantitative Counting Templates (QCTs)

QCTs are the foundation of our smNGS technology. They are artificial DNA fragments that we design and synthesize to mimic the properties of the human DNA loci that are being interrogated in an assay. A specific identifier is embedded into the sequence that flags the QCTs as synthetic controls, and a randomized embedded sequence ensures that each QCT is unique. QCTs are added to the biological sample at the start of the testing process so that they are subject to the same laboratory processes, including amplification and sequencing, as the disease-associated genetic molecules that the assay targets. Importantly, QCTs amplify at the same rate as the genetic targets. We can then precisely calculate the amplification and sequencing biases that were introduced during the sample processing and remove their effects from the data to absolutely quantify the number of cfDNA molecules that are present in the sample. The precise number of QCT molecules added to each specimen is calculated bioinformatically through the counting of the number of diversity regions in the sequencing data. This method is therefore “calibration-free” and does not require the exact measurement and titration of spike-in DNA concentrations, a feature that is particularly advantageous for quantitative assessments across multiple timepoints in longitudinal monitoring contexts.

QCTs are compatible with almost all NGS library preparation methods and can be used to measure both genetic and epigenetic changes, such as methylation. Our ability to absolutely quantify methylation across genomic loci allows us to combine signals from thousands of genomic loci to reduce the amplification and sample processing noise to negligible levels, thereby converting a 0.01% signal to the equivalent of a 10+% signal.

Our patented smNGS platform
has **single-molecule precision**.



QCTs are used in our testing workflow with the following steps:

- (1) **Add** an aliquot of traceable and specific QCTs into the patient's blood sample, which contains an unknown number of DNA fragments of interest (m_1) among a vast background of the patient's genome. The precise number of QCT molecules (n_1) is also unknown at this stage but is determined in a subsequent step.
- (2) **Amplify** the cfDNA fragments of interest using PCR at the same, unknown amplification rate as QCTs.
- (3) **Count** the number of clusters of sequences with identifier tags (i.e., the number of distinct QCTs with different diversity regions), which is equal to the number of QCTs that were added to the sample (n_1).
- (4) **Determine** the amplification multiplier (x) by dividing the number of total sequencing reads that map to QCTs by the number of QCTs (n_1).
- (5) **Remove bias** by dividing the total number of sequencing reads that map to cfDNA fragments of interest by x to find the absolute number of molecules in the cfDNA sample (m_1).

We believe that QCTs provide unprecedented insight into disease biology across the human genome. We have developed custom machine learning models to analyze the tiny, individualized variations across hundreds of thousands of patients, uncovering novel patterns of disease biology. These insights are incorporated into our assays to significantly improve performance. We continuously refine our understanding of disease biology to support existing and future diagnostic products.

Custom bioinformatics with machine learning

Due to the vast amounts of data generated by genetic sequencing, robust bioinformatics are required to analyze the data and identify mutations of interest. Our smNGS platform requires the use of proprietary

- bioinformatics to further analyze the data generated by the genetic sample and QCTs to accurately quantify the presence of disease. A selection of proprietary bioinformatic tools enabling the single-molecule sensitivity of smNGS includes the following:
- Our bioinformatic tools implement numerous quality control metrics that enable single molecule sensitivity, for instance, the QCTs' ability to identify cross-contamination between samples down to a 0.001% level.
 - Our bioinformatic models enable us to effectively combine signals across thousands of loci, enabling unprecedented sensitivity.
 - The close collaboration between our clinical and bioinformatics teams enables us to curate personalized reports for patients. For example, there are more than 500 types of results that our fetal risk screen can provide with a vast repertoire of risk assessment.
 - Our custom bioinformatic tools enable design-based approaches to assay development, significantly reducing the time and cost of building a novel assay.

Specialized and scalable infrastructure

Our smNGS platform leverages specialized and scalable infrastructure that we have spent years building and refining. Our laboratory infrastructure has been custom designed from the ground up to support the single molecule sensitivity of our assays. The scalability of our tests has been built over time through automation, which has enabled us to maintain single molecule sensitivity while driving down COGS. While the vast majority of our laboratory processes are now fully automated, it was accomplished through a deliberate step-by-step approach of continuous implementation. In addition to the smNGS technology that we have developed, we believe that the current scalability of our assays also gives us a multi-year advantage. For example, it took an entire year to automate one single step of our sgNIPT assay, automated cfDNA extraction with the same yield as manual column-based extraction, to maintain the same single molecule sensitivity.

Once a sample is received at one of our facilities, it is processed through a single-directional workflow across four separate labs, each with strictly separated and segregated airflows and air filtration systems. Every step in the laboratory process is designed to optimize yields and support a high-quality testing process. By leveraging smNGS techniques and strictly controlling the workflow and environment, we can detect sample cross-contamination at the single molecule level and even determine the exact point in the process where the contamination occurred, including potentially at the clinic where the sample was collected. Even if QCTs were deployed in a traditional NGS lab, post-PCR contamination that is typically found in such labs would preclude the single molecule sensitivity, absent a complete redesign of not only the assays and bioinformatics, but of the entire laboratory infrastructure.

We have also utilized automation and AI throughout our infrastructure to reduce errors and increase laboratory throughput. By automating our labs, we are able to build uniformity into sample processing and can rapidly identify and triage problems as they occur. Each individual lab contains specialized equipment with bespoke programming to drive specific processes and to progress the sample through the testing workflow. In addition, we also integrate third-party large language models and AI to improve our laboratory workflows. For example, we completely redesigned and automated our biological sample accessioning process by incorporating AI and computer vision that automates labor-intensive clerical tasks. This allowed us to redeploy our laboratory personnel to higher impact areas. As a technology-forward organization, we have decreased our Overall Cost Per Test by more than 21% in the 24 months ended June 30, 2025, in part by deploying automation and AI. While our current laboratory space is already sufficient for at least four times more growth, our process engineering and automation teams continue to work on creative solutions to further scale our laboratory capacity and decrease our COGS.

IP and know-how

Our smNGS platform is protected by a suite of over 50 patents and proprietary technological know-how. Our patented technologies differentiate us from our competitors and support improved quality controls, enable nimble product iteration, and drive rational assay design that allow us to build novel products with attractive gross margin. We have multiple issued patents for our core technologies and our ancillary technology in the United States and internationally. Our core patents cover various approaches to using synthetic molecules to provide accurate counting of target molecules, which is our QCT technology, as well as protecting the following technologies:

- **Dilution tagging** is a novel method to quantify the abundance of targeted DNA molecules across a dynamic range of many orders of magnitude. This technology enables low-cost sequencing of cfDNA samples with rare sequences without the loss of quantitative information. For example, this can reduce sequencing costs by 10-50x for sequencing intensive applications, such as immune receptor repertoire profiling and single cell RNA sequencing.
- **Spike-in technology** refers to synthetic DNA controls custom-made for each assay and added to every patient sample. These DNA controls enable the calculation of relative abundance of targeted DNA molecules at a low cost.
- **qSanger technology** combines spike-in technology with custom-built, proprietary signal processing and applies it to Sanger sequencing and capillary electrophoresis, bringing the power of quantification to previously qualitative technologies. This approach brings NGS-level precision to easy-to-deploy technologies and enables their use as low-cost and high-throughput diagnostic tools.

Beyond these patented technologies, we have developed substantial proprietary techniques and know-how throughout our organization that are critical to our R&D and commercial success. We protect our IP through a comprehensive strategy including patents, trademarks, copyrights, trade secrets, confidentiality agreements, and other contractual protections. For further details on our IP portfolio, including issued and pending patents, see the section titled "Intellectual property".

Engineering biology approach

Our focus on quantification fundamentally transforms our R&D approach. We believe, by leveraging the precise molecular measurements enabled by our smNGS platform, we significantly reduce biological and clinical risks in our diagnostic pipeline. When designing new assays, we build mechanistic models that mathematically predict clinical performance with high confidence, transforming diagnostic development from a biology-driven trial-and-error process with inherent uncertainties into an engineering challenge with clear, solvable parameters.

We believe this engineering biology framework delivers exceptional capital efficiency. While many competitors invest heavily in exploratory biological research with uncertain outcomes, our quantification-first approach enables us to predict diagnostic performance based on biomarker measurability rather than speculative biology. We believe this targeted strategy accelerates time-to-market and significantly improves our success rate in developing category-defining products, creating substantial value for patients and shareholders alike.

We have complemented these technological advantages with an innovative organizational structure inspired by Bell Laboratories, Inc. Our R&D model organizes core scientists into focused teams reporting directly to our CEO and CTO, eliminating bureaucratic layers and accelerating decision-making. Each scientist has end-to-end responsibility across the biochemistry and bioinformatics technology stack and is empowered to drive new products from conception through commercialization. This structure enables rapid iteration with minimal resources. We believe this combination of technological foundation and organizational design will create compounding advantages that widen the gap between BillionToOne and our competitors over time.

Future uses of artificial intelligence

Productivity improvements

We have already begun to harness the transformative potential of AI to drive productivity improvements across our operations. For example, AI has significantly reduced the time required on sample accessioning, reimbursement, and healthcare operations, while substantially improving software programming productivity. These early applications represent just the beginning of our AI integration strategy. We envision an organization where AI augments virtually every functional area, creating a continuous cycle of productivity enhancement and financial performance improvement. By progressively automating routine tasks, we expect to increasingly redirect our exceptional talent toward high-value, creative activities that drive innovation and competitive differentiation. We believe this will further strengthen our differentiated financial profile by continuously improving the ratio of revenue to operating expense.

Personalized medicine

We believe that our smNGS platform is building a uniquely valuable genetics dataset due to its ability to detect single molecules at scale. We have processed over one million tests to date and our dataset continues to grow rapidly. AI can reduce medical chart extraction costs by over 90%, enabling the synthesis of smNGS molecular data and AI-extracted longitudinal clinical data for each patient.⁴⁷ This powerful combination creates the potential for us to increasingly provide more actionable and personalized clinical reports of treatment strategies while minimizing adverse effects for patients, making our products increasingly more valuable.



The strengths and challenges of precision-based diagnostic solutions

Precision diagnostics has emerged as one of the most critical components of healthcare in improving patient outcomes across multiple therapeutic areas. Through the identification of actionable unique biomarkers, diagnostic tests can offer critical information for the diagnosis and treatment of diseases. Historically, directly obtaining a sample from the fetus or the tumor for analysis has been the standard of care for prenatal and oncology diagnostics, but such procedures are highly invasive and can lead to inconclusive results. More recently, many areas of care, including prenatal and oncology, have been transformed by cfDNA diagnostics. Both genetic and epigenetic properties of cfDNA reflect the originating tissue and can be used to diagnose and monitor disease. However, while powerful, the extremely limited availability of cfDNA in blood poses significant challenges to traditional diagnostics. The fraction of cfDNA that is of fetal or tumor origin can be as low as 0.01% to 1.0% of the total cfDNA, and often there is only a single molecule that corresponds to the particular mutation of interest within a tube of blood. To address this challenge, the DNA sample must be amplified during laboratory processing by a factor of millions, which adds significant errors and biases that are then difficult to differentiate from the actual targeted mutations. It also makes quantification extremely challenging, as the original signal can be orders of magnitude smaller than these errors and biases.

⁴⁷ Carrell, D. S., Halgrim, S., Tran, D., Buist, D. S. M., Chubak, J., Chapman, W. W., & Savova, G. (2014). Using natural language processing to improve efficiency of manual chart abstraction in research: The case of breast cancer recurrence. *American Journal of Epidemiology*, 179(6), 749–758 "[Natural language processing] could reduce by 90% the number of [electronic health records] charts abstracted to identify confirmed breast cancer recurrence cases at a rate comparable to traditional abstraction."

Our market entry strategy and journey

Prior to our entry, the non-invasive prenatal testing market (NIPT) almost exclusively focused on chromosomal abnormalities called aneuploidies. Other conditions such as cystic fibrosis or sickle-cell disease could only be detected by invasive methods such as amniocentesis following carrier testing of the parents. By first focusing our smNGS platform on directly assessing fetal risk for these conditions, we expanded the indication of NIPT from more than one million base pair aneuploidies to single base pair conditions. Currently, we are the second largest prenatal genetics laboratory in the United States by revenue, achieving a 83% revenue growth rate to \$209 million in the 12-month period ended June 30, 2025 from the preceding 12-month period. We estimate the market opportunity for our prenatal products to be over \$2.5 billion annually in the United States.⁴⁸

Building on our success in the prenatal market, we have applied our smNGS platform to solve similar technical challenges in the oncology market – specifically focusing on late-stage cancer. In 2023, we launched offerings in oncology specifically related to therapy selection (Northstar Select) and response monitoring (Northstar Response). We estimate the annual market opportunity for these two products to be more than \$20 billion, and critically, we estimate that the market is less than 20% penetrated today by all molecular diagnostics companies.⁴⁹ We also plan to expand our product portfolio and are developing a tissue-free, pan-cancer MRD test, which we expect to be commercially available in 2026. We estimate the annual United States market opportunity for MRD to be over \$30 billion.⁴⁸ Longer term, we believe that our smNGS-based technology could address the sensitivity challenges of early-stage cancer detection. While we have not yet started development in this area, the research work that we have done for Northstar Response and MRD is a necessary precursor for early detection development. In particular, we believe that a sensitive tissue-free MRD test, which we have already de-risked by the recent launch of an ultra-sensitive response monitoring assay (Northstar Response v2), which can detect tumor DNA in blood down to a limit of detection (LOD) of 0.01%, can be technically equivalent to an early detection test for cancer.⁵⁰ We estimate the annual United States market opportunity for early detection to be over \$50 billion. Collectively, we estimate these addressable oncology markets represent over \$100 billion annually.⁴⁸

The need for comprehensive prenatal testing solutions

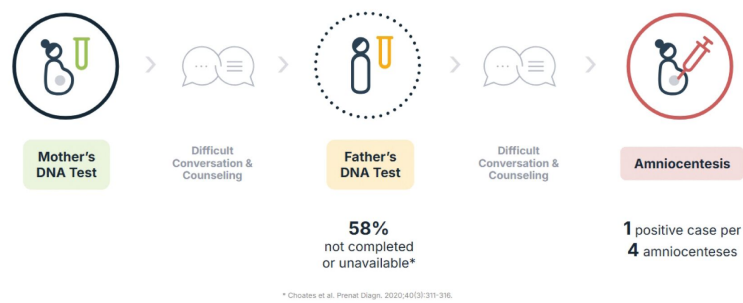
In 2023, the U.S. Center for Disease Control and Prevention (CDC) reported approximately 3.7 million births in the United States, with about one in every 33 infants affected by congenital anomalies. These anomalies can be due to chromosomal abnormalities or single gene inherited disorders. While commonly-used cfDNA prenatal tests can detect chromosomal abnormalities, they are unable to screen for these inherited single gene conditions, such as sickle cell disease, cystic fibrosis, alpha-thalassemia, beta-thalassemia and spinal muscular atrophy (SMA). These five recessive conditions are common, clinically actionable, and recommended for universal screening by ACOG, with one in six pregnant individuals in the United States being a carrier for recessive conditions.

⁴⁸ See “Management’s discussion and analysis of financial condition and results of operations—Key factors affecting our results of operations and performance” for more information regarding how these total addressable markets are calculated, including material assumptions.

⁴⁹ This estimate includes the most recently reported annual oncology revenue generated by our public company competitors, compared to our estimated \$20 billion annual United States market opportunity. For competitors that do not disaggregate oncology revenue, this estimate is over-inclusive. The competitors included in this estimate are: Bio-Techne, Ltd., Caris, Exact Sciences Corp., Foundation Medicine, Inc., Guardant, Natera and NeoGenomics Laboratories, Inc.

⁵⁰ Both MRD and early-detection assays are designed to detect minute amounts of cancer DNA in blood (e.g., at levels of 0.01% or even lower). As a part of our five-year strategic plan, we have included the necessary R&D funding for development of an early detection test that builds upon our earlier work. We also believe that there is significant potential for our smNGS platform to accommodate products in this area. We believe the molecular information provided by our tests can assist in predicting the diagnostic pathway that can confirm the presence and tissue of origin of cancer.

Inherited single gene conditions can be identified through carrier screening of the parents, followed by invasive diagnostic procedures such as amniocentesis. One of the most significant problems with traditional carrier screening is the requirement for both maternal and paternal blood draws. Obtaining the paternal blood sample is logistically challenging in an obstetricians-gynecologists (OB-GYN) setting. As reported in studies by independent publications, in at least 58% of cases when the mother is identified as a carrier, the father's carrier test is not performed, resulting in the majority of affected pregnancies to be undetected.



The significant prevalence of genetic disorders underscores the critical need for safe and effective prenatal screening methods. By identifying these disorders prenatally, we can significantly improve patient outcomes through earlier therapeutic interventions. For instance, SMA is a progressive and debilitating disorder that causes irreversible damage to affected newborns every day following birth. Administering therapy within the first six weeks of life can be the difference between lifelong physical disability and meeting age-appropriate physical milestones. Prenatal detection of SMA is critical when considering the timelines for newborn screening, confirmatory molecular diagnostics and insurance authorization for expensive therapies. Similarly, there are an increasing number of case reports where specialists prescribe therapeutics to carrier pregnant mothers with affected CF fetuses, which significantly improved newborn outcomes. In addition, novel diagnostics enable the development and use of novel therapies. We have a global exclusive partnership with Johnson & Johnson in which a therapy for preventing HDFN is administered only to those at-risk pregnancies that we identify through our non-invasive fetal testing.

We have two strategic partnerships with Johnson & Johnson. The first is an agreement dated January 6, 2023, which was subsequently amended on July 14, 2023 and August 11, 2023 (collectively, the First J&J Agreement). The First J&J Agreement provides our UNITY fetal antigen clinical trial assay in Johnson & Johnson's AZALEA Phase 3 clinical trial of nipocalimab in HDFN. Under the First J&J Agreement, Johnson & Johnson made an initial payment to us, with subsequent payments due upon achievement of specific milestones, including receipt of approval of the trial, which was achieved in 2023, various patient enrollment milestones, and subsequent full trial completion. Under the First J&J Agreement, Johnson & Johnson is required to pay us up to \$9.4 million in upfront fees and milestone payments, as well as payments related to patient testing activities and other costs. Revenue from this agreement was immaterial to our financial results in 2024.

We also entered into a development and commercialization agreement with Johnson & Johnson on July 11, 2025 (the Commercialization Agreement), which governs our collaboration on a companion diagnostic product for nipocalimab. The Commercialization Agreement sets forth the roles and responsibilities, including development activities, to be performed by each party; the timelines for development activities and associated milestone

payments; and target specifications for the companion diagnostic product. Under the Commercialization Agreement, Johnson & Johnson is required to make an initial payment to us, with subsequent payments due upon achievement of specific milestones, including submission of the companion diagnostic product to the FDA for marketing approval by January 2028, and FDA approval of the companion diagnostic product, by the later of (i) December 2029 and (ii) one year after Johnson & Johnson obtains regulatory approval for nipocalimab. The cumulative amount of upfront fees, milestone payments, expenses and costs payable to us under the Commercialization Agreement will not exceed \$13 million. The Commercialization Agreement will remain in effect until such time as Johnson & Johnson ceases the development and commercialization of nipocalimab. While we expect to make the FDA submission of the companion diagnostic product by January 2028, the exact timing of FDA approval will depend on the approval timeline of the associated Phase 3 clinical trial of nipcalimab. The timing and conduct of the Phase 3 clinical trial, including submissions to the FDA, are the responsibility of Johnson & Johnson and its affiliates, as the sponsor of the trial.

The market demand for more sensitive and precise oncology tests

Cancer is the second leading cause of death according to the CDC. There are over 300 commercially available cancer treatments today, with more than 60 new therapies approved by the FDA in 2024 alone. Despite the breadth of therapeutic options, treatment response rates can be as low as single-digit percentages due to differences in genetic and epigenetic patient profiles. Enabling more personalized cancer treatments and better outcomes requires more sensitive and precise tests to (i) select the best therapy regimen and (ii) monitor the patient's response to that treatment.

The gold standard for cancer therapy selection has been a tissue biopsy, which can be sequenced to determine the tumor profile. However, tissue biopsies can be invasive, challenging to obtain, and can lead to inconclusive results and quality control failures from the extracted DNA. They may also miss mutations due to tumor heterogeneity. In addition to tissue biopsies, non-invasive liquid biopsy tests are a rapidly growing approach to analyze tumor DNA. Faster and more convenient blood-based tests may allow earlier treatment; however, they also have lower sensitivity due to very low amounts of circulating tumor DNA (ctDNA) shed by tumors. This challenge has meant traditional liquid biopsies often miss targetable tumor mutations at lower ctDNA fractions.

Our Northstar Select test addresses these challenges by capturing tumor-specific variants with high sensitivity at low variant allele frequencies (VAF). In essence, our test enables physicians to detect mutations in cancers that other diagnostic tests might miss. The detection of these mutations can enable better, more targeted therapies that their patients would otherwise not receive. We have demonstrated the analytical and clinical validity,⁵¹ as well as the clinical utility,⁵² of our Northstar Select test through rigorous reviews. In February beneficiaries with advanced solid tumors who meet the Molecular Diagnostics Services program (MoDX) coverage criteria. The clinical validation data submitted as part of the MoDX evaluation included a head-to-head concordance study, directly comparing the utility of our test to that of our leading competitors. The results demonstrated the superior sensitivity of Northstar Select by identifying 51% more SNVs and 109% more CNVs, most of which were found below the comparator assays' 95% limit of detection. All references to clinical validity and clinical utility are distinct from claims of safety and efficacy relating to each of our LDTs.

⁵¹ Analytical validity refers to how accurately and reliably the molecular diagnostic test measures the specific DNA, RNA, protein, or other molecular target it is designed to detect. Clinical validity refers to the accuracy with which a molecular diagnostic test correctly identifies the presence or absence of a specific genetic variant, biomarker, or molecular target associated with a disease or condition in the intended patient population. It measures how well the test performs in distinguishing between patients with a condition or not in clinical practice. Together, these demonstrate whether the molecular test can reliably detect the genetic or molecular changes it's designed to identify and whether those changes are truly associated with the clinical condition being tested for.

⁵² Clinical utility refers to the likelihood that a test will, by prompting an intervention, result in an improved health outcome. The clinical utility of a genetic test is based on the health benefits related to the interventions offered to individuals with positive test results (or improvements in health benefits for avoiding interventions for individuals with negative results).

While the number of cancer treatment options continues to expand, determining whether a specific treatment is working for an individual patient remains a significant challenge that relies too heavily on subjective assessments. Currently, doctors use medical imaging (e.g., computed tomography (CT) scans, magnetic resonance imaging (MRIs), and positron emission tomography (PET) scans) as the primary tool to evaluate a patient's cancer status. However, this approach has important limitations affecting both accuracy and reliability. Tumors often contain diverse cell populations that respond differently to treatment, making overall assessment difficult. Some patients receiving immunotherapy experience "pseudoprogression," where imaging temporarily shows growth even though the treatment is working. Scar tissue forming around tumors can be hard to distinguish from active cancer. Certain areas of the body, like bones and the abdominal cavity lining, naturally provide poor contrast on imaging, making cancer changes difficult to see. Lastly, interpreting scans involves significant human judgment, introducing inconsistency between different radiologists' assessments.

The practical limitations of imaging also create problems. Most patients undergo scans only every few months, leading to critical delays in determining whether a treatment is effective. These delays can result in patients continuing ineffective therapies longer than necessary or missing opportunities to begin alternative treatments sooner. While increasing scan frequency might seem like a solution, patients face real-world barriers including limited availability of imaging equipment (especially in rural areas), the physical and financial burden of traveling to specialized imaging centers, and substantial costs that might not be fully covered by insurance. These limitations create an urgent need for better tools that can assess treatment response more accurately, consistently, and frequently to help doctors make timely and informed decisions about patient care.

Northstar Response is designed to solve these problems. Northstar Response is a tissue-free, pan-cancer, smNGS-based liquid biopsy test that precisely measures more than 2,200 genomic loci uniquely methylated in cancer. Based on our knowledge of all widely available tests, Northstar Response is the only methylation-based assay that quantifies tumor burden with single molecule precision and provides insight into dynamic changes in a patient's response to therapy. In validation studies, Northstar Response showed a consistent ability to detect quantitative changes in tumor fraction across more than 10 different cancer types, in some cases as much as six months earlier than indicated by imaging scans. Northstar Response has been analytically and clinically validated in three peer-reviewed publications, including in collaborations with the University of California, San Diego and the University of Florida.

Northstar Response is now undergoing further validation through our large flagship study: NORTH (Northstar Oncology Response Monitoring Test Hallmark). NORTH is a multi-site study with over 500 Stage III and IV solid tumor cancer patients undergoing systemic therapies. Enrollment of the study was completed in early 2025 and we expect to complete sample and data collection by the end of 2025, with results available in 2026. The NORTH study, along with other ongoing clinical studies, have the potential to generate sufficient clinical validity evidence for our MolDX submissions for Medicare coverage.

Beyond late-stage cancer testing, we recognize there is a significant need for more powerful early-stage cancer testing. We are developing additional oncology products for these cancer patients, including MRD testing. Current standard of care for early-stage cancer is the surgical removal of the tumor. However, a small number of cancer cells may remain and can lead to future metastasis. MRD testing post-surgery enables healthcare providers to administer adjuvant therapy when needed and can also be used to monitor cancer recurrence over time. There are two approaches to MRD testing today, tumor-informed and tumor-naïve. Tumor-informed approaches involve sequencing the cancer tissue to identify mutations which can then be tracked in blood at subsequent points in time. Tumor-informed approaches can have up to 40% failure rates due to the limited amount of tissue that can be obtained in early-stage cancers or tissue sequencing failing to identify a sufficient number of variants that can be used for MRD tracking. Moreover, the mutations that are tracked may not represent the evolution of the tumor, resulting in false negatives. Tumor-naïve approaches measure the levels

of ctDNA in a patient's blood and do not require an upfront tissue sample, but to date, their lower sensitivity has been a limiting factor in their adoption. We believe that our smNGS platform will allow our planned MRD test to address the sensitivity challenges of existing tumor-naïve assays.

Our Product Portfolio

Our proprietary smNGS platform enables us to create differentiated, ultrasensitive tests that approach the physical limit of detection (LOD). Our product portfolio touches everyone from the beginning of life, with prenatal genetic testing, to the end of life, with cancer therapy selection and response monitoring testing.

To date, we have launched multiple differentiated products across these large addressable markets. We performed approximately 508,000 smNGS-based tests in the last 12 months ended June 30, 2025, with significant room to further grow test volume in both markets.

PRENATAL 	2019	Fetal Risk Screen The only commercial single-gene NIPT in US for recessive conditions
	2020	Aneuploidy NIPT + RhD NIPT NIPT for T21, 18, 13, and sex aneuploidies with opt-in RhD NIPT
	2021	Fetal Antigen NIPT The only commercial red blood cell NIPT in US for D, Kell, C/c, E, and Duffy
ONCOLOGY  NORTHSTAR	2023	Select 84-gene treatment selection panel with 2-5x lower LOD
	2023	Response The only treatment response monitoring test that precisely quantifies methylation
	Future	Minimum Residual Disease (MRD): Cancer detection & surveillance post-surgery Tumor-naïve MRD assay with unprecedented LOD

Prenatal products

Traditional non-invasive prenatal screening focuses on assessing a fetus' risk for larger chromosomal changes, such as Down syndrome. However, several common and severe conditions are the result of much smaller genetic changes. Identifying these tiny changes within cfDNA is technically challenging and requires precise quantification to separate the contribution of relatively sparse fetal signal from the significant maternal background DNA, especially for recessive conditions such as SCD, alpha thalassemia, beta-thalassemia, CF, and SMA. Since traditional non-invasive prenatal tests (NIPTs) are unable to screen for these recessively-inherited, single-gene conditions, diagnosing these disorders in the fetus requires invasive methods such as amniocentesis or chorionic

villus sampling.⁵³ Prior to such invasive testing, conventional carrier screening has to be completed and requires a paternal sample. Third party studies estimate that fewer than half of the fathers complete the recommended screening due to barriers related to cost, availability, and willingness.⁵⁴ As a result, at least 58% of pregnancies affected by these conditions are undetected. Our smNGS-based tests offer the level of precision and quantification necessary to overcome these challenges and provide a solution to this problem.

Our UNITY Complete portfolio

Our UNITY prenatal testing portfolio includes the first sgNIPT that uses cfDNA to achieve precise fetal risk analysis without requiring a paternal sample – a breakthrough that enhances accessibility, ease of use, and adoption across patient populations. In 2020, we added Aneuploidy and RhD NIPT to create our UNITY Complete offering. In 2022, we added other fetal red blood cell antigens for alloimmunized pregnancies at risk for HDFN without requiring a paternal sample or invasive procedures such as amniocentesis. Our portfolio delivers unmatched clinical insights through the screening for recessive conditions, aneuploidies, and fetal antigens using a single maternal blood draw. We believe our offering provides the most comprehensive view of fetal health available today.

⁵³ Hsieh, V., Sherer, D. M., Davydovych, K., Kheyman, M., & Dalloul, M. (2025). The art (and science) of Individualized Selection of Non-Invasive Prenatal Screening (NIPS). International Journal of Women S Health, Volume 17, 1271–1283.

⁵⁴ Strauss, T. S., Schneider, E., Boniferno, E., Brockhoff, E., Johnson, A., Stoffels, G., Feldman, K., Grubman, O., Cole, D., Hussain, F., Ashmead, G., Al-Ibraheemi, Z., & Brustman, L. (2023). Barriers to completion of expanded carrier screening in an inner city population. Genetics in Medicine, 25(7), 100858.

UNITY Fetal Risk Screen

In 2019, we launched UNITY Fetal Risk Screen as the first sgNIPT that uses cfDNA to provide fetal risk assessments for recessive conditions. This breakthrough approach addresses a major gap in traditional carrier screening and enhances accessibility, speed, and accuracy for all pregnant patients. In May 2025, we expanded UNITY Fetal Risk Screen’s testing menu to include up to 14 conditions, as shown in the below figure, further enhancing its clinical impact.

Available interventions for the early detection of the 14 conditions screened by UNITY Fetal Risk Screen	Gene or Enzyme Therapies Early detection enables access to therapies that may significantly improve outcomes	Multidisciplinary Care Early detection connects families with specialists for immediate postnatal care	Dietary Modifications May improve outcomes and help alleviate symptoms
Spinal Muscular Atrophy			
Cystic Fibrosis			
Sickle Cell Disease			
Beta-Thalassemia			
Alpha-Thalassemia			
Tay Sachs Disease			
Smith-Lemli-Opitz Syndrome			
Fragile X Syndrome			
Canavan Disease			
Familial Dysautonomia			
PMM2-Congenital Disorder of Glycosylation			
DMD-Associated Dystrophinopathies			
Phenylalanine Hydroxylase Deficiency (PKU)			
Medium Chain Acyl-CoA Dehydrogenase Deficiency			

The first step of the UNITY Fetal Risk Screen involves determining the maternal carrier status. If the mother is identified as a carrier, cfDNA analysis is performed on the same blood sample to assess fetal risk. We believe directly measuring fetal risk through a single maternal blood draw is only possible with the precision and sensitivity provided by our smNGS technology. Within two weeks, the information provided to the clinician and patient includes:

- Maternal carrier status and any information about the specific variant that may be identified;
- A personalized fetal risk score on each condition for which the pregnant mother is a carrier, ranging from <1 in 5,000 to 9 in 10, providing clear, actionable information for clinicians and patients; and
- Whether the risk is classified as low or high risk.

SUMMARY OF RESULTS

A

+

POSITIVE

Carrier

B

L

LOW RISK

Fetus

9.0% fetal fraction

UNITY Fetal Risk™ Screen: Carrier Screen + cfDNA Fetal Risk Assessment

C

CARRIER SCREEN

D

cfDNA FETAL RISK ASSESSMENT (pregnant carriers only)

Conditions Screened	Patient Carrier Status	Risk Before cfDNA	Fetal Risk After cfDNA
ACOG Guideline Panel			
Alpha-Thalassemia HBA1 HBA2	Negative		N/A
Cystic Fibrosis CFTR	POSITIVE	1 in 96 - 1 in 376	<1 in 5000 E LOW RISK
Sickle Cell Disease / Beta-Thalassemia / Hemoglobinopathies HBB	Negative		N/A
Spinal Muscular Atrophy SMN1	Negative 2 SMN1 copies, SNP not present		N/A

A

Maternal Carrier Results

B

Fetal Risk via cfDNA

>99% of patients will be reassured with a low risk result¹

C

Conditions screened align with ACOG recommendations²

D

Fetal risk is provided for this pregnancy without male partner

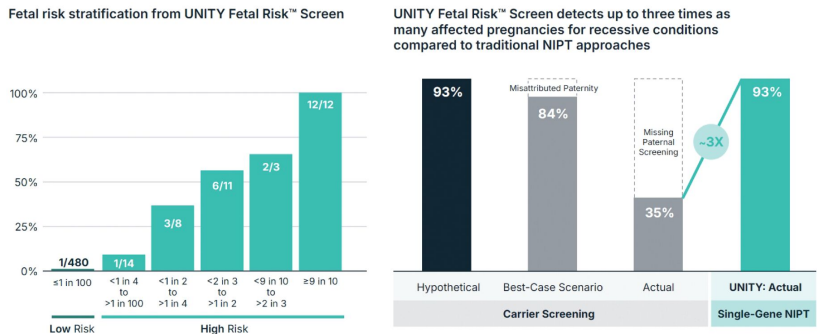
E

For positive carriers, risk can be clarified down to 1 in 10,000 or up to 9 in 10

1. Internal Data on File, 2024

2. American College of Obstetricians and Gynecologists. (2017). Carrier screening in the age of genomic medicine Committee Opinion No. 690. Obstetrics & Gynecology, 129(3), e35-e40

UNITY Fetal Risk Screen's accuracy has been validated in multiple peer-reviewed studies. A 2023 study published in *Prenatal Diagnosis* demonstrated 100% of "9 in 10" risk pregnancies were confirmed to be affected pregnancies.⁵⁵ Because UNITY Fetal Risk Screen does not rely on paternal testing, which is often not completed, it detects up to three times as many affected pregnancies for these recessive conditions compared to traditional carrier screening.⁵⁵



UNITY Aneuploidy Screen

In 2020, we launched our UNITY Aneuploidy Screen, which we believe has become the most performant assay for aneuploidies. Compared to many competing tests, our test overcomes the significant challenge of low fetal cfDNA levels in the mother's blood, which often produces inconclusive results. This issue can be particularly pronounced for single nucleotide polymorphism-based NIPTs, which tend to have a higher fetal fraction cutoff to provide conclusive results. Our smNGS platform provides a critical signal boost that is especially noticeable at lower fetal fractions, significantly reducing inconclusive results.

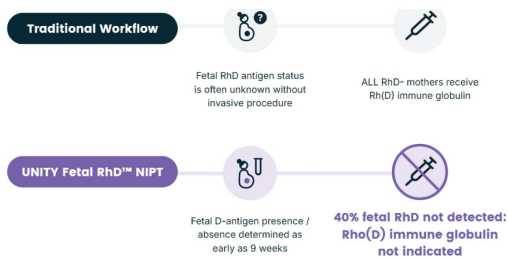
⁵⁵ Wynn, J., Hoskovec, J., Carter, R., et al. (2023). "Performance of single-gene noninvasive prenatal testing for autosomal recessive conditions in a general population setting." *Prenatal Diagnosis*, 43(10), 1344-1354. The study included 42,067 pregnant individuals, with 7,538 carriers undergoing reflex single-gene (sg) NIPT. Fetal or neonatal outcomes were gathered for 528 cases, revealing 25 affected pregnancies. Notably, all pregnancies identified with a 9 in 10 personalized fetal risk were confirmed as affected, showing a 100% positive predictive value for this specific high-risk group. The researchers concluded that carrier testing followed by reflex sgNIPT is highly accurate for general population screening and, is a viable option for most pregnant individuals.

In addition to robust performance above 99.7% sensitivity and 99.9% specificity for common trisomies, UNITY Aneuploidy NIPT uniquely leverages smNGS technology to enhance 22q11.2 Microdeletion Analysis, addressing a critical gap in competing prenatal screening tests.⁵⁶ As the most common microdeletion disorder, 22q11.2 deletion syndrome (DiGeorge Syndrome) has historically resulted in low positive predictive values (PPV), reducing clinical confidence and resulting in patient anxiety. smNGS enables >95% sensitivity and >99.9% specificity, which results in an industry-leading PPV of 80% in average risk pregnancies.⁵⁷ More than 70% of UNITY Aneuploidy orders now include 22q11.2 optional add-on testing.

UNITY Fetal RhD NIPT

Approximately 15% of pregnant individuals in the United States are RhD-negative, putting them at risk of RhD alloimmunization if they are carrying an RhD-positive fetus. To prevent this, the standard of care has been the administration of Rho(D) immune globulin (RhIG) (e.g., RhoGAM) at 28 weeks' gestation and postpartum. However, this approach lacks precision, as 40% of RhD-negative pregnancies do not require RhIG because the fetus is also RhD-negative. Administering RhIG to these pregnancies is unnecessary, costly, and limits supply availability for those who need it most. This is because RhIG availability can be limited given it is a blood product derived from human donors.

To address this issue, we launched UNITY Fetal RhD NIPT in 2020 to detect fetal D antigen. While other tests for fetal RhD detection were launched in 2024, UNITY Fetal RhD NIPT remains the only test that can accurately detect fetal RhD status when the pregnant individual has *RhD_y* and RhD-CE-D hybrid genes, which are prevalent in Black (45%) and Asian (>10%) populations. Other fetal RhD NIPTs are limited in their ability to detect these genetic complexities. UNITY Fetal RhD NIPT addresses these limitations through our revolutionary smNGS platform. Since launching, UNITY Fetal RhD NIPT has been ordered for over 150,000 patients, with data published in peer-reviewed studies demonstrating 100% concordance with neonatal outcomes and sensitivity/specificity of >99.9%.⁵⁸



UNITY Fetal Antigen NIPT

Alloimmunization occurs when a pregnant individual's immune system produces antibodies against fetal red blood cell (RBC) antigens. This can happen when a RhD negative pregnant mother carrying an RhD positive fetus does not receive RhIG. This can also happen with other rare RBC antigens are present, such as Kell, especially due to a blood transfusion prior to the pregnancy. This can lead to HDFN, a condition that can cause

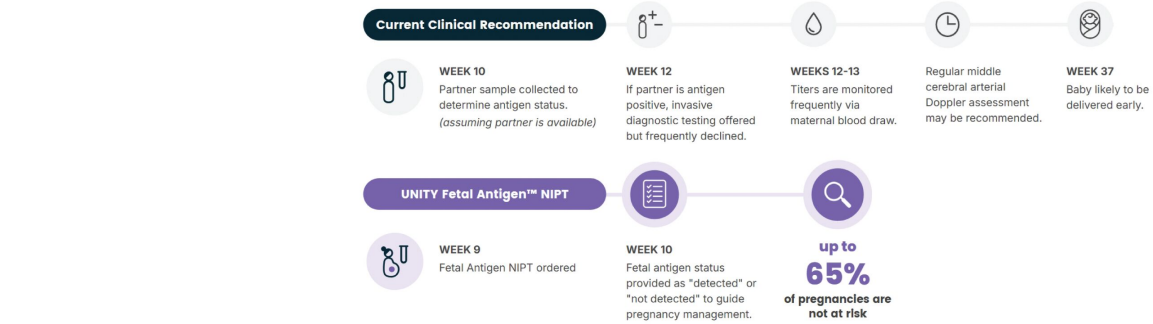
⁵⁶ Wynn, J., Rego, S., Fang, J., Alford, B., Carter, R., & Hoskovec, J. (2024). Performance Characteristics of a Next Generation Sequencing-Based cfDNA Assay for Common Aneuploidies in a General Risk Population. *Annals of Gynecology and Obstetrics Research*, 7(1), 1027.

⁵⁷ Percentage based on an internal validation report we issued in January 2025 conducted by an independent third party lab.

⁵⁸ Rego, S., Balogun, O. A., Emanuel, K., Overcash, R., Gonzalez, J. M., Denomme, G. A., Hoskovec, J., King, H., Wilson, A., Wynn, J., & Moise, K. J. Jr. (2024). Cell-free DNA analysis for the determination of fetal red blood cell antigen genotype in individuals with alloimmunized pregnancies. *Obstetrics & Gynecology*, 144(4), 436-443.

severe anemia, hydrops fetalis, or fetal demise. Managing these pregnancies is challenging. The current methods to determine fetal antigen status, such as amniocentesis, are often invasive. These invasive procedures could cause maternal and fetal blood to mix, which would exacerbate HDFN. As a result, many patients experience undue anxiety, unnecessary and expensive weekly monitoring, frequent antibody titer checks, and intensive surveillance. In approximately 65% of these pregnancies, the fetus is negative for the antigen and therefore there is no fetal risk.⁵⁹

To address this issue, we launched UNITY Fetal Antigen NIPT in 2022. Our UNITY Fetal Antigen NIPT addresses a critical gap in managing alloimmunized pregnancies and detects key fetal RBC antigens, including D, C, c, E, K (Kell), and Fya (Duffy), helping to guide clinical decisions and reduce unnecessary monitoring. As the only commercially available test for fetal antigen screening in the United States, UNITY Fetal Antigen NIPT not only solves a previously unmet clinical need but has deepened our relationships with Maternal-Fetal Medicine (MFM) specialists.



UNITY Fetal Antigen NIPT's clinical accuracy has been validated in multiple peer-reviewed publications, including a Scientific Reports study demonstrating 100% concordance between test results and neonatal antigen status. UNITY Fetal Antigen NIPT offers 100% sensitivity and specificity while maintaining a no-call rate of <0.1%, ensuring highly reliable results.

In 2024, ACOG issued two clinical guideline updates, referencing UNITY Fetal RhD NIPT and UNITY Fetal Antigen NIPT data: (i) acknowledging the role of fetal RhD NIPT in triaging anti-D immunoglobulin (e.g., RhoGAM) use, particularly amid shortages, and (ii) endorsing UNITY Fetal RhD NIPT as a reasonable alternative for guiding management of alloimmunized patients who decline invasive testing. These clinical guideline updates recognized comparable performance of our assay to invasive diagnostic testing while avoiding complications. They not only validated the clinical utility of our UNITY Fetal RhD NIPT and UNITY Fetal Antigen NIPT but also further highlighted their critical role in enhancing patient care and ensuring effective management of patients across diverse populations.

UNITY Fetal Antigen CTA NIPT

In December 2023, we announced a global partnership with Johnson & Johnson to provide our UNITY Fetal Antigen clinical trial assay (CTA) in their AZALEA Phase 3 clinical trial of nupocalmab in pregnancies at risk for severe HDFN. In April 2023, the FDA granted an Investigational Device Exemption (IDE) for the assay's use in

⁵⁹ Wynn, J., Hoskovec, J., Carter, R., et al. (2023). "Performance of single-gene noninvasive prenatal testing for autosomal recessive conditions in a general population setting." *Prenatal Diagnosis*, 43(10), 1344-1354.

the trial. Final FDA approval of the companion diagnostics indication is dependent on the success of the Johnson & Johnson AZALEA Phase 3 clinical trial. We have also received regulatory clearances from health authorities in certain European and Latin American countries for the use of the assay in a global clinical trial. We believe that a successful completion of this Phase 3 trial may enable our test to be the first NIPT that is granted a companion diagnostics indication.

Our comprehensive customer experience and commitment to quality and innovation beyond our tests

UNITY Complete is more than just a test, it is a fully integrated, end-to-end experience that delivers a seamless workflow for both patients and providers. Over the years, we have developed various software tools to support the entire testing workflow for providers and patients, which has fueled the rapid growth of the UNITY Complete portfolio. We continuously refine our workflow to address the evolving needs of obstetric providers, in an effort to maximize efficiency, accessibility, and ease of adoption for both patients and providers. By combining unique clinical testing with workflow enhancements, we believe UNITY Complete has established a highly scalable infrastructure that streamlines every step of the journey, further solidifying that UNITY Complete is becoming the new standard in prenatal care.

Oncology products

Precision oncology continues to be a focus in the global fight to cure cancer. However, despite significant advancements and growth in the field, cancer continues to rank as the second leading cause of death worldwide, with persistently high mortality rates.⁶⁰ Liquid biopsies, or blood-based tests that interrogate ctDNA, cfDNA released from a tumor cell, for therapy selection or disease monitoring have recently become available for clinical practice as non-invasive, rapid and readily available alternatives to traditional tissue-based biopsies. Despite the increase in uptake, current liquid biopsies developed using standard NGS methods present shortcomings, including undetected actionable mutations and delays in detection of response and progression. In a head-to-head study presented at ASCO in 2024, we have shown that more than one-third of actionable mutations are undetected by other liquid biopsies due to lower sensitivities at lower variant allele fractions. Moreover, current products are also limited in their ability to quickly, precisely, and sensitively quantify trends in tumor progression over the course of treatment.

Our Northstar portfolio

Our Northstar portfolio for oncology consists of smNGS-based pan-cancer liquid biopsy tests that provide comprehensive therapy selection (Northstar Select) and therapy monitoring (Northstar Response) for late-stage, solid tumor cancer patients. Using a blood-only approach with a focus on sensitivity and precision, we are committed to pushing the limits of cfDNA testing to ensure patients are getting the most advanced profiling and monitoring tools available, while maintaining the convenience of a single blood draw.

Northstar Select

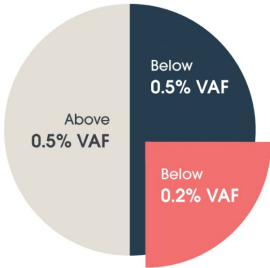
In January 2023, we launched Northstar Select, which is an ultrasensitive liquid biopsy test using smNGS. Northstar Select can provide insight into what therapies may be appropriate for a patient with stage III or IV cancer. Our Northstar Select test has demonstrated industry-leading performance, including two to five times lower LOD, which results in more than 50% more actionable mutations identified than comparator products.^{61, 62}

⁶⁰ GBD 2021 Cancer Collaboration. Global burden of cancer and associated risk factors in 204 countries and territories, 1980-2021: a systematic analysis for the Global Burden of Disease Study 2021. Lancet Oncol.
⁶¹ Bower, X., Wignall, J., Varga, M. G., Zhu, J., O'Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhard, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. (2025). Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling. The Journal of Liquid Biopsy, 100322.
⁶² More than 50% more actionable mutations when compared to the comparator products in the aggregate. Actual percentages may vary depending on the individual comparator test.

In 2025, the MoIDX Program, which is administered by Palmetto GBA, a Medicare administrative contractor, determined Northstar Select meets the coverage requirements under LCD L38043. The MoIDX Program’s thorough review process confirms Northstar Select’s clinical validity and utility and enables reimbursement for Medicare and Medicare Advantage beneficiaries who are receiving the test. In the future we may seek FDA approval for certain of our tests, in particular, Northstar Select, which could provide us with competitive advantages such as including enhanced reimbursement through Advanced Laboratory Diagnostic Test (ALDT) pricing; however, it would also subject us to additional regulatory requirements, which can be costly.

Northstar Select achieves a significantly lower limit of detection than other liquid biopsy products

Liquid biopsy tests are dependent on finding tumor molecules circulating in blood that are shed from tumor cells. The tumor shedding rate is highly variable, with many cancers shedding very little ctDNA. This poses a sensitivity challenge for liquid biopsies, especially for variants at low levels, and can lead to potential false-negative results and missed treatment opportunities. The amount of a particular SNV or alteration compared to normal DNA detected by liquid biopsy tests are measured as a variant allele fraction (VAF), with over half of all treatable alterations occurring at a VAF <0.5%, and approximately one fourth occurring at <0.2%. The ability to reliably detect more alterations at a lower VAF is a significant area of unmet clinical need for ctDNA-based testing and an opportunity for technological improvement.

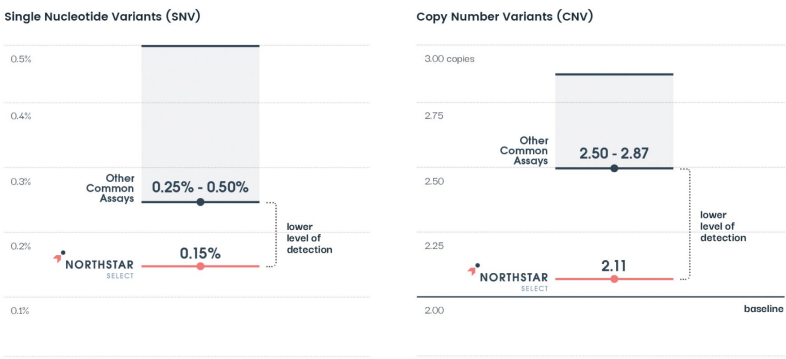


The limit of detection (LOD) is the lower bound limit of an assay’s ability to reliably detect alterations at a specific VAF, at a 95% sensitivity. First generation liquid biopsy tests have an LOD that ranges between 0.25%—0.50%, whereas Northstar Select has demonstrated an LOD of 0.15%, representing a 2-fold higher sensitivity than these other assays.⁶³ Since most treatable mutations occur at very low VAFs and studies have shown that even mutations found at <0.20% VAF respond to therapy, Northstar Select uncovers more treatment options for patients.

The sensitivity of other liquid biopsies is even more problematic for copy number variants (CNVs). During a cancer’s development and evolution, certain genes may replicate in number, driving uncontrollable growth. CNVs are increasingly recognized as hallmarks of cancer. While there are therapies that target these CNVs, CNVs are very difficult to detect in plasma due to amplification bias inherent in standard NGS approaches. smNGS-based Northstar Select solves this problem and achieves an LOD that is approximately five to eight times lower than other liquid biopsies.

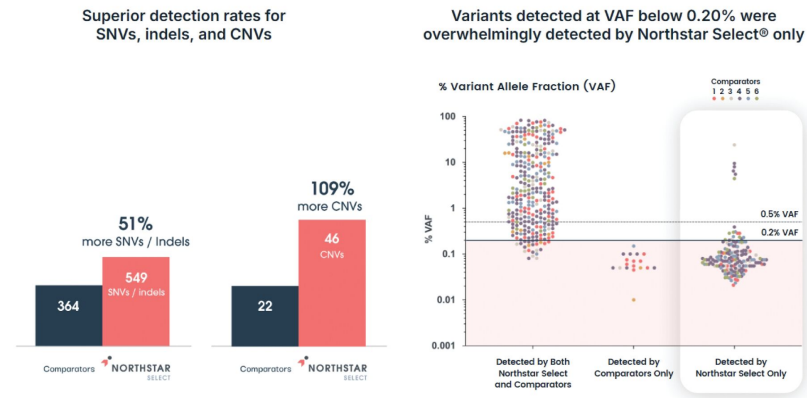
⁶³ Deveson, I.W., Gong, B., Lai, K. et al. (2021). Evaluating the analytical validity of circulating tumor DNA sequencing assays for precision oncology. Nature Biotechnology, 39(9), 1115–1128.

Northstar Select® assay's LOD vs. comparator assays' LOD for SNV and CNV mutations



Northstar Select detects >50% more actionable mutations than comparator assays⁶⁴

In a head-to-head clinical validation study, we compared the performance of Northstar Select against commonly used first-generation ctDNA comprehensive genomic profiling assays. Northstar Select found superior detection rates with 51% more actionable SNVs and Indels, and 109% more CNVs than conventional liquid biopsies.⁶⁵ Moreover, the study results showed that variants detected at VAF below 0.20% were overwhelmingly detected by Northstar Select only, demonstrating Northstar's superior sensitivity. In practice, finding more actionable variants can help oncologists more effectively plan treatment for their patients, improving overall patient care.



⁶⁴ More than 50% more actionable mutations when compared to the comparator products in the aggregate. Actual percentages may vary depending on the individual comparator test.

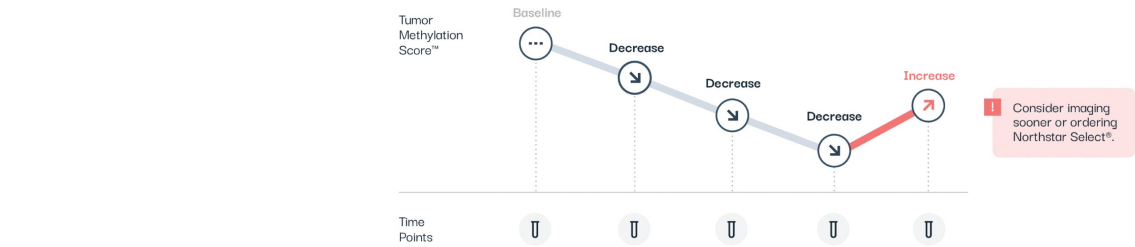
⁶⁵ Bower, X., Wignall, J., Varga, M. G., Zhu, J., O'Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhart, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. (2025). Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling. The Journal of Liquid Biopsy, 100322.

Northstar Response

In January 2023, we launched Northstar Response, a pan-cancer smNGS-based liquid biopsy test that precisely measured more than 500 genomic loci uniquely methylated in cancer, achieving single-molecule level quantification, without the need for an upfront tissue-sample.⁶⁶ In May 2025, along with other improvements, we updated the assay to include more than 2,200 genomic loci. The new version of the assay has a significantly lower LOD, achieving 0.01% LOD. Northstar Response provides epigenomic insight into dynamic changes in a patient's response to therapy and, based on our knowledge of all widely available tests, is the only tissue-free methylation-based assay that quantifies tumor burden with single molecule precision. We believe Northstar Response offers a convenient and more precise method to accurately monitor the molecular changes occurring during a patient's treatment course, which can enable real-time treatment decisions for physicians and patients.

Northstar Response is complementary to standard of care radiographic imaging

The ability to monitor a tumor's response to therapy and rapidly adjust treatment strategy when necessary is pivotal to improving patient outcomes, especially in late-stage cancers. Today, the most common and accepted method to assess treatment response is by measuring changes in tumor size through radiographic imaging (e.g., CT, MRI, and PET scans). Radiation exposure, infrequent scans, pseudo-progression with immuno-oncology therapy, and inability to precisely quantify changes, highlight some of the limitations of an anatomic-only based approach in treatment monitoring. Our Northstar Response test is complementary to traditional imaging and introduces real-time, single-molecule quantification to treatment monitoring with a Tumor Methylation Score (TMS). TMS is a quantitative metric that measures the extent of cancer-specific DNA methylation signal that is present in blood and reflects whether the tumor is growing or shrinking in a cancer patient when measured longitudinally. Using a DNA methylation-based approach in conjunction with our smNGS platform, we bring a new level of precision that can help determine molecular progression or therapy response at multiple time-points over the course of a patient's treatment.

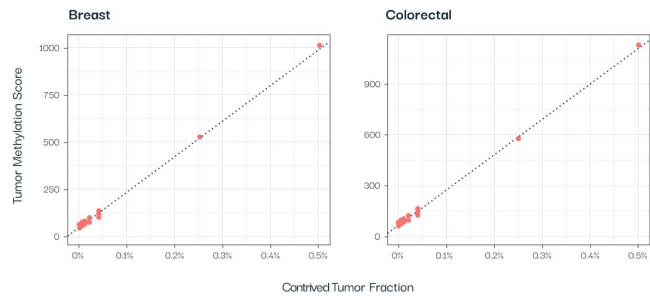


Northstar Response is highly accurate at measuring changes in tumor burden across cancer types

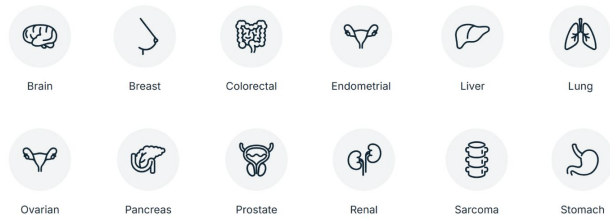
Our pan-cancer Northstar Response assay has been analytically validated across more than 10 tumor types and has been evaluated in several clinical studies. In one study, we demonstrated that our assay could detect minute changes in cfDNA burden as small as 0.02% (e.g., an elevation of tumor fraction from 0.02% to 0.04%) demonstrating high sensitivity for a tissue-free, blood only test. The assay also achieves a coefficient of variation (CV) of less than 10% for a typical sample with 1% tumor fraction, which is at least two times lower than conventional tumor-naïve, targeted-panel methods that measure VAF. It has demonstrated a strong correlation with clinical outcomes in patients with lung, colorectal, and pancreatic cancers.

⁶⁶ Ye, P. P., Viens, R., Shelburne, K. E., Langpap, et al. (2025). Molecular counting enables accurate and precise quantification of methylated ctDNA for tumor-naïve cancer therapy response monitoring. Scientific Reports, 15(1).

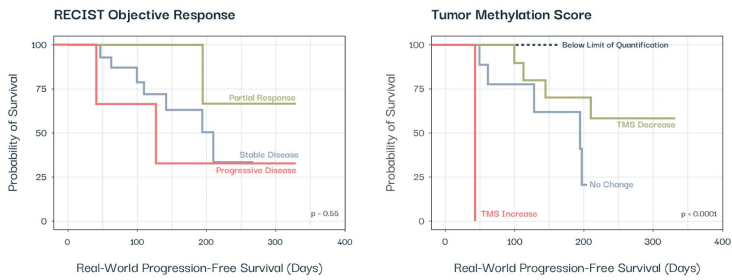
Analytical LOD is at 0.01%



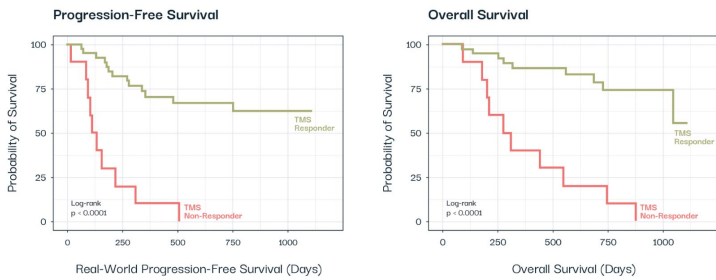
Northstar Response® assay measures changes in tumor burden across 12+ cancer types



We also collaborated with University of California, San Diego on a study involving immunotherapy and immuno-chemotherapy treated advanced non-small cell lung cancer patients.⁶⁷ In that study, which involved 60 samples from 51 patients, Northstar Response's changes in TMS measured four to ten weeks after starting treatment significantly predicted real-world progression free survival (rwPFS, $p < 0.0001$), compared to standard imaging assessments which did not reach statistical significance ($p = 0.55$). The p-value is used to determine the probability as to whether the difference between two data sets is due to chance. The smaller the p-value, the more likely the differences are not due to chance alone. In general, if the p-value is less than or equal to 0.05, the outcome is considered statistically significant. The study also showed that the test often detected treatment response and progression earlier than standard of care CT scans, with high concordance between TMS and clinical outcomes.



In collaboration with Allegheny Health Network (AHN), a separate pan-cancer validation cohort of 54 advanced stage cancer patients (lung, melanoma, and six other solid-tumor cancers) treated with immunotherapy regimens, TMS-based molecular responders had significantly better progression free survival (PFS) (HR=0.26) and OS (HR=0.18) than molecular non-responders. This was particularly remarkable given that the separation between responder and non-responder was made within the first 90 days from baseline and was predictive of durable outcomes years in advance. Molecular responders at day 90 had a significantly improved median overall survival of over two years longer compared to patients who were found to be molecular non-responders.



In addition to the aforementioned studies, we are further engaged in multiple prospective clinical validation studies spanning all solid tumor and therapy types. Our flagship NORTH study is a multi-site study with over 500 late-stage (stage III/IV) solid tumor cancer patients undergoing systemic therapies. We completed enrollment of the study in early 2025 and expect to complete sample and data collection by the end of 2025. We

⁶⁷ Ye, P. P., Viens, R., Shelburne, K. E., Langpap, et al. (2025). Molecular counting enables accurate and precise quantification of methylated ctDNA for tumor-naïve cancer therapy response monitoring. *Scientific Reports*, 15(1).

expect the initial results to be available in 2026. The NORTH study, along with other ongoing clinical studies, has the potential to generate sufficient clinical validity evidence for our MolDX submissions for Medicare coverage. We have also engaged with academic key opinion leaders in specific disease areas to provide more insights into the validity and utility of Northstar Response. In collaboration with University of Florida, we are conducting a 100-patient prospective study examining the clinical validity of Northstar Response focusing specifically on advanced gastrointestinal tumors. The study completed enrollment in March 2025. In collaboration with University of Miami, we are engaging in a clinical utility study to identify metastatic pancreatic ductal adenocarcinoma (mPDAC) patients who may benefit from ctDNA informed switching to second line chemotherapy based on early measures of response at four weeks following first line treatment initiation. We have also sponsored an investigator-initiated study at the Fred Hutch cancer center to assess the clinical validity of Northstar Response in quantifying therapy response in appendiceal and metastatic peritoneal tumors, which are more difficult to assess by imaging modalities.

Additional opportunities in oncology

Beyond our two complementary therapy selection and monitoring tests, we are actively advancing our efforts in developing additional oncology products in MRD testing. Our Northstar Response test already achieves 0.01% LOD, which is in line with the first-generation tissue-informed MRD assays. We are making further improvements to the Northstar Response assay designed to achieve superior clinical performance than existing assays using the tumor-naïve (blood only) approach. We believe there is a significant market opportunity for tumor-naïve MRD assays, especially in certain cancer types such as lung, where the QC failure rates for tissue testing can exceed 40%.⁶⁸ Longer term, we believe that our smNGS-based technology could address the sensitivity challenges of early-stage cancer detection. We have leveraged our existing relationship with Allegheny Health Network to collaborate on procuring a retrospective sample set to begin assessment of our MRD assay across multiple tumor types including CRC and endometrial cancers.

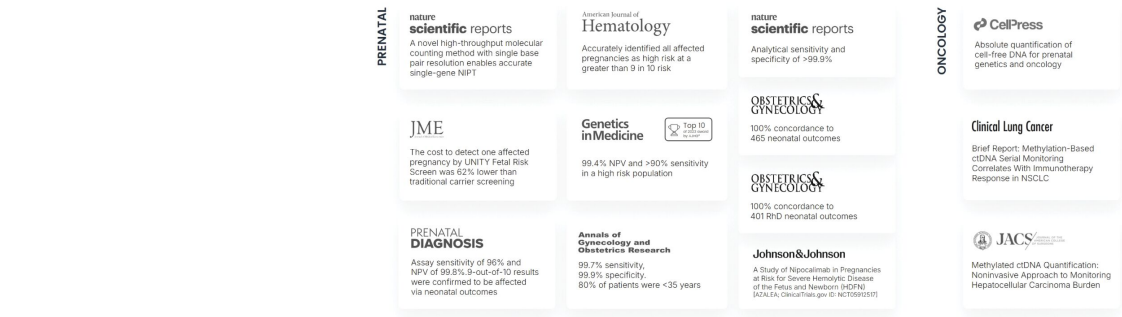
Publications and collaborations

We have extensive publications on our smNGS platform and products. Our UNITY Fetal Risk Screen clinical publication in Genetics in Medicine was selected for the Top 10 publications in Genomic medicine year in review 2023 by AJHG. Our hallmark publications in the Obstetrics & Gynecology journal (the Green Journal) demonstrated 100% sensitivity and specificity in approximately 860 patients for fetal RhD and other fetal RBC antigen detection, ultimately leading to the ACOG practice guideline changes.

The analytical and clinical validity of our Northstar products have also been demonstrated in peer-reviewed publications. The analytical validation of Northstar Response was published in January 2025 in Scientific Reports while additional clinical studies of the assay performance in lung and liver cancer cohorts were published in *Clinical Lung Cancer* and the *Journal of American College of Surgeons*, respectively. The analytical and clinical validation of Northstar Select, including the head-to-head comparison against other on-market assays published in August 2025 which demonstrated Northstar Selects superiority in detection of SNV and CNVs as relative to commercially available competitors.⁶⁹ Beyond the peer-reviewed journal publications below, we have published posters and abstracts at various medical conferences including AACR, AACR LBx, ASCO, and the International Society of Liquid Biopsy.

⁶⁸ Choudhury, Y., Tan, M.-H., Shi, J. L., Tee, A., Ngeow, K. C., Poh, J., Goh, R. R., & Mong, J. (2022). Complementing tissue testing with plasma mutation profiling improves therapeutic decision-making for patients with lung cancer. *Frontiers in Medicine*, 9, 758464.

⁶⁹ Bower, X., Wignall, J., Varga, M. G., Zhu, J., O'Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhard, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. (2025). Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling. *The Journal of Liquid Biopsy*, 100322.



Through the clinical studies described below, we have demonstrated strategic validation data for our liquid biopsy tests. Leveraging both internally designed prospective studies, as well as partnering with well-known and respected oncology research organizations, provides both the efficiency and impact that is needed for validation of novel precision oncology tools. ⁷⁰

Summary of publications for BillionToOne	
Study information	Study description
* The URLs citing the studies in the following table are inactive textual references only and the studies are not incorporated by reference into this prospectus.	
PRENATAL STUDIES	
UNITY Analytical Validation Study Publication: <i>Scientific Reports</i> (Nature Publishing Group) Title: A novel high-throughput molecular counting method with single base-pair resolution enables accurate single -gene NIPT Authors: Tsao, D.S., Silas, S., Landry, B.P., Itzep, N.P., Nguyen, A.B., Greenberg, S., Kanne, C.K., Sheehan, V.A.,	This foundational study presents the first technical publication of BillionToOne’s patent-pending QCT molecular counting method. The research demonstrates that QCT technology can accurately count single DNA molecules, enabling ultra-rare variant calls for liquid biopsy and

⁷⁰ The clinical studies described below include both retrospective and prospective analyses. Retrospective studies involve the analysis of previously collected blood samples obtained from patient cohorts as reflected in medical records. No new patient enrollment, randomization, or interventional procedures were undertaken. The methodology involved processing these pre-existing samples using our LDTs and comparing the resulting test outputs to patient outcomes as documented in existing clinical data. The prospective studies involve collecting blood samples and medical records from patients that have been diagnosed and analyzing the samples using our LDTs to determine the association of ctDNA test results with clinical outcomes. Since these retrospective and prospective studies are focused on analytical and clinical validity, information typically requested for clinical trials, including, but not limited to, the dates and locations of trial conduct, the identity of trial sponsors, and the occurrence of serious adverse events, is not applicable or available in the context of these clinical studies. All references to clinical validity and clinical utility described in the summary of publications are distinct from claims of safety and efficacy relating to each of our LDTs.

Sharma, R., Shukla, R., Arora, P.N., Atay, O. Link*: https://doi.org/10.1038/s41598-019-50378-8 DOI: 10.1038/s41598-019-50378-8. Publication Date: October 2019	single-gene NIPT for recessively inherited genetic disorders. Using pre-clinical samples for cystic fibrosis, spinal muscular atrophy, sickle cell disease, and thalassemias, the study achieved >98% analytical sensitivity and >99% analytical specificity. Validation with on blood samples from singleton pregnancies showed 100% concordance between QCT-enabled single-gene NIPT calls and newborn genotype for both maternal recessive inheritance and paternal inheritance scenarios.
sgNIPT Health Economics Study Publication: <i>Journal of Medical Economics</i> (JME) Title: Reflex single-gene non-invasive prenatal testing is associated with markedly better detection of fetuses affected with single-gene recessive disorders at lower cost Authors: Riku, S., Hedriana, H., Carozza, J.A., Hoskovec, J. Link*: https://www.tandfonline.com/doi/full/10.1080/13696998.2022.2053384 DOI: 10.1080/13696998.2022.2053384 Publication Date: March 2022	This health economics analysis evaluates the clinical benefits and cost savings associated with adopting carrier screening with reflex single- gene NIPT in prenatal care. The study used decision modeling to compare traditional carrier screening with carrier screening plus reflex sgNIPT across 100,000 pregnancies. Results showed that the cost to detect one affected pregnancy by UNITY Fetal Risk Screen was 62% lower than traditional carrier screening, with reflex sgNIPT detecting 108 of 110 affected pregnancies (98.5% sensitivity) compared to traditional screening's 46 of 110 (41.5% sensitivity). The analysis demonstrated total healthcare cost savings of \$37.6 million per 100,000 pregnancies, establishing optimal pricing thresholds for sustainable implementation.
sgNIPT Sickle Cell Disease Validation Study Publication: <i>American Journal of Hematology</i> Title: Validation of single-gene noninvasive prenatal testing for sickle cell disease Authors: Westin, E.R., Tsao, D.S., Atay, O., Landry, B.P., Ye, P.P., Chandler-Brown, D., Alford, B., Hoskovec, J., Subramaniam, A., Pawlik, K.M., Kuper, S.G., Goldman, F.D., Townes, T.M., Sheehan, V.A. Link*: https://pmc.ncbi.nlm.nih.gov/articles/PMC9394186/ DOI: 10.1002/ajh.26570 Publication Date: May 2022	This clinical validation study evaluated BillionToOne's single-gene noninvasive prenatal testing (sgNIPT) performance for sickle cell disease (SCD) across 77 pregnancies from patients at Baylor College of Medicine and the University of Alabama at Birmingham who were known carriers of at least one pathogenic HBB allele. The methodology utilized BillionToOne's proprietary Quantitative Counting Template (QCT) technology to analyze cell-free DNA from maternal plasma samples collected between October 2018 and December 2019, providing personalized fetal residual disease risk assessments ranging from greater than 9 in 10 to less than 1 in 20,000. Results demonstrated exceptional clinical performance with all affected cases identified as high risk (sensitivity 100%) and all unaffected cases identified as low or decreased risk. This validation study represents a

	significant advancement in prenatal screening capabilities, offering more sensitive and precise risk assessment compared to current standard of care methods while eliminating the need for paternal screening, thereby enabling improved genetic counseling and clinical decision-making for at-risk pregnancies.
Large-Scale UNITY Outcomes Study (9K Patients) Publication: <i>Genetics in Medicine</i> (ACMG Official Journal) Title: Clinical performance evaluation of UNITY Screen for recessive condition detection Authors: Hoskovec, J., Hardisty, E.E., Talati, A.N., Carozza, J.A., Wynn, J., Riku, S., Ten Bosch, J.R., Vora, N.L. Link*: https://www.gimjournal.org/article/S1098-3600(22)01002-4/fulltext DOI: 10.1016/j.gim.2022.10.014 Publication Date: December 2022	This comprehensive outcomes study analyzed clinical performance data from 9,151 pregnant individuals across 30 states and 240 clinical sites to evaluate real-world effectiveness of the UNITY Screen. The methodology involved maternal carrier screening with reflex single-gene NIPT for cystic fibrosis, alpha and beta thalassemia, and spinal muscular atrophy, with follow-up of pregnancy outcomes in 191 carrier-positive cases. Results showed UNITY Screen achieved 93.3% sensitivity in detecting affected fetuses compared to approximately 35% estimated for traditional carrier screening in a real-world setting, with a positive predictive value of 48.3% versus 25% for traditional methods and a negative predictive value exceeding 99.4%.
Large-Scale UNITY Outcomes Study (42K Patients) Publication: <i>Prenatal Diagnosis</i> Title: Performance of single-gene noninvasive prenatal testing for autosomal recessive conditions in a general population setting Authors: Wynn, J., Hoskovec, J., Carter, R.D., Ross, M.J., Perni, S.C. Link*: https://obgyn.onlinelibrary.wiley.com/doi/10.1002/pd.6427 DOI: 10.1002/pd.6427 Publication Date: October 2023	This expanded validation study represents the largest cohort analysis of single-gene NIPT performance in a general obstetric population, encompassing over 42,000 patients from 811 clinical practices across 45 states. The methodology evaluated UNITY Fetal Risk Screen's ability to assess fetal risk for autosomal recessive conditions including cystic fibrosis, spinal muscular atrophy, and hemoglobinopathies without requiring paternal samples, with assay sensitivity of 96% and NPV of 99.8% confirmed via neonatal outcomes. Results demonstrated 96% sensitivity in identifying affected fetuses as high risk, with approximately 18% of patients identified as carriers and 528 clinical newborn outcomes collected for validation. As in prior publications, all pregnancies with 9 in 10 fetal risk were confirmed to be affected via neonatal outcomes, establishing exceptional accuracy in a general pregnancy population and leading the study authors to conclude that "this workflow should be considered as an option for most of the general pregnant population."

RhD/Fetal Antigen NIPT Analytical Validation (<i>Scientific Reports</i>) Publication: <i>Scientific Reports</i> (Nature Publishing Group) Title: Validation of a non-invasive prenatal test for fetal RhD, C, c, E, K and Fya antigens Authors: Alford, B., Landry, B.P., Hou, S., et al. Link*: https://doi.org/10.1038/s41598-023-39283-3 Publication Date: August 2023	This analytical validation study evaluated BillionToOne’s UNITY Fetal Antigen NIPT for detecting fetal red blood cell antigens in pregnancies at risk for hemolytic disease of the fetus and newborn (HDFN). The methodology used BillionToOne’s proprietary QCT molecular counting technology to analyze fetal antigen genotypes from cell-free DNA as early as 10 weeks gestation, testing samples from alloimmunized pregnancies against RhD, C, c, E, K (Kell), and Fya (Duffy) antigens. Results demonstrated analytical sensitivity and specificity of >99.9% across preclinical and clinical samples, achieving 99.9% precision with only a 0.1% no-call rate. The study showed 100% concordance across clinical samples with known outcomes, representing the lowest no-call rate of any RhD assay and establishing new standards for fetal antigen testing accuracy.
RhD/Fetal Antigen NIPT Clinical Study (<i>Obstetrics & Gynecology</i>) Publication: <i>Obstetrics & Gynecology</i> (The Green Journal—ACOG Official Journal) Title: Cell-Free DNA Analysis for the Determination of Fetal Red Blood Cell Antigen Genotype in Individuals With Alloimmunized Pregnancies Authors: Rego, S., Ashimi Balogun, O., Emanuel, K., Overcash, R., Gonzalez, J.M., Denomme, G.A., Hoskovec, J., King, H., Wilson, A., Wynn, J., Moise, K.J. Jr. Link*: https://journals.lww.com/greenjournal/abstract/2024/10000/cell_free_dna_analysis_for_the_determination_of.7.aspx DOI: 10.1097/AOG.00000000000005692 Publication Date: October 2024	This clinical study demonstrates 100% sensitivity and specificity to correctly call 465 fetal RhD and other fetal red blood cell antigens across 156 alloimmunized pregnancies, representing one of BillionToOne’s hallmark publications in the Green Journal. The study examined the clinical performance of BillionToOne’s NGS-based QCT technology to determine fetal antigen genotype from blood samples from pregnant individuals alloimmunized against various red blood cell antigens in a diverse clinical sample including 15.4% Hispanic, 9.0% non-Hispanic Black, 65.4% non-Hispanic White, 4.5% Asian, 1.3% more than one race or ethnicity, and 4.5% were unknown. Blood samples from the pregnant individuals were sent for clinical testing and in all cases, the fetal antigen cell-free DNA results were concordant with the postnatal neonate antigen genotype result. Taken together with previously published evidence, this study supports the implementation of cell-free DNA testing to manage individuals with alloimmunized pregnancies in the United States.
RhD Antigen NIPT Clinical Study (<i>Obstetrics & Gynecology</i>) Publication: <i>Obstetrics & Gynecology</i> (The Green Journal—ACOG Official Journal) Title: Clinical Performance of Cell-Free DNA for Fetal RhD Detection in RhD-Negative Pregnant Individuals in the	This large-scale clinical study demonstrated 100% accuracy in non-invasive fetal RhD detection across 401 racially and ethnically diverse RhD-negative pregnant individuals from four US healthcare centers. The methodology

United States Authors: Mateus-Nino, J.F., Wynn, J., Wiggins-Smith, J., Bryant, J.B., Citty, J.K., Citty, J.K., Ahuja, S., Newman, Link*: https://pubmed.ncbi.nlm.nih.gov/40014864/ DOI: 10.1097/AOG.0000000000005850. Publication Date: February 2025	utilized BillionToOne's next-generation sequencing with QCT molecular counting to test nonalloimmunized pregnant individuals from August 2020 to November 2023, with focus on diverse populations where non<i>RHD gene deletion</i> variants are more prevalent. Results confirmed 100% sensitivity, specificity, positive and negative predictive values with complete concordance to all neonatal outcomes and a 0% no-call rate. The assay correctly identified fetal RhD phenotype in 10 cases with non-<i>RHD</i> gene deletions, demonstrating superior performance compared to European-based PCR assays. Healthcare providers used results to guide RhoGAM administration, with targeted use leading to RhIG conservation. This study supported ACOG's practice advisory changes during the 2024 RhoGAM shortage, establishing the assay as optimal for the diverse US pregnant population.
UNITY Aneuploidy Clinical Validation Publication: Peer-reviewed clinical validation study published in a scientific journal Title: <i>Performance Characteristics of a Next Generation Sequencing-Based cfDNA Assay for Common Aneuploidies in a General Risk Population</i> Authors: Calaway, M., Lal, A., Tyson, R., Stosic, M., Soni, S., Davis K., et al. Journal: <i>Annals of Gynecology and Obstetrics Research</i> Volume/Issue: Volume 7, Issue 1 Link*: https://www.remedypublications.com/annals-of-gynecology-and-obstetrics-research-abstract.php?aid=10032 DOI: N/A Publication Date: January 2024	This clinical validation study evaluates the performance of BillionToOne's UNITY Aneuploidy Screen for chromosomal aneuploidies including trisomies 21, 18, and 13, as well as monosomy X. The methodology combines BillionToOne's proprietary QCT technology with cell-free DNA analysis to provide aneuploidy screening from a single maternal blood draw, with results applicable to a general obstetric population where 80% of patients in the study were <35 years of age. Results demonstrate clinical-grade performance for aneuploidy detection while maintaining the unique capability to simultaneously assess fetal risk for recessive conditions, positioning UNITY Complete as the only comprehensive prenatal screen capable of evaluating both chromosomal and single-gene disorders from one sample.
ONCOLOGY STUDIES	
Northstar Analytical Validation Publication: <i>Scientific Reports</i> (Nature Publishing Group) Title: Molecular counting enables accurate and precise quantification of methylated ctDNA for tumor-naïve cancer therapy response monitoring Authors: Ye, P.P., Viens, R., Shelburne, K.E., Langpap, S.S., Bower, X.S., Shi, J.J., Zhou, W., Wignall, J.C., Zhu, J.J., Tsao, D.S., Atay, O. Link*: https://www.nature.com/articles/	This analytical validation study establishes the performance characteristics of BillionToOne's Northstar Response liquid biopsy assay for cancer therapy response monitoring. The methodology leverages BillionToOne's patented QCT technology as a "molecular ruler" to enable absolute quantification of methylated circulating tumor DNA (ctDNA) down to single-molecule levels across 12 cancer types, including lung,

s41598-025-90013-3 DOI: 10.1038/s41598-025-90013-3 Publication Date: March 2025	colorectal, and pancreatic cancers. Results demonstrate the assay's ability to accurately discriminate small differences in ctDNA burden with high precision (tumor fraction changes as small as 0.25%), providing up to 10x more precise treatment response monitoring than alternative blood-based methods and enabling tissue-agnostic tumor burden measurement without requiring tumor tissue biopsy.
UCSD Collaboration Study (<i>Clinical Lung Cancer</i>) Publication: <i>Clinical Lung Cancer</i> Title: Brief Report: Methylation-Based ctDNA Serial Monitoring Correlates With Immunotherapy Response in NSCLC Authors: Hsiao, A., Woodward, B., Ye, P., Varga, M.G., Altaie, G., Lu, K., Searle, N., Viens, R., Langpap, S., Li, Z., Palmer, G., Husain, H. Link*: https://www.clinical-lung-cancer.com/article/S1525-7304(24)00230-4/fulltext DOI: 10.1016/j.clc.2024.10.013 Publication Date: January 2025	This clinical validity and utility study represents the collaboration between BillionToOne and the University of California San Diego, examining the correlation between Tumor Methylation Scores (TMS) and therapy response in advanced non-small cell lung cancer (NSCLC) patients. The methodology involved longitudinal monitoring of methylated ctDNA using BillionToOne's Northstar Response assay in late-stage NSCLC patients receiving anti-PD1/immunotherapy treatment, with banked plasma samples analyzed at 4-10 weeks post-treatment initiation. Results demonstrated that TMS changes significantly predicted real-world progression-free survival (rwPFS, $P < 0.0001$) compared to standard imaging assessments which did not reach statistical significance ($P = 0.55$), establishing methylated ctDNA quantification as an earlier and more reliable indicator of treatment response than conventional CT scan monitoring.
UF Collaboration Study (<i>Journal of the American College of Surgeons</i>) Publication: <i>Journal of the American College of Surgeons</i> (JACS) Title: Methylated ctDNA Quantification: Noninvasive Approach to Monitoring Hepatocellular Carcinoma Burden Authors: Angeli-Pahim, I., Chambers, A., Duarte, S., Soma, D., Beduschi, T., Sahin, I., Hughes, S., Zarrinpar, A. Link*: https://doi.org/10.1097/XCS.0000000000000939 DOI: 10.1097/XCS.0000000000000939 Publication Date: April 2024	This collaboration between BillionToOne and the University of Florida demonstrates the application of methylated circulating tumor DNA (ctDNA) quantification for monitoring hepatocellular carcinoma (HCC) treatment efficacy using BillionToOne's proprietary molecular counting technology. Blood samples from 25 patients (21 with HCC and 4 with benign liver masses) were collected at various treatment points to noninvasively assess tumor burden changes. Results confirmed that methylated ctDNA quantification reliably detected HCC and accurately differentiated cancer patients from non-cancer controls. Compared to alpha-fetoprotein (AFP), the current standard biomarker, methylated ctDNA quantification showed significantly superior sensitivity (80.9% vs. 51.7%) and 100%

	specificity, effectively detecting tumor presence and subtle changes in tumor burden post- transplantation, post-surgical removal, and throughout locoregional and systemic therapies. Furthermore, changes in the Tumor Methylation Score (TMS) demonstrated better predictive accuracy for tumor progression than AFP alone (AUC=0.800 vs. AUC=0.783), and when combined with AFP, produced the strongest predictive model (AUC=0.892). These findings strongly support the clinical utility of TMS as a powerful tool for guiding personalized therapeutic decisions in HCC management.
NIPT Cystic Fibrosis Validation Study Publication: <i>Journal of Cystic Fibrosis</i> Title: Routine cell-free DNA prenatal screening identifies pregnancies at high risk for cystic fibrosis that may benefit from fetal therapy. Authors: Wynn, J., Rego, S., Chandler-Brown, D., Carter, R., Talati, A., Zaretsky, M., & Trimble, A. Link*: https://www.cysticfibrosisjournal.com/article/S1569-1993(25)01563-2/fulltext DOI: 10.1016/j.jcf.2025.08.004 Publication Date: September 2025	This validation study found that NIPT using cfDNA can accurately identify pregnancies at high risk for cystic fibrosis (CF) early on, using only a single maternal blood sample, avoiding the need for a partner's sample required by traditional screening. Among over 100,000 carrier screening samples reviewed, NIPT testing correctly flagged cases where cfDNA predicted very high risk ($\geq 90\%$) were confirmed as CF-affected, resulting in 100% sensitivity in identifying affected fetuses. Furthermore, over 75% of the NIPT testing results were available before the 18.5 week gestation period, providing sufficient time for additional diagnostic testing and the initiation of in utero treatments, if applicable.
Northstar Select Head to Head Validation Study Publication: <i>The Journal of Liquid Biopsy</i> Title: Validation of a liquid biopsy assay with increased sensitivity for clinical comprehensive genomic profiling Authors: Bower, X., Wignall, J., Varga, M. G., Zhu, J., O'Sullivan, M., Searle, N. E., Hong, L. K., Dogruluk, T., Li, Z., Farmer, T. E., Rosas-Linhard, E., Luong, J., Lin, E., Simon, M. E., Tsao, D. S., Bosch, J. R. T., Palmer, G., Gajra, A., Huynh, C., & Zhou, W. Link*: https://www.sciencedirect.com/science/article/pii/S2950195425000384 DOI: 10.1016/j.jlb.2025.100322 Publication Date: September 2025	This analytical and clinical validation study evaluated Northstar Select, an 84-gene next generation sequencing panel for blood-based comprehensive genomic profiling (CGP) of solid-tumor cancers. Northstar Select was validated in head to head comparisons against 6 other commercially available liquid biopsy assays on 182 advanced-stage cancer patients, exhibiting more than 17 different solid tumor types. Results demonstrated Northstar Select's clear superiority: the assay detected 51% more pathogenic single nucleotide variant /Indels and 109% more copy number variants than available comparators, with 45% fewer null reports. Overall, this study found that Northstar Select allows doctors to find more clinically relevant genetic changes, which may help guide treatment decisions - especially for patients with low-shedding tumors.

Patient Case Studies

We believe the following patient case studies are examples of how our patients can benefit from our tests, and highlight one of the important reasons behind physicians' choice of utilizing our products and platform. We have highlighted patients across our UNITY and Northstar tests. Because these patients cover varied populations and circumstances, we believe the following case studies provide a helpful overview of the results that could be achieved by the broader patient population during the same time periods presented. However, patients experience different results depending on a number of factors, and these case studies are not necessarily representative of the results achieved by other patients. In particular, in a screening setting, such as for our prenatal tests, more than 99% of patients receive negative or low-risk results, which reduce the anxiety and the fear of the unknown for these patients, but do not necessarily improve their healthcare outcomes.

UNITY Fetal Risk Screen patient case studies: Identifying cystic fibrosis during routine screening

Study 1: A patient with no prior knowledge of being a carrier for cystic fibrosis (CF) underwent routine prenatal testing, which revealed she was a carrier of CF. The couple, neither with a family history of CF, initially had a general population risk for CF of one in 3,000 to one in 6,000. However, within approximately two weeks of sample collection, results from UNITY Fetal Risk Screen indicated a nine in 10 chance of the baby being affected with CF through homozygous inheritance of delta F508, leading the patient to opt for amniocentesis and a prenatal diagnostic confirmation of CF. Subsequently, the mother received TRIKAFTA (ellexacaftor/tezacaftor/ivacaftor and ivacaftor) treatment during pregnancy, and the baby was able to receive further treatment at just two weeks old.

This case demonstrates how UNITY Fetal Risk Screen's personalized fetal risk assessment enabled timely intervention and specialist referrals that may not have been possible with traditional carrier screening, which often has delays and lower partner participation rates.

Study 2: In a similar case, a patient who presented with echogenic bowel on ultrasound was identified as a CF carrier with sgNIPT showing a 9 in 10 chance of the baby being affected with CF. The amniocentesis confirmed the diagnosis. After referral to a pulmonologist, the patient received TRIKAFTA during pregnancy, starting at 27 weeks of gestation. Despite earlier ultrasound findings, the baby was able to be discharged without a neonatal intensive care unit stay and passed newborn screening (NBS) for CF. It is extremely rare for a newborn with CF to pass NBS. Given the echogenic bowel on ultrasound during pregnancy, early diagnosis by UNITY and subsequent treatment enabled this newborn to have a significantly better outcome and avoid a potentially lengthy NICU stay.

UNITY Fetal Antigen NIPT patient case study: Assessing big C alloimmunization risk for streamlined care

During routine prenatal lab work, a pregnant patient was found to be alloimmunized to the big C antigen. The patient's OB-GYN ordered UNITY Fetal Antigen NIPT at 14 weeks gestation to assess the fetal antigen status of the pregnancy. UNITY Fetal Antigen NIPT revealed a "not detected" result, indicating that the baby did not express the big C antigen and the pregnancy was not at risk for HDFN. As a result, the patient avoided the need for weekly intensive monitoring by a specialist, invasive procedures, and regular blood draws, significantly reducing healthcare costs and her anxiety. This early identification through the UNITY Fetal Antigen NIPT provided critical information that guided the management of her pregnancy, ensuring it progressed without

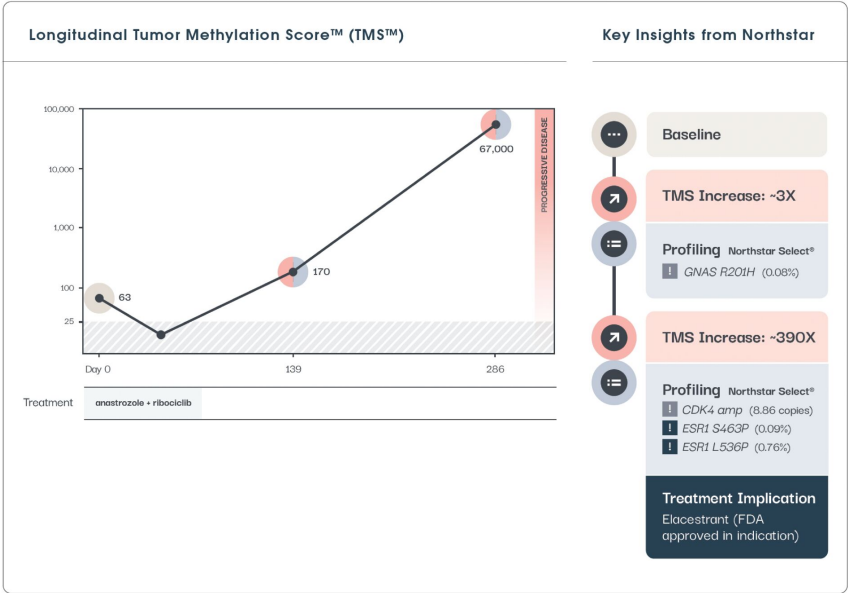
complications related to alloimmunization. This case highlights the value of UNITY Fetal Antigen NIPT in streamlining prenatal care, minimizing unnecessary interventions and risks, and removing the fear of the unknown for the patient.

Northstar patient case study: Northstar Select identified a new *ESR1* mutation at a very low VAF in a metastatic breast cancer patient after signs of progression using Northstar Response

A patient was diagnosed with HR positive/*HER2* negative metastatic breast cancer and was heavily pretreated with anastrozole/ribociclib. During the patient's routine follow-up three years later, the patient began Northstar Response monitoring, which indicated low baseline tumor burden (TMS=63). Longitudinal monitoring revealed progressively increasing TMS scores with a 390-fold increase found five months afterwards (TMS=67,000).

Subsequent comprehensive profiling with Northstar Select revealed an *ESR1* S463P mutation at a VAF of 0.09%, significantly below any competing therapy selection test's limit of detection, confirming the emergence of a resistance mutation to aromatase inhibitor therapy, a common challenge in treating HR-positive metastatic breast cancer. *ESR1* S463P mutations have an FDA-approved therapy, elacestrant, in this indication and provided this patient with an opportunity for treatment.

This case highlights how utilizing both Northstar Select and Response can help physicians first timely detect disease progression and identify more actionable mutations at greater sensitivity, leading to earlier interventions and better treatment options for patients.

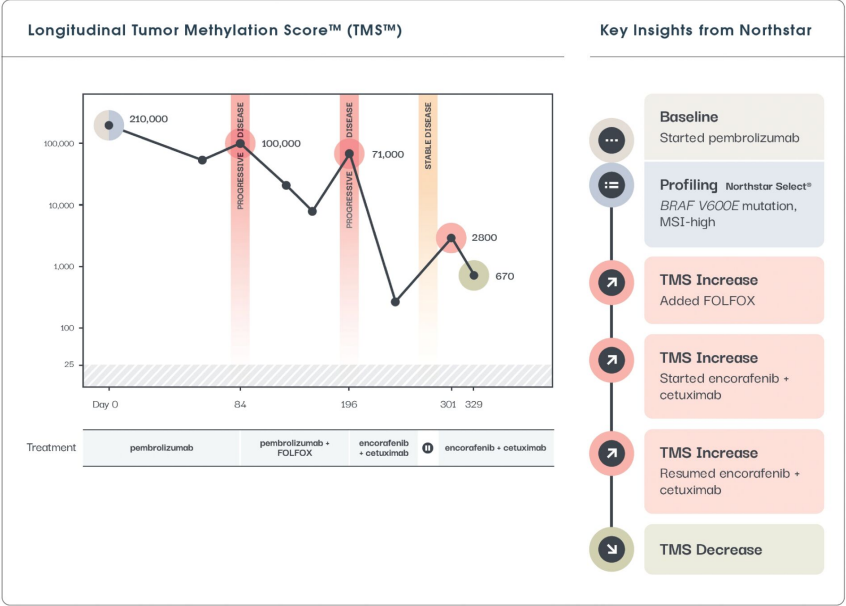


Northstar patient case study: Synergistic use of Northstar Select and Response demonstrated true precision oncology and personalized medicine

A patient with metastatic colorectal cancer, awaiting first-line treatment with pembrolizumab monotherapy, presented with a baseline TMS of 210,000, indicating a very high tumor burden. After the first cycle of treatment, initial molecular response was observed and TMS decreased by over 50%, while therapy profiling with Northstar Select identified a druggable *BRAF* V600E mutation. Continuing with monotherapy IO alone, TMS increased above 100,000, which prompted the provider to increase treatment intensity by adding chemotherapy. Dramatic molecular response was observed, with the TMS dropping below 10,000. After the next cycle, TMS rebounded to over 71,000, prompting the physician to switch therapy strategy and treat with encorafenib + cetuximab, the approved treatment for the *BRAF* V600E mutation that Northstar Select had detected.

The patient's follow-up response demonstrated a significant decrease down to a TMS of 200, a decrease of more than 99.9% of the tumor burden compared to the pre-treatment time point. While undergoing a perioperative treatment hold for a planned ileostomy reversal procedure, scans showed radiographic stable disease while TMS demonstrated molecular progression and a rise in TMS to 2,800. Molecular progression detected by Northstar Response enabled better surgical treatment planning, and the patient resumed targeted therapy to control disease burden, indicated by a falling TMS down to 670 at the latest collection date.

In this case, longitudinal sampling and observed changes in TMS via Northstar Response offered real-time insights into the patient's treatment response, while comprehensive profiling from the same blood draw by Northstar Select helped optimize the therapeutic strategy at several key time points. This case highlights how the synergistic use of Northstar Select and Response can enable a physician to pivot to an alternative therapy expeditiously.



Commercialization

We commercialize our UNITY and Northstar tests in the United States through our direct sales force targeting physicians in the prenatal and oncology markets, respectively. As of December 31, 2024, our clinician-focused sales organization included 137 sales representatives, with 120 in prenatal and 17 in oncology. In comparison, we had a total of 90 sales representatives at the end of 2023, 85 in prenatal and 5 in oncology. We plan to continue to expand our field sales force systematically, as our prenatal sales force is less than one-third the size of our largest competitor and our oncology sales force is very small relative to many other liquid biopsy companies. Our sales representatives in prenatal are engaged in educating OB-GYNs, MFMs, genetic counselors (GCs) and others about the existence, uniqueness and clinical utility of our offerings. Our sales representatives in oncology conduct similar commercial and educational activities and primarily engage with oncologists. We have supplemented our direct sales team with medical science liaisons (MSLs) who are generally genetic counselors in prenatal and PhDs in oncology, as well as adding other support staff to help onboard clinics and to manage the physician and patient experiences.

Our sales force achieved an annualized revenue run-rate of \$1.8 million per sales representative in the six months ended June 30, 2025, despite approximately 35% of our territories launching less than 18 months ago. We believe our high sales efficiency is driven by the combination of our differentiated products and our ability to provide a seamless, end-to-end solution that enhances both the patient and provider experience and significantly reduces churn. Our cohort analysis indicates that the net test retention, as defined by the total number of tests that are received from a cohort of clinics first onboarded in a particular quarter, even after

accounting for any account or provider churn, is over 100% after a year for the majority of quarterly cohorts. Our sales efficiency has also increased over time, and we believe this efficiency will be maintained or further increase as we systematically grow our sales team.

We also drive physician awareness of our products by actively participating in industry conferences, publishing in relevant scientific journals, and driving dialogue with key opinion leaders and physician organizations. These efforts have already resulted in practice advisory changes within the prenatal field, including for RhD and fetal antigen NIPT. Across both prenatal and oncology, we believe that our ongoing and planned studies will help drive increased guideline expansion. Through our extensive digital marketing, we also engage directly with motivated patients, and this can lead to access to physicians in clinics that typically do not otherwise allow sales representative presence.

In international markets, which represented less than 1% of our revenue for the year ended December 31, 2024, we primarily sell through distributors, which collect and send samples to our laboratories in the United States. In these markets, the patient bears the full cost of the testing, which limits the adoption. In the future, we believe that the health economics of our tests will enable nationwide coverage via single-payor agreements. However, this is often predicated on the tests being performed locally within the country, requiring capital investments in international markets. While we believe that international expansion could significantly expand our total addressable market, we are currently focusing on expansion opportunities in the United States.

Prenatal commercialization

We sell our UNITY products through direct targeting of OB-GYNs, GCs, MFMs and others in the United States. Our penetration in prenatal is often executed via a "land-and-expand" strategy in which the adoption of UNITY by one physician in a larger clinic often leads to increased access and broader adoption of our tests by other physicians in the clinic. This approach enables us to first access clinics and then expand within those clinics by providing an excellent end-to-end service. Our high client satisfaction is evidenced by our low churn, which is an important factor in our rapid growth.

Our tests are typically ordered during the first trimester, starting as early as nine weeks into the pregnancy, and help physicians and patients assess risk across a variety of conditions. We have simplified billing process that consolidates all tests ordered into one claim and one bill. Our dedicated clinical support staff aids in our commercial and education efforts by providing workflow implementation, patient and payor billing, and report interpretation.

We also have a global partnership with Johnson & Johnson in the AZALEA Phase 3 clinical trial of nipocalimab in pregnancies at risk for severe HDFN, in which UNITY Fetal Antigen CTA is exclusively used for determining patient eligibility, and a related U.S.-specific partnership regarding development of a companion diagnostic product. Exclusivity of this arrangement is another proof point of the unique capabilities of our products. We believe this partnership and potential future partnerships or collaborations with other partners can boost awareness and adoption of our tests, while also providing us with access to patients who can benefit from our products.

We will also continue to increase the size of our direct sales force to better penetrate existing markets and to cover new territories in the United States. Our sales team was built with proven performers, and we have designed a robust training infrastructure to continue our leading sales efficiency as we continue to grow the team.

Oncology commercialization

Our oncology strategy is dedicated to the cross-selling of both Northstar Select and Northstar Response. These complementary products support physician decision-making on initial therapy selection, monitoring patient

response to treatment, and informing treatment modification when necessary. The head-to-head study that showed significantly higher numbers of actionable mutations that Northstar Select found versus competing assays is an important factor in our ability to persuade oncologists to start using our tests. Each Northstar Select test is often accompanied by a Northstar Response test for the baseline measurement, followed by additional Northstar Select and Response tests in certain cases as physicians monitor and adapt treatment plans. As of March 31, 2025, approximately 95% of our ordering providers utilize both Northstar Select and Northstar Response tests in tandem for the same patient's care. Higher reimbursement and existing Medicare coverage of our Northstar Select tests allow us to broaden the use of Northstar Response without incurring significant losses. If we were to receive increased coverage and reimbursement for Northstar Response, it would lead to a significant increase in our revenue as the adoption of the test will have already been established.

Outside of our direct sales efforts in oncology, we have signed collaboration agreements with a select number of pharmaceutical companies and institutions to support clinical development of novel precision oncology therapeutics. These collaborations utilize our existing Northstar products, as opposed to developing new assays that are specifically tailored to each agreement.

Our Growth Strategy

We are driving and leading a paradigm shift within precision diagnostics. Our vision is to leverage our novel single-molecule next-generation sequencing (smNGS) platform to develop ultrasensitive diagnostic tests that enable personalized solutions and enhance patient outcomes. Our growth strategy to achieve this goal includes the following elements:

- Drive increased adoption of our existing products in the prenatal and oncology markets.** Healthcare professionals have increasingly incorporated our UNITY tests into their clinical practices to adopt what we believe will be the new standard of care. There are three main opportunities to expand our market penetration of our UNITY prenatal products. First, we believe that we have a significant opportunity for footprint expansion and are continuing to invest in increasing our sales team size to cover new geographies, with aggressive recruiting targets. Second, we believe that our current sales team has only just begun to penetrate their existing territories and, over time, more clinics will adopt our tests in an existing sales territory. Finally, we typically see significant growth once we have gained adoption in a clinic, as additional physicians in those clinics adopt our tests.

We are in the early stages of executing the same sales strategy in oncology. We will continue to drive adoption of our tests by working closely with physicians, medical societies, payors, and patient advocacy groups to educate them on the benefits of our products. We also believe that our commitment to quality customer experience, through patient education, patient self-service, streamlined testing, and patient-friendly billing, will help maintain and enhance usage of our tests. With our Northstar product line, our commercial efforts have just begun, with our field sales team covering only a fraction of the geography. We have significant room to grow, via more geographical expansion, more penetration within existing sales territories, as well as within existing clinics.
- Build beyond our extensive library of clinical evidence to support favorable coverage and reimbursement.** In prenatal, our carrier and aneuploidy tests are broadly covered by most major insurance providers, and we have broad reimbursement for the tests we provide. In addition, we have contracts with payors that account

for more than 225 million covered lives in the United States, which generally include our oncology products. We are continuing to generate persuasive clinical utility data that we believe can lead to additional payor contracts and justify guideline inclusion.

While we believe we have industry-leading ASPs for our prenatal products, as we contract with more payors and as certain aspects of our tests are more broadly covered due to guideline inclusions, we believe that our ASP will continue to increase. In oncology, we have already secured Medicare and Medicare Advantage coverage for Northstar Select. For Northstar Response, our flagship study, NORTH, along with other ongoing clinical studies, has the potential to generate sufficient clinical validity evidence for our MoIDX submissions for Medicare coverage.

- **Utilize our smNGS platform and R&D capabilities to efficiently expand and improve our portfolio of category-defining molecular diagnostic tests.** Our foundational smNGS platform fundamentally reduces the biological and clinical risks in our product development process. Because it achieves single molecule level sensitivity and precision at the physical LOD, we can accurately predict clinical performance in advance when designing new smNGS assays. This is complemented by our lean and innovative R&D structure which further enables efficient and high-impact product development. As a result, we are able to rapidly convert R&D investment into differentiated products. In the prenatal market, we started with one UNITY Fetal Risk Screen and then developed multiple tests and add-ons, including UNITY Aneuploidy Screen and UNITY Fetal Antigen NIPT. In oncology, we are extending our portfolio beyond our commercial products focused on therapy selection and response monitoring. We are also developing a tissue-free, pan-cancer MRD test, which we expect to be commercially available in 2026. Longer-term we believe that our smNGS-based technology could address the sensitivity challenges of early-stage cancer detection, among other applications.
- **Continue to deploy AI across our entire organization, including laboratory operations, to improve efficiency and productivity.** The integration of AI across our operations has been and will continue to be a critical driver of efficiency and productivity. We have been an early adopter of AI, and every function across the company uses AI in some capacity. For example, we have decreased our overall cost per test by 21% in the 24 months ended June 30, 2025, in part by deploying automation and AI, while approximately 30% of the code we developed internally was generated by AI. By continuing to automate labor-intensive processes, we can continue to reduce costs and significantly increase productivity across our organization.
- **Leverage our growing clinical dataset with AI to improve the utility of diagnostics and enable personalized medicine.** Our advanced diagnostics platform generates rich biomarker data as we test patients that can be integrated with multimodal patient clinical information such as medical records. By leveraging AI algorithms to analyze these large datasets, and combining them with our unique Northstar Response results, we believe we will be able to identify distinct patient subgroups with unique biomarker profiles and predict therapeutic response patterns with unprecedented precision. This capability will enable us to provide clinicians with personalized treatment recommendations tailored to each patient's unique biology. We believe this approach will significantly improve therapeutic outcomes by maximizing efficacy while minimizing adverse effects.

As we continue to expand our clinical data repositories and refine our AI models, we expect to further enhance our competitive advantage and accelerate the transition of precision medicine from aspiration to clinical reality across our diagnostic portfolio.



Healthcare delivery continues to focus on becoming more patient-centered with personalized solutions. This evolution is leading to more companies and product offerings in the molecular diagnostics market. As a result, each of our products faces competition from a number of established and emerging companies.

In the prenatal market, our main competitors offering NIPTs include Illumina, through its subsidiary Verinata, Laboratory Corporation of America Holdings (Labcorp), Myriad Genetics, Inc. (Myriad), Natera, Inc. (Natera), and Quest Diagnostics Incorporated (Quest). We also compete with companies providing carrier screening tests such as Fulgent Genetics, Labcorp, Myriad, Natera, and Quest. Each of these companies offers comprehensive carrier screening panels.

Our pre-natal testing product, UNITY, is the first NIPT that uses cfDNA to provide fetal risk assessment for recessive conditions such as sickle cell disease and cystic fibrosis without requiring a paternal sample or invasive procedures such as amniocentesis. Since UNITY's launch, we have established ourselves as a leader in the prenatal testing market and expanded our UNITY offering to cover comprehensive prenatal genetic needs from a single maternal blood draw. While we know of competitors, in particular Natera and Myriad, that have been working on creating competing products that also assess fetal risk for recessive conditions non-invasively, such as Natera's recently launched competitor product, we believe that our smNGS platform and five years of accumulated data, along with six peer-reviewed publications for UNITY covering more than 100,000 patients over the course of last six years, will allow us to maintain clear clinical and technical superiority as this type of testing becomes the standard of care. In addition, while product launches by our competitors can create heightened competition in our prenatal market, we also believe that it can lead to increased awareness, acceptance, adoption of this modality of testing (that we innovated and lead the field with) by both providers and medical guidelines.

In the oncology market, our main competitors for our therapy selection and response monitoring tests include Caris Life Sciences, Inc., Foundation Medicine, Inc., which was acquired by Roche Holdings, Inc., Guardant Health, Inc., NeoGenomics Laboratories, Inc., and Tempus AI, Inc. As we expand our oncology offerings into applications such as MRD testing, as well as potentially testing for early detection in the future, we anticipate facing competition from a broader universe of companies, including Exact Sciences, Grail, Haystack, which was acquired by Quest, and Natera.

Our competitors may offer oncology tests for therapy selection that encompass a broader range of genes, thereby positioning their products as more comprehensive. While we believe that these larger panels result in reduced sensitivity for identifying actionable variants, their expanded gene coverage enables selection of a wider array of therapies—including some that are not yet approved or immediately actionable. As the number of approved therapies continues to increase, necessitating the addition of new genetic targets and revalidation of our assays, we may incur higher costs and risk losing customers to competitors if updates to our tests are delayed.

Many of our competitors, either alone or with their collaborators, may have greater financial and/or other resources than we do, including larger and more established manufacturing capabilities and marketing, sales, and support functions. Other competitors are in the process of developing novel technologies which may lead to products that rival or replace our products. While we cannot assure you how the market will evolve, we believe our four pillars of differentiation provide competitive advantages that are difficult for others to replicate.

For further discussion of the risks we face relating to competition, see the section titled "Risk factors—Risks Related to Our Business and Strategy—If we cannot compete successfully with our competitors, we may be unable to increase or sustain our revenue or to achieve and then sustain profitability."

Intellectual Property

The long-term success of our business depends on securing protection of our intellectual property through patent, trade secret, trademark, and other intellectual property rights. We also utilize non-disclosure agreements and proprietary information and inventions assignment agreements with employees, consultants, contractors and other third parties and maintain physical security of our premises and physical and electronic security of our information technology systems in order to strengthen the protection of our intellectual property.

As of June 30, 2025, we held nine U.S. issued patents, which expire between August 2038 and March 2043, and 45 foreign patents, which expire between August 2038 and September 2041. Additionally, we had 14 pending U.S. patent applications and 31 foreign patent applications. We also held 4 U.S. registered trademarks and 13 foreign registered trademarks as of June 30, 2025.

Our patent strategy is focused on seeking robust coverage for our core molecular counting technology (covered by U.S. Patent No. 11,629,381, with a pending U.S. divisional application, granted patents in Australia, Brazil, China, Europe Hong Kong, India, Japan and South Korea (validated in 17 countries), and pending applications in Canada, Israel, Singapore, Japan (divisional), Europe (divisional), and Hong Kong (divisional), our dilution tagging technology (cover by U.S. Patent No. 12,071,651, with a pending U.S. continuation, and issued patent in Canada and pending foreign applications in China, Europe, and Hong Kong), our custom-made Synthetic DNA controls (covered by U.S. Patent Nos. 11,646,100 and 12,176,066, with a pending U.S. continuation, an issued patent in Canada, and pending applications in China, Europe, and Hong Kong), and our proprietary signal processing technology (covered by U.S. Patent Nos. 11,430,543 and 12,183,437, also granted in Brazil, Japan, Singapore, South Korea, Israel, Canada, Australia and Europe, and pending in China, Hong Kong, and India), all of which is used to maximize readings taken from single blood draws. We have also recently filed several unpublished patent applications covering a range of techniques for improving the efficiency and accuracy of DNA sequencing-based assays. In addition, we file for patent protection in connection with our ongoing research and development activities, particularly those related to early-stage cancer detection.

Our patents and applications generally fall into three broad categories:

- detecting and monitoring cancer and other diseases by determining genetic variations and other biomarkers in biological samples;
- methods for preparing and sequencing cfDNA, techniques for enriching nucleic acid samples, identifying cfDNA, and detecting epigenomic variations (such as DNA methylation) in biological samples; and
- precision diagnostics, including biochemical and analytical techniques for obtaining and analyzing genetic information to detect genetic abnormalities in relatively small complex samples, such as fetal cfDNA using reflex single-gene noninvasive prenatal screening.

The following table includes our U.S. patents granted and U.S. patent applications published as of June 30, 2025, along with the status in other jurisdictions (excluding divisional and continuation patents and applications). All patents are utility patents. We have additional patent applications that have not yet published as of June 30, 2025.

BillionToOne Patent Portfolio

Patent Family	Patent Name	Summary	U.S. Patent Number	U.S. Exp. Date	Other Jurisdictions
P01	Dilution Tagging for Quantification of Biological Targets	Method for accurate determination of biological target abundance that can include generating a first set of molecules associated with a target sequence that includes dilution tags associated with a relative concentration profile; generating a second set of molecules including dilution tags; generating a dilution tagged mixture; amplifying the dilution tagged targets; generating a modified dilution tagged mixture from the amplified subsets; determining, for the biological sample, a count of the distinct molecules including the target sequence.	12,071,651	3-19-2041	Issued/Allowed: CA Pending: CN, EU, HK
P02	Target-Associated Molecules for Characterization Associated with Biological Targets	A method and/or system for facilitating characterization of one or more conditions that can include: generating a set of target-associated molecules; generating a reference-associated set of molecules; facilitating generation of a spike-in mixture; determining abundance metrics based on an analysis of the spike-in mixture; and facilitating the characterization of the conditions based on the abundance metrics	11,646,100	3-5-2042	Issued/Allowed: CA Pending: CN, EU, HK

Patent Family	Patent Name	Summary	U.S. Patent Number	U.S. Exp. Date	Other Jurisdictions
P03	Sequencing Output Determination and Analysis with Target-Associated Molecules in Quantification Associated with Biological Targets	A method and/or system for generating a set of target-associated molecules (e.g., spike-in molecules) associated with biological targets; generating spike-in mixtures based on processing the set of target-associated molecules with samples including the biological targets; performing Sanger sequencing operations on the spike-in mixtures; determining abundance metrics based on chromatogram-related outputs from the Sanger sequencing operations; and/or facilitating characterization of medical conditions based on the abundance metrics.	11,430,543	6-24-2041	Issued/Allowed: AU, BE, BZ, CA, EU, FR, DE, IL, IT, JP, KR, NL, SG, EP, UK Pending: CN, HK, IN, SG
P04	Quality Control Templates for Ensuring Validity of Sequencing-Based Assays	A method and/or system for generating a set of quality control template (QCT) molecules; determining a set of QCT sequence read clusters based on the set of QCT molecules, such as based on variation regions of the set of QCT molecules; and based on the set of QCT sequence read clusters, determining a sequencing-related parameter, such as a contamination parameter and/or molecule count parameter, associated with the at least one of sequencing library preparation and sequencing.	11,629,381	2-17-2042	Issued/Allowed: AU, AT, BE, BZ, CN, CY, DN, EU, FN, FR, DE, GR, HK, IN, IR, IL, IT, JP, KR, LE, NL, NO, PT, EP, SE, CH, UK Pending: CA, HK, SG

Patent Family	Patent Name	Summary	U.S. Patent Number	U.S. Exp. Date	Other Jurisdictions
P05	Homologous Genomic Regions for Characterization Associated with Biological Targets	A method and/or system for generating a co-amplified mixture based on co-amplifying a set of nucleic acid molecules (e.g., cell-free nucleic acids, etc.) from the biological sample, wherein the set of nucleic acid molecules includes a genomic region of interest associated with the medical condition; and a homologous native genomic region with partial sequence similarity to the genomic region of interest; sequencing the co-amplified mixture; determining an abundance metric for the genomic region of interest and an abundance metric for the homologous native genomic region; and/or facilitating the characterization of the medical condition based on the abundance metric for the genomic region of interest and the abundance metric for the homologous native genomic region.	11,519,024	3-25-2040	Pending: CA, EU
P08	Fragment Analysis for Quantitative Diagnostics of Biological Targets	Methods of detecting the presence or absence of diseases using quantitative approaches, including methods for determining the abundance of endogenous targets and determining the presence or absence of an aneuploidy.	Pending	N/A	Pending: CA, EU

Patent Family	Patent Name	Summary	U.S. Patent Number	U.S. Exp. Date	Other Jurisdictions
P09	Molecule Counting of Methylated Cell-free DNA for Treatment Monitoring	Methods to quantify methylation in a DNA sample that include treating the sample to encode the presence or absence of DNA methylation, adding to the sample a set of synthetic molecules (e.g., quality control template (QCT) molecules), generating a co-amplification mixture, sequencing the co-amplification mixture, and determining a number of methylated molecules in the sample based on the number of methylated reads from the sample and a number of reads from the set of synthetic molecules.	12,043,873	3-21-2043	Pending: AU, CA, CN, EU, JP, KR
P10	Non-Invasive Prenatal Testing at Early Stage of Pregnancy	A highly accurate non-invasive prenatal testing methodology that allows accurate fetal rhesus determination and fetal DNA fraction measurement in a single assay is provided. The disclosed testing may be administered as early as at week 10 of pregnancy and can be conveniently combined with prenatal genetic disease testing and detection.	11,946,104	7-7-2040	Pending: CA, EU

BZ = Brazil
CA = Canada
CH = Switzerland
DN = Denmark
FR = France
IL = Isreal

CN = China
CY = Cyprus
DE = Germany
EU = European Union
FN = Finland
HK = Hong Kong
IN = India

IR = Ireland
IT = Italy
LE = Liechtenstein
NL = Netherlands
NO = Norway

PT = Portugal
SE = Sweden
SG = Singapore
UK = United Kingdom
PCT = Patent Cooperation Treaty

To date, we have not been engaged in patent infringement lawsuits or any other material intellectual property disputes. However, we may in the future become subject to or initiate intellectual property litigation. Moreover, our ability to compete effectively depends to a large extent on our ability to develop proprietary products and technologies and to maintain adequate protection of our intellectual property in the United States and other countries. We pursue intellectual property protection to the extent we believe it would advance our business objectives. Notwithstanding these efforts, there can be no assurance that we will adequately protect our

intellectual property or provide any competitive advantage. For more information regarding risks relating to intellectual property, see the section titled “Risk factors–Risks related to our intellectual property.”

Payor Coverage & Reimbursement

Reimbursement is a critical component of our business strategy and financial success. We approach reimbursement through a comprehensive framework addressing coding, coverage, and contracting to maximize access to our tests and optimize ASP. More than 90% of our revenue stems from reimbursement of our prenatal and oncology tests in the United States, making our payor strategy central to our financial performance.

While the vast majority of the carrier and aneuploidy tests we offer are covered under existing policies, we initially operated primarily out-of-network with commercial third-party payors, resulting in lower payments and higher denials, creating challenges in terms of revenue growth and generating headwinds for provider adoption. It is a testament to the uniqueness of our products that we have achieved substantial growth despite initially having limited in-network status. Today, we have dramatically expanded our in-network coverage to include 225 million covered lives as of December 31, 2024. We anticipate our covered lives will continue to increase over time, which we expect will drive progressively higher ASPs.

Our reimbursement strategy aligns with the demonstrated clinical utility and cost-effectiveness of our tests, as well as with value-based care trends. We have validated the clinical utility of our tests through peer-reviewed publications and real-world data.

Reimbursement sources and status

We receive reimbursement from several distinct sources:

- Commercial third-party payors, including insurance companies and health maintenance organizations;
- Government payors, state Medicaid programs, and Medicare;
- Employee benefits health plans; and
- Individual patients, who represent a small amount of our revenue.

Commercial third-party payors

We have significantly expanded our in-network status with commercial insurers, including several of the largest national payors. We expect this in-network expansion to continue driving higher ASPs and enhance revenue predictability, due to the contracts establishing agreed-upon rates. Beyond our contracted rate agreements, we submit claims for reimbursement and receive associated payments from commercial insurers on a non-contracted basis as necessary. The amount of reimbursement allowed and collected outside of network contract rates with commercial insurers is subject to greater variability and less predictability.

In prenatal, our carrier and aneuploidy tests are broadly covered by most major insurance providers, and we have broad reimbursement for tests we provide. Our sgNIPT and fetal antigen NIPT have variable coverage, with certain payors providing reimbursement, creating opportunities for ASP growth as coverage expands. For

our oncology products, Northstar Select has gained coverage from several commercial insurers. Northstar Response, while newer to market, is already reimbursed by certain commercial insurers, achieving a level of ASP that already provides positive contribution margins.

Medicare

We have obtained Medicare coverage for both our prenatal and oncology testing services. In April 2025, our Northstar Select test received a positive coverage decision and Z-code through the MoIDX program administered by Palmetto GBA.

For our prenatal tests, Medicare provides coverage for patients who meet the Medicare eligibility criteria; however, this represents a very small portion of our prenatal test volume given the demographics of pregnant patients. For our oncology portfolio, Medicare coverage is crucial given the higher prevalence of cancer in the Medicare-eligible population.

We continue to advance our evidence development strategy for Northstar Response, which requires additional clinical validity and utility data for Medicare coverage. Our flagship “NORTH” study, along with other ongoing clinical studies, is designed to generate the evidence necessary for Medicare coverage, initially focusing on immunotherapy and immunotherapy-combination therapy applications.

Medicaid

We have enrolled in over 40 state Medicaid programs across the United States. These enrollments are critical for our prenatal test ASPs. We plan to expand our Medicaid participation as our geographical footprint continues to grow, ensuring access to our tests for underserved populations. While Medicaid broadly covers carrier and aneuploidy tests, reimbursement rates vary significantly across state Medicaid programs. Moreover, various managed Medicaid payors may not have any out-of-network benefits, resulting in non-payments until they agree to contract with our laboratory, creating variability in our reimbursement from this payor segment.⁷¹

Billing and claims processing

Laboratory tests are classified for reimbursement purposes under a coding system known as Current Procedure Terminology (CPT), which we and our customers must use to bill and receive reimbursement for our diagnostic tests. Once the American Medical Association (AMA) establishes a CPT code, the Centers for Medicare & Medicaid Services (CMS) establishes payment levels and coverage rules under Medicare, while state Medicaid programs and commercial health plans establish rates and coverage rules independently in accordance with applicable rules. A Proprietary Laboratory Analyses (PLA) code is part of the CPT code set and may be assigned to tests that are not covered by standard CPT codes.

We utilize a combination of established CPT codes and recently obtained PLA codes for billing and reimbursement of our tests. We use established CPT codes for certain tests, including our aneuploidy NIPT which CMS has a pricing rate of \$759 per test. For other proprietary tests, we use PLA codes, including our carrier panel which CMS has a pricing rate of approximately \$1,825 per test. We have also obtained PLA codes for our Northstar Select and Northstar Response tests, which CMS has pricing rates of approximately \$2,920 per test and \$1,644 per test, respectively. The transition from miscellaneous codes to specific PLA codes has enhanced our reimbursement clarity and is expected to continue to improve our ASPs as these codes are increasingly recognized by commercial third-party payors.

⁷¹ In addition, our carrier screen test is not covered by Alabama, Michigan, or Nevada, and our aneuploidy test is not covered by Nebraska, Nevada or Utah. State Medicaid coverage for our RhD and fetal antigen tests is currently uncommon. Our oncology test are covered at the federal level by Medicare. Medicaid coverage for our oncology tests is less relevant, as the vast majority of cancer patients do not have Medicaid coverage.

Despite favorable coding and high coverage rates for many of our tests, we face reimbursement challenges in certain scenarios. For example, for out-of-network claims with Managed Medicaid plans, we may receive no reimbursement. Even for commercial insurances with out-of-network benefits, the percentage of allowed amounts that are paid may be a small fraction of the CMS rate. Challenges related to reimbursements are more fully discussed in the section titled “Risk factors—Risks related to our reimbursements” included elsewhere in this prospectus.

As a result of these challenges and rates negotiated with contracted payors, our Overall ASP is lower than the reimbursement amounts suggested by the codes. We maintain a systematic approach to appeals for denied claims, with variable success rates depending on the payor and reason for denial. Our appeals process is supported by our internal reimbursement team, who analyze denial patterns and optimize appeal strategies accordingly. Moreover, as our test volume increases, we believe this will improve our ability to secure network contracts with more commercial insurers, which should decrease claim denials and increase ASPs.

In addition, we have built a robust revenue cycle management infrastructure to optimize reimbursement for our tests, which includes internal and external resources, as well as AI-based automation for processing payor communications and streamlining claims management.

Patient access and financial assistance

We provide comprehensive patient support services, including pre-authorization support where required by payors, patient-focused education about potential financial responsibilities and personalized financial assistance for patients who indicate an inability to afford out of pocket charges. We use a combination of robotic process automation and AI for reimbursement, including sorting thousands of pages of correspondence we receive from payors on a daily basis, and submitting reconsiderations or appeals for thousands of claims that are initially denied. Due to various forms of automation, our reimbursement team was able to handle an approximately 50% increase in the claim volume and increase collections by approximately 50% with only an approximately 15% increase in employee headcount during the twelve months ended June 30, 2025.

Reimbursement expansion strategy

We are actively generating additional clinical validity and utility evidence to expand coverage of our tests. For our prenatal products, we continue to build evidence demonstrating improved outcomes and cost-effectiveness compared to traditional approaches. In oncology, our NORTH study and other ongoing clinical studies aim to demonstrate the clinical utility of Northstar Response in early therapy response assessment across multiple cancer types and treatment modalities.

In addition, inclusion in clinical practice guidelines is a key element of our reimbursement strategy. Recent ACOG practice advisory changes have cited our publications in support of new approaches to testing. Additionally, inclusion of our specific tests, such as sgNIPT, or broader adoption of testing categories like 22q11.2 microdeletion screening in ACOG guidelines could significantly increase coverage and ASPs. Moreover, our publication strategy prioritizes studies that address key questions relevant to clinical guideline development.

We continuously pursue strategic initiatives to enhance our reimbursement landscape, including:

- **Expansion of in-network coverage.** As we increase test volumes and publish additional evidence, we expect to secure additional in-network contracts with commercial third-party payors.
- **Medicare coverage expansion.** We are working toward Medicare coverage for Northstar Response, beginning with applications in immunotherapy response monitoring where the clinical utility is most established.

- **Clinical guideline incorporation.** We actively engage with professional societies to support the inclusion of our testing methodologies in clinical practice guidelines.
- **Test menu optimization.** We evaluate reimbursement potential when developing new tests or expanding existing test menus to ensure alignment with payor policies.
- **Payor education.** We maintain active engagement with medical directors at key payors to ensure understanding of our unique technology and clinical value proposition.

Future reimbursement landscape

The reimbursement landscape for molecular diagnostics continues to evolve, with increasing emphasis on demonstrated clinical utility and economic value. We believe our approach to evidence generation, combined with our unique technology platform and differentiated products, positions us favorably for continued improvements in reimbursement.

As we expand our menu of tests and geographical reach, we anticipate further strengthening our reimbursement profile through various initiatives, including increasing in-network coverage with commercial and Managed Medicaid payors; adding additional Medicaid participation across states, and obtaining Medicare coverage for Northstar Response. We believe these initiatives will support continued growth in our realized ASPs and gross margin over time.

Government Regulations

Our business is subject to and impacted by laws and regulations in the United States (at both the federal and state levels) and internationally that are subject to change. Some of these laws and regulations are particular to our laboratory business while others relate to conducting business generally and billing and reimbursement practices. In addition, we are subject to site inspections, claims audits, and other inquiries by certain federal and state governmental agencies.

Food and Drug Administration

In the United States, medical devices are subject to extensive regulation by the Food and Drug Administration (FDA) under the Federal Food, Drug, and Cosmetic Act (FDCA) and its implementing regulations, and other federal and state statutes and regulations. The laws and regulations govern, among other things, medical device development, testing, labeling, storage, premarket clearance, de novo classification or premarket approval, post-market requirements, labeling, advertising and promotion and product sales and distribution. Unless subject to an exemption, to be commercially distributed in the United States, medical devices must receive from the FDA prior to marketing, clearance of a 510(k) premarket notification submission, grant of a request for de novo classification, or approval of an application for premarket approval (PMA).

An in vitro diagnostic product (IVD) is a type of medical device that is intended for use in the diagnosis of diseases or conditions, including a determination of the state of health, in order to cure, mitigate, treat, or prevent disease or its sequelae. IVDs comprise reagents, instruments, and systems intended for use in the collection, preparation and examination of specimens from the human body. IVDs can be used to detect the

presence of certain chemicals, genetic information or other biomarkers related to health or disease. IVDs include tests for disease prediction, prognosis, diagnosis, and screening (e.g., carrier screening). A subset of IVDs are known as analyte specific reagents (ASRs). An ASR is a single reagent (e.g., antibody, specific receptor protein, ligand, nucleic acid sequence) that, through specific binding or chemical reaction with substances in a specimen, is intended for use in a diagnostic application for the identification and quantification of an individual chemical substance in biological specimens. Most ASRs are exempt from the premarket review processes but must comply with general controls, as described below, including applicable provisions of the quality system regulation (QSR).

Device classifications

The FDC Act classifies medical devices into one of three categories based on the risks associated with the device and the level of control necessary to provide reasonable assurance of safety and effectiveness.

- Class I devices are deemed to be low risk and are subject to the fewest regulatory controls. Many Class I devices are exempt from FDA premarket review requirements.
- Class II devices, including some software products to the extent that they qualify as a device, are deemed to be moderate risk, and generally require 510(k) clearance.
- Class III devices are generally the highest risk devices and are subject to the highest level of regulatory control to provide reasonable assurance of the device's safety and effectiveness. Class III devices typically require a PMA by the FDA before they are marketed.

A clinical trial is almost always required to support a PMA application and is sometimes required for 510(k) clearance. All clinical trials of investigational devices must be conducted in compliance with any applicable FDA and Institutional Review Board requirements. Devices that are exempt from FDA premarket review requirements must nonetheless comply with post-market general controls as described below, unless the FDA has chosen otherwise.

FDA premarket clearance and approval requirements

510(k) clearance. To obtain 510(k) clearance, a manufacturer must submit a premarket notification demonstrating to the FDA's satisfaction that the proposed device is substantially equivalent to a legally marketed predicate device. The FDA's 510(k) clearance pathway usually takes from three to 12 months from submission, but it can take longer, particularly for a novel type of product.

PMA. The PMA pathway requires valid scientific evidence demonstrating to the FDA's satisfaction the safety and effectiveness of the device for its intended use. The PMA pathway is costly, lengthy, and uncertain. The PMA review process typically takes one to three years from submission but can take longer.

De novo. If no predicate device can be identified, a device is automatically classified as Class III, requiring a PMA application. However, the FDA on its own initiative or at the request of a manufacturer can reclassify as low- or moderate-risk device for which there is no predicate through the de novo classification process. The de novo route is intended to be less burdensome than the PMA process. The de novo route has historically been used for many IVD products.

Post-market general controls. After a device, including a device exempt from FDA premarket review, is placed on the market, numerous regulatory requirements apply. These include: the QSR, labeling regulations, registration and listing, the Medical Device Reporting regulation (and the Reports of Corrections and Removals regulation).

The FDA enforces compliance with its requirements through inspection and market surveillance. If the FDA finds a violation, it can institute a wide variety of actions, ranging from issuing a Form 483 Notice of Inspectional Observations or sending an untitled or public warning letter, to enforcement actions such as fines, injunctions, and civil penalties; recall or seizure of products; operating restrictions, partial suspension or total shutdown of production; refusing requests for 510(k) clearance, de novo classification, or PMA approval of new products; withdrawing PMAs already granted; and criminal prosecution.

Research use only. Research use only (RUO) products are exempt from FDA medical device requirements provided their manufacturers comply with specified labeling and restrictions on distribution and promotion. The products must bear the statement: "For Research Use Only. Not for Use in Diagnostic Procedures." Manufacturers of RUO products cannot make any claims related to safety, effectiveness or diagnostic utility, and RUO products cannot be intended by the manufacturer for clinical diagnostic use. An RUO product promoted for diagnostic use may be viewed by the FDA as adulterated and misbranded under the FDC Act and the manufacturer of such product could be subject to FDA enforcement activities. Our laboratory-developed tests (LDTs) use instruments and reagents labeled as RUO.

Laboratory-developed tests. Each of our genetic tests is an LDT. The FDA considers LDTs to be tests that are designed, developed, validated and used within a single laboratory. The FDA had historically taken the position that it had the authority to regulate LDTs as medical devices under the FD&C Act but exercised enforcement discretion until it recently rescinded LDT regulations indicating that it does not have the authority to require clearance, de novo classification, or approval of LDTs prior to market release. As a result, our molecular diagnostic products are not subject to FDA approval requirements.

Clinical Laboratory Improvement Amendments of 1988, College of American Pathologists, and state regulations

Clinical Laboratory Improvement Amendments (CLIA)

As a clinical laboratory, we are required to hold certain federal and state licenses, certifications or permits to conduct our business. As to federal certifications, the Clinical Laboratory Improvement Amendments of 1988 (CLIA) establishes rigorous quality standards for all commercial laboratories that perform testing on human specimens for the purpose of providing information for the diagnosis, prevention, or treatment of disease or the assessment of the health or impairment of human beings. CLIA requires such laboratories to be certified by the federal government and mandates compliance with various operational, personnel, facility, administration, quality and proficiency testing requirements intended to ensure the accuracy, reliability and timeliness of patient test results. CLIA certification is also a prerequisite to be eligible to bill state and federal health care programs, as well as many commercial third-party payors, for laboratory testing services.

Our laboratories located in Menlo Park and Union City, California, are CLIA certified and must comply with all applicable CLIA regulations and standards. If a clinical laboratory is found to be out of compliance with CLIA standards, CMS may impose sanctions; suspend, limit or revoke the laboratory's CLIA certificate (and prohibit the owner, operator or laboratory director from owning, operating, or directing a laboratory for two or more years following license revocation); subject the laboratory to a directed plan of correction, on-site monitoring, civil monetary penalties, civil actions for injunctive relief, criminal penalties; or suspension or exclusion from the Medicare and Medicaid programs.

CLIA provides that a state may adopt laboratory licensure requirements and regulations that are more stringent than those under federal law and requires compliance with such laws and regulations. A number of states have implemented their own more stringent laboratory regulatory requirements. State laws may require the laboratory to obtain state licensure and/or laboratory personnel to meet certain qualifications and obtain professional licensure, specify certain quality control procedures or facility requirements, or prescribe record

maintenance requirements. Moreover, several states impose the same or similar state requirements on out-of-state laboratory testing specimens collected or received from, or test results reported back to, residents within that state. Therefore, we are required to meet certain laboratory licensing requirements for those states in which we offer services or from which we accept specimens, and that have adopted laboratory regulations beyond CLIA.

College of American Pathologists (CAP)

The College of American Pathologists (CAP) maintains a clinical laboratory accreditation program. While not required to operate a CLIA-certified laboratory, many private insurers require CAP accreditation as a condition to contracting with clinical laboratories to cover their tests. In addition, some countries outside the United States require CAP accreditation as a condition to permitting clinical laboratories to test samples taken from their citizens. Our two laboratories have each been accredited by CAP, which means that our laboratories have been certified as following CAP standards and guidelines in operating the laboratory facility and in performing tests that ensure the quality of our test results. In order to maintain CAP accreditation, we are subject to survey for compliance with CAP standards every two years. Failure to maintain CAP accreditation could have a material adverse effect on the sales of our tests and the results of our operations.

California laboratory licensing

In addition to federal certification requirements for laboratories under CLIA, we are required under California law to maintain a California state license for both our Menlo Park and Union City clinical laboratories, and to comply with California state laboratory laws and regulations, because our laboratories are located in California, and both facilities test specimens originating from California. Similar to the federal CLIA regulations, the California state laboratory laws and regulations establish standards for the operation of a clinical laboratory and performance of test services, including the education and experience requirements of the laboratory director and personnel (including requirements for documentation of competency), equipment validations, and quality management practices. All testing personnel must maintain a California state license or be supervised by licensed personnel, and our laboratory director must maintain an additional license issued by the California Department of Public Health (CDPH).

Clinical laboratories are subject to both routine and complaint-initiated on-site inspections by the state. If a clinical laboratory is found to be out of compliance with California laboratory standards, the CDPH may suspend, restrict or revoke the California state laboratory license to operate the clinical laboratory (and exclude persons or entities from owning, operating, or directing a laboratory for two years following license revocation), assess civil money penalties, and/or impose specific corrective action plans, among other sanctions. Clinical laboratories must also provide notice to CDPH of any changes in the ownership, directorship, name or location of the laboratory. Failure to provide such notification may result in revocation of the state license and sanctions under the CLIA certificate. Any revocation of a CLIA certificate or exclusion from participation in Medicare or Medicaid programs may also result in suspension of the California state laboratory license.

New York laboratory licensing

In order to test specimens in our laboratories originating from, and return test results to, New York State, both of our laboratories are required to obtain a New York state laboratory permit and comply with New York state laboratory laws and regulations. We maintain a valid permit in the state of New York for the prenatal molecular genetic testing services furnished by our Union City laboratory and we are in the application process to obtain a permit in the state of New York for the oncology molecular genetic testing services furnished by our Menlo Park laboratory.

The New York state laboratory laws, regulations and rules are equal to or more stringent than the CLIA regulations and establish standards for the operation of a clinical laboratory and performance of test services, including education and experience requirements of a laboratory director and personnel, physical requirements of a laboratory facility, equipment validations, and quality management practices. The laboratory director(s) must maintain a Certificate of Qualification issued by the New York State Department of Health (DOH) in the permitted test categories.

Under the New York state requirements, our clinical laboratory in Union City is, and our clinical laboratory in Menlo Park will be, subject to proficiency testing and on-site survey inspections conducted by the Clinical Laboratory Evaluation Program (CLEP) under the DOH. If a laboratory is found to be out of compliance with New York's CLEP standards, the DOH may suspend, limit, revoke or annul the New York laboratory permit, censure the holder of the license or assess civil money penalties. Statutory or regulatory noncompliance may result in a laboratory's operator, owners and/or laboratory director being found guilty of a misdemeanor under New York law. Clinical laboratories must also provide notice to the CLEP of any changes in ownership, directorship, name or location of the laboratory. Failure to provide such notification may result in revocation of the state license and sanctions under the CLIA certificate. Any revocation of a CLIA certificate or exclusion from participation in the Medicare or Medicaid programs may result in suspension of the New York laboratory permit.

The DOH also must approve each LDT before the test is offered to patients located in New York. Our Union City clinical laboratory has received approval from New York's CLEP to offer most of our prenatal tests that are performed in Union City. We are in the application process to obtain approval from New York's CLEP to offer our Northstar Select test that is performed in our Menlo Park laboratory.

Other state laboratory licensing laws

In addition to New York and California, certain other states require licensing of out-of-state laboratories under certain circumstances. We have obtained licenses in the states that we believe require us to do so based on our current operations, and believe we are in compliance with applicable state laboratory licensing laws, including Maryland, Pennsylvania, Rhode Island and the District of Columbia.

Potential sanctions for violation of state statutes and regulations can include significant monetary fines, the rejection of license applications, the suspension or loss of various licenses, certificates and authorizations, and in some cases criminal penalties, which could harm our business. CLIA does not preempt state laws that have established laboratory quality standards that are more stringent than federal law.

State genetic testing and privacy laws

Many states have implemented genetic testing and privacy laws imposing specific patient consent requirements and protecting test results. Under some state laws, we are prohibited from conducting genetic tests without appropriate documentation of patient (or parental/guardian) consent from the physician ordering the test. For example, Texas enacted legislation limiting use of genetic data applicable to companies offering direct-to-consumer (without health care provider involvement) genetic testing or collect, use, or otherwise analyze genetic data derived from individuals using such products or services, but exempt genetic data collected or generated by an entity subject to HIPAA. While we rely on physicians to obtain the required patient consent to perform genetic testing, the regulatory burden may be deemed to be our responsibility and such consents, or our compliance with applicable laws and regulations, could be challenged. Requirements of these laws and penalties for violations vary widely from state to state.

Federal and state health care laws

As a clinical laboratory, we are subject to certain federal and state laws and regulations relating to delivery of diagnostic healthcare. To meet the requirements of these laws and regulations, we have developed and operate a compliance program modeled after the general and specific guidance issued by the Office of Inspector General of the U.S. Department of Health and Human Services (HHS) and grounded in our company ethics and values. Although we believe that our compliance program and company culture support compliance with the various laws and regulations applicable to our business, we cannot ensure that government regulators will not identify potential deficiencies or violations in the conduct of our business activities. The Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 provides for an annual, automatic adjustment of civil monetary penalties authorized under the Social Security Act to account for inflation, which are published in the Federal Register annually.

Federal physician self-referral prohibition

We are subject to the federal physician self-referral prohibition (42 U.S.C. §1395nn), commonly known as the Stark Law, and to comparable state laws. Together these restrictions generally prohibit us from billing a patient or governmental or private payor for certain designated health services, including laboratory test services, when the physician ordering the service, or a member of such physician's immediate family, has a financial relationship with our company, such as an ownership or investment interest in or compensation arrangement with us, unless the relationship meets an applicable exception. Several Stark Law exceptions are relevant to many common financial relationships involving clinical laboratories and referring physicians, including: fair market value compensation for the provision of certain laboratory items or services; payments by physicians to a laboratory; space and equipment rental arrangements, and personal services arrangements that satisfy certain criteria. No clinical laboratory may submit claims to the Medicare or Medicaid programs for items or services furnished in violation of the Stark Law. These prohibitions apply regardless of any intent by the parties to induce or reward referrals or the reasons for the financial relationship and the referral. Penalties for violating the Stark Law include significant civil penalties, such as the return of funds received for all prohibited referrals, fines, civil monetary penalties, exclusion from the federal healthcare programs, integrity oversight and reporting obligations. Any person who presents or causes to be presented a claim to the Medicare or Medicaid programs in violation of the Stark Law may be subject to civil monetary penalties – up to \$30,868 in 2024 – per claim submission, an assessment of up to three times the amount claimed, and exclusion from participation in any federal health care program. A person who engages in a scheme to circumvent the Stark Law's referral prohibition may be fined – up to \$205,799 in 2024 – for each such arrangement or scheme. Claims submitted in violation of the Stark Law may not be paid by Medicare or Medicaid, and any person collecting any amounts with respect to any such prohibited claim is obligated to refund such amounts. In addition, knowing violations of the Stark Law may also serve as the basis for liability under the federal False Claims Act (FCA), which may result in additional civil penalties.

Federal Anti-Kickback law

The federal Anti-Kickback Statute (42 U.S.C. §1320a-7b), commonly known as AKS, makes it a felony for a person or entity, including a clinical laboratory, to knowingly and willfully offer, pay, solicit or receive any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce business that is reimbursable under any federal health care program. A person or entity does not need to have actual knowledge of the statute or specific intent to violate the AKS to have committed a violation if there is the requisite intent to commit the act. A violation of the federal Anti-Kickback Statute may result in imprisonment for up to ten years and/or criminal or civil fines – up to \$104,330 (or \$27,894 for each wrongful act) in 2024 – and exclusion from participation in federal health care programs. Claims submitted in violation of the federal

Anti-Kickback Statute may not be paid by a federal health care program, and any person collecting any amounts with respect to any such prohibited claim is obligated to refund such amounts. Although the AKS applies only to items and services reimbursable under any federal health care program, a number of states have passed statutes substantially similar to the AKS that apply to any payor. Penalties for violations of such state laws may include imprisonment and significant monetary penalties. Generally, courts have taken a broad interpretation of the scope of the AKS, holding that the statute may be violated if merely one purpose of a payment arrangement is to induce referrals or purchases. In addition to statutory exceptions to the AKS, regulations set forth in 42 C.F.R. § 1001.952 provide for a number of safe harbors for defined payment arrangements that will not be deemed improper remuneration. An arrangement must fully comply with each element of an applicable safe harbor to qualify for protection. Failure to meet the requirements of the safe harbor, however, does not render a payment arrangement per se illegal. Rather, the government must evaluate such arrangements on a case-by-case basis, taking into account all facts and circumstances. In addition, a knowing violation of the AKS constitutes a false or fraudulent claim under the FCA, which is discussed in greater detail below.

False Claims Act

The federal False Claims Act (31 U.S.C. §§ 3729-3733), commonly known as FCA, prohibits, among other things, a person from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment or approval and from making, using, or causing to be made or used, a false record or statement material to a false or fraudulent claim to secure payment or retain an overpayment by the federal government. Violation of the federal False Claims Act may result in fines of up to three times the actual damages sustained by the government, plus mandatory civil penalties – up to approximately \$28,619 in 2025 – per false claim or statement, imprisonment or both, reimbursement of the whistleblower's attorneys' fees, and possible exclusion from any federal health care programs. The penalties will continue to be adjusted, increasing each year to reflect changes in the inflation rate, pursuant to the 2015 Bipartisan Budget Act. In addition to actions initiated by the government itself, the statute authorizes actions to be brought on behalf of the federal government by a private party having knowledge of the alleged fraud. Because the complaint is initially filed under seal, the action may be pending for some time before the defendant is even aware of the action. If the government intervenes and is ultimately successful in obtaining redress in the matter or if the plaintiff succeeds in obtaining redress without the government's involvement, then the plaintiff will receive a percentage of the recovery. Finally, the Social Security Act includes its own provisions that prohibit the filing of false claims or submitting false statements in order to obtain payment. Several states have enacted comparable false claims laws which may be broader in scope and apply regardless of payor.

Civil Monetary Penalty Law

The Civil Monetary Penalty Law (42 U.S.C. § 1320a-7a), commonly known as CMPL, imposes penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal health care program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. In addition, a person who offers or provides to a Medicare or Medicaid beneficiary any remuneration, that the person knows or should know is likely to influence the beneficiary's selection of a particular provider, practitioner or supplier of Medicare or Medicaid payable items or services may be liable and subject to civil monetary penalties. A violation of the federal Civil Monetary Penalty statute may result in maximum civil fines – up to \$124,732 in 2024 – plus treble damages and exclusion from participation in any federal health care program.

Eliminating Kickbacks in Recovery Act

The Eliminating Kickbacks in Recovery Act of 2018 (18 U.S.C. §220), commonly known as EKRA, prohibits knowingly and willfully soliciting or receiving any remuneration (including any kickback, bribe or rebate) directly or indirectly, overtly or covertly, in cash or in kind, in return for referring a patient or patronage to a laboratory; or paying or offering any remuneration (including any kickback, bribe or rebate) directly or indirectly, overtly or covertly, in cash or in kind, to induce a referral of an individual to a laboratory or in exchange for an individual using the services of that laboratory. EKRA was enacted under the SUPPORT Act for the legislative purpose to help reduce opioid-related fraud and abuse. However, EKRA defines the term "laboratory" broadly and without reference to any connection to substance use disorder treatment. Moreover, EKRA applies to claims submitted to both government and commercial third-party payors. Violation of EKRA carries potential penalties of up to \$200,000 in fines and imprisonment of up to ten years for each occurrence, and potential exclusion from participation in any federal health care program. The law includes a limited number of exceptions, some of which closely align with corresponding AKS safe harbors, and others that materially differ. Currently, there is no regulation interpreting or implementing EKRA, nor any guidance released by any federal agency regarding the scope of EKRA. The only case law issued to date involves decisions interpreting the EKRA as it applies to compensation of laboratory sales personnel hired as independent contractors, and the courts differ on interpretation and application of the law. These decisions are currently on appeal in the federal court of appeals. We cannot assure you that our relationships with physicians, hospitals, customers, or sales personnel will not be subject to scrutiny or will survive a challenge under EKRA. If imposed for any reason, sanctions under EKRA could have a negative effect on our business.

Because we operate a laboratory facility located in California and licensed by California's DHS, California law is applicable to our business arrangements. California's state anti-kickback statutes, Business and Professions Code Section 650 (which applies to all categories of payors) and Insurance Code Section 754, and its Medi-Cal anti-kickback statute, Welfare and Institutions Code Section 14107.2, are analogous to, and have been interpreted by the California Attorney General and California courts in substantially the same way as the federal government and the courts have interpreted, the federal Anti-Kickback Statute. A violation of Section 650 is punishable by up to one year of imprisonment, a fine up to \$50,000, or both imprisonment and a fine. A violation of Section 14107.2 is punishable by imprisonment and fines of up to \$10,000. The California Insurance Code includes similar prohibitions against any consideration for the referral or procurement of patients if a claim is submitted to a commercial insurer, CA Ins. Code § 750, which is punishable by criminal penalties mirroring those that apply to violations of Business and Professions Code Section 650.

Because each of our laboratories holds a New York CLEP permit, we must comply with New York state laboratory statutes and regulations, which include anti-kickback provisions, Public Health Law Section 587, and Medicaid anti-kickback provisions, 18 NYCRR Section 515.2, related to laboratory services. The New York DOH may suspend, limit, revoke or annul the New York laboratory permit or otherwise discipline the permit holder for a violation.

Data Privacy & Security

We are, or may become, subject to numerous federal, state, local and foreign laws, regulations, standards, and guidance regarding data privacy and security.

The federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) created federal criminal statutes relating to privacy of personal data. HIPAA imposes privacy, security and breach reporting obligations with respect to individually identifiable health information upon "covered entities" (health plans, health care clearinghouses and certain health care providers), and their respective business associates, individuals or entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HIPAA mandates the reporting of certain breaches of health information to HHS, affected individuals and if the breach is large enough, the media. Entities that are found to be in violation of HIPAA, including as the result of a breach of unsecured protected health information (PHI), a complaint about privacy practices or an audit by HHS, may be subject to significant civil, criminal and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance.

HIPAA also prohibits knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Like the AKS, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation.

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH) and their respective implementing regulations, impose obligations on "covered entities," including certain healthcare providers, health plans, and healthcare clearinghouses, as well as their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. Additionally, HITECH created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in U.S. federal courts to enforce HIPAA and seek attorneys' fees and costs associated with pursuing federal civil actions.

Even when HIPAA does not apply, failing to take appropriate steps to keep consumers' personal information secure may constitute unfair acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act, 15 U.S.C § 45(a). The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Personally identifiable health information is considered sensitive data that merits stronger safeguards. The FTC's guidance for appropriately securing consumers' personal information is similar to what is required by the HIPAA Security Rule. In addition, certain state laws govern the privacy and security of personal information, including health information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Many states are considering similar laws. Failure or perceived failure to comply with these laws, where applicable, can result in material adverse effects to our business, including the imposition of significant civil and/or criminal penalties and private litigation.

As a health care provider, we are also subject to Section 4004 of the 21st Century Cures Act, or Cures Act, and regulations promulgated by HHS related to patient access to electronic PHI, or EHI, to promote interoperability and to ensure the access, exchange, or use of EHI.

Various U.S. states have implemented similar restrictive requirements regulating the use and disclosure of health information and other personal information that are not necessarily preempted by HIPAA or that regulate different information than HIPAA. The California Consumer Privacy Act (CCPA), which went into effect January 1, 2020, and California Privacy Rights Act of 2020 (CPRA), which went into effect on January 1, 2023,

which created additional obligations with respect to certain data relating to consumers, significantly expands the CCPA, is an example of the increasingly stringent privacy laws at the state level in the United States. The CCPA also created a private right of action with statutory damages for certain data breaches, thereby potentially increasing risks associated with a data breach. However, the CCPA and CPRA include an exemption for HIPAA covered entities such as our laboratory. The California Confidentiality of Medical Information Act, which protects the confidentiality of individually identifiable medical information obtained by health care providers and their contractors, is much broader than HIPAA and the data protected is also broader than HIPAA.

In addition, numerous other states' legislatures have passed or are considering similar laws that will require ongoing compliance efforts and investment. For example, Virginia passed the Virginia Consumer Data Protection Act, and Colorado passed the Colorado Privacy Act, both of which differ from the CPRA and became effective in 2023 and the Texas Data Privacy and Security Act became effective in 2024. These state privacy laws dictate how we can collect, use, store, sell, share, analyze or process personal identifying information and/or consumer or health data received or generated by our business operations.

Outside the United States, there are an increasing number of laws and regulations governing the collection, use and processing of personal data. For example, the European Union's General Data Protection Regulation (EU GDPR) applies to any company established in the European Economic Area (EEA), and to companies established outside the EEA that process personal information in connection with the offering of goods or services to data subjects in the EEA or the monitoring of the behavior of data subjects in the EEA. These regulations are often more restrictive than those in the United States and may restrict transfers of personal data from the EEA to the United States and other countries unless certain requirements are met. The EU GDPR provides that EU member states may make their own further laws and regulations limiting the processing of genetic, biometric or health data, which could limit our ability to use and share personal data or could cause our costs to increase, and harm our business and financial condition. Further, the United Kingdom's decision to leave the European Union has created uncertainty with regard to data protection regulation in the United Kingdom. As of January 1, 2021, we are also subject to the UK General Data Protection Regulation and UK Data Protection Act of 2018, which retains the GDPR in substantially similar form in the United Kingdom's national law. Failure to comply with any of these obligations could expose us to material adverse effects, including significant fines.

It is possible that state, federal (including legislative and executive branch initiatives), and foreign healthcare reform measures may be adopted in the future.

Employees & Human Capital

Our culture and values

BillionToOne was founded on the mission of removing the fear of the unknown by providing molecular diagnostics that are accurate, fast, and accessible. To fulfill our mission, we are dedicated to fostering a high-performance culture where every individual, regardless of level or position, feels empowered to solve significant problems and make a notable impact. Our vision is to challenge the status quo that makes healthcare opaque and financially out of reach for many. We are focused on building a corporate culture that nurtures innovation, creative problem solving, and a strong sense of purpose with patient and caregiver mindsets at the forefront. Our core values are:

- **Patient-Centered.** We place patients at the forefront of everything we do. We expect all team members to make business decisions guided by the best interest of patients, the company and the highest ethical standards.
- **Creative and Innovative.** We create a workplace where all team members are enabled and encouraged to bring new ideas and new ways of thinking to solve significant problems.
- **Profoundly Impactful.** We seek to revolutionize the molecular diagnostics industry by empowering patients with timely knowledge.
- **Internally Motivated and Passionate.** We seek to revolutionize the molecular diagnostics industry by empowering patients with timely knowledge.
- **Kindly Inquisitive and Collaborative.** We value an environment where employees are empowered to explore new ideas and work together constructively despite our differences.
- **Rational and Deliberate.** We expect all team members to make business decisions with thought and purpose. The choices we make should be guided by the best interests of our company, our patients, and the highest ethical standards.

Talent development, compensation and retention

We focus on attracting, retaining, and cultivating highly-talented employees, with the goal of hiring the top 1% from the application pool. Due to our highly technical and competitive industry, we believe recruiting and retaining highly-talented personnel is key to our ability to execute our business strategy and maintain competitive margins.

We offer our employees competitive pay, equity compensation, a retirement savings package with company matching, and other benefits such as four months of paid time off at full salary for parental or family leave, as well as incentive plans. The principal purposes of these plans are to attract, retain and reward personnel through the granting of stock-based and cash-based compensation awards, in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

Our values-based culture and our employees are a critical component of our success. We strive to create a supportive and professional environment for our employees. We expend considerable management time and attention, and financial resources, to attracting, retaining, and motivating exceptional individuals at our company.

As of June 30, 2025, we had 620 employees, all of which were full-time employees. Of these employees, 117 were engaged in research and development activities and the remaining employees are engaged in laboratory operations, sales or administrative activities. None of our employees are represented by a labor union or covered by collective bargaining agreements, and we believe our relationship with our employees is good.

Human capital resources

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards and cash-based performance bonus awards.

Laboratory and R&D Facilities

Our headquarters is located in Menlo Park, California, where we lease approximately 36,000 square feet of office and laboratory space pursuant to a lease that expires in February 2031. We also lease approximately 90,000 square feet of office and laboratory space in Union City, California, pursuant to a lease that expires in June 2033. We have an option to extend this lease for an additional five years.

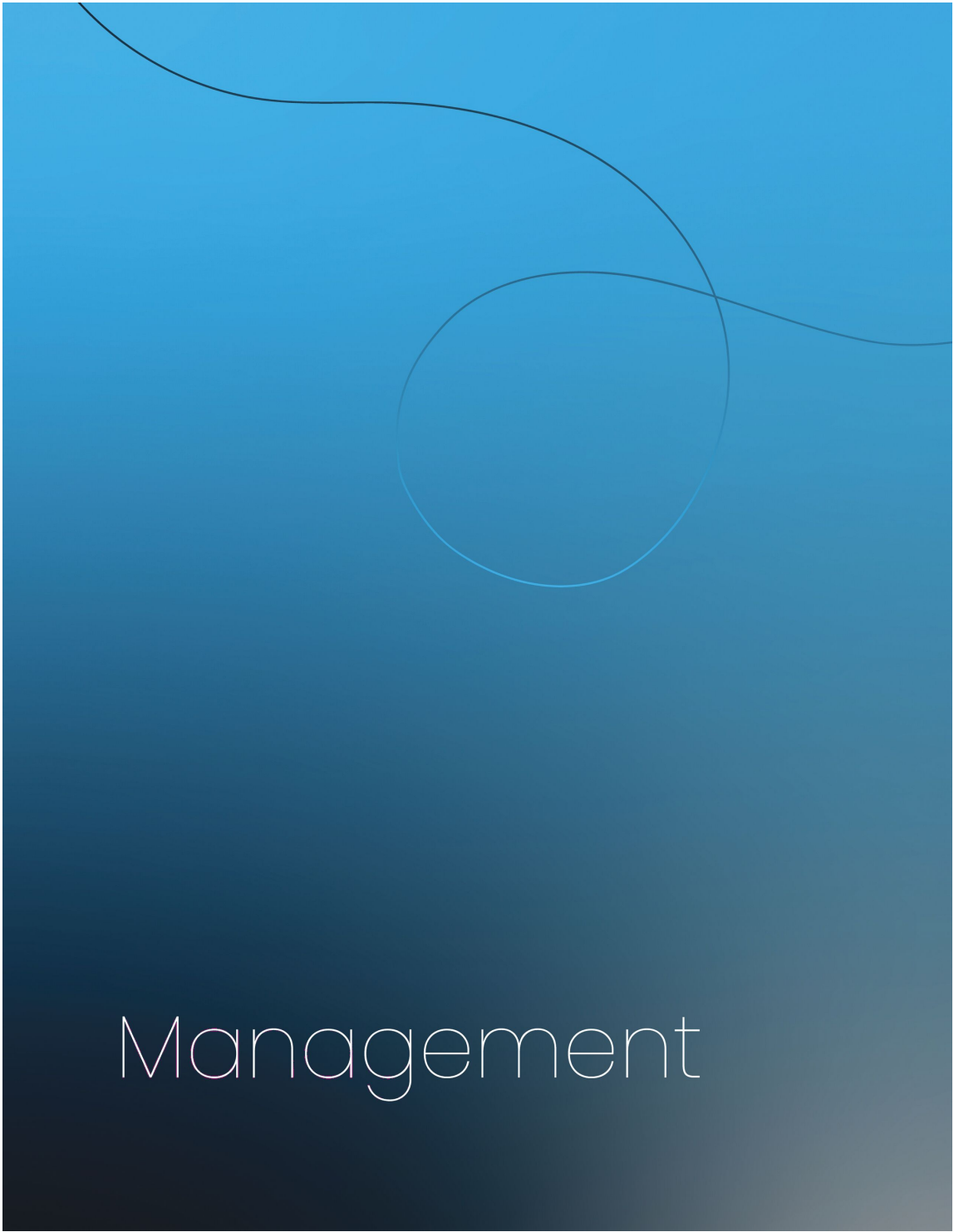
To support our planned growth, we have also entered into a lease for a new facility with 220,000 square feet of office and custom laboratory space located in Austin, Texas, expected to commence on or before December 31, 2026, and expiring in October 2042, with an option to extend for an additional seven years. Once the facility is fully utilized, we expect our potential testing capacity to be nearly triple our current capabilities. We also have commercial leases for patient service centers in various cities, for an aggregate of approximately 8,000 square feet as of June 30, 2025. We expect to enter into additional leases for patient service centers in the ordinary course.

We believe that our current facilities are adequate to meet our current needs and that, should it be needed, suitable additional or alternative space will be available to accommodate our operations.

Legal Proceedings

From time to time, we are involved in legal claims, regulatory investigations, inquiries, proceedings and other legal matters arising from the normal course of business and typical for our industry. Although no formal legal proceeding has been instituted, from time to time, we receive requests from governmental agencies, or third parties working on their behalf, for documents and information related to our products. We do not view any of the legal claims, regulatory investigations, inquiries, proceedings and other legal matters that we are currently subject to as being material to our business; however, it is difficult to assess the outcome of these matters, and we may not prevail in any current or future proceedings or litigation.

Litigation or any other legal, regulatory or administrative proceedings, regardless of the outcome, can result in substantial cost and diversion of our resources, including our management's time and attention, and there can be no assurances that favorable final outcomes will be obtained. For additional information on risks relating to legal proceedings, see the section titled "Risk Factors—Risks Related to Our Business and Strategy—We are involved in legal proceedings, regulatory investigations and inquiries and other legal matters, which may have an adverse effect on our business, financial condition, results of operations and prospects."



Management

Executive officers and directors

The following table sets forth certain information with respect to our executive officers and directors, including their ages as of October 1, 2025:

Name	Age	Position(s)
Executive officers and employee directors		
Oguzhan Atay, PhD	37	Chief Executive Officer and Chair of the Board
David Tsao, PhD	36	President, Chief Technology Officer and Director
Ross Taylor	62	Chief Financial Officer
Shan Riku Sakakibara	42	Chief Product Officer
Thomas Lynch	58	General Counsel, Chief Compliance Officer and Secretary
Nancy Johnson	62	Senior Vice President of Sales and Commercial Operations
John ten Bosch, PhD	50	Senior Vice President of Laboratory Operations
John Lister	50	Chief Administrative Officer
Non-employee directors		
Thomas Bremner ⁽¹⁾⁽²⁾	43	Director
Firat Ileri ⁽²⁾⁽³⁾	38	Director
Krishna Swaroop Kolluri ⁽²⁾	61	Director
Akshay Rai ⁽¹⁾	41	Director

(1) Member of the audit committee immediately after the effectiveness of the registration statement of which this prospectus forms a part.
(2) Member of the compensation committee.
(3) Lead independent director.

Executive officers and employee directors

Oguzhan Atay is our Chief Executive Officer and Co-Founder, having led the Company since its inception in 2016, and also serves as the Chair of our Board of Directors. Dr. Atay received his PhD in Biology from Stanford University, where his work was published on the cover of Cell Systems. He graduated summa cum laude and Phi Beta Kappa from Princeton University with a bachelor's in molecular biology and minors in physics, computer science, and applied mathematics. We believe that Dr. Atay is qualified to serve on our Board of Directors because of his experience as our co-founder and Chief Executive Officer, his co-development of our molecular counting platform, and his extensive knowledge of the precision diagnostics industry.

David Tsao is our President, Chief Technology Officer and Co-Founder, having been with the Company since its inception in 2016, and also serves as a member of our Board of Directors. Dr. Tsao oversees all technology developments at BillionToOne. He received a PhD in bioengineering from Rice University, where he was awarded a nanobiology training fellowship. He graduated cum laude from Princeton University with a bachelor's in physics and minors in biophysics and engineering management systems. While at Princeton, he

was twice awarded the Shenstone Prize in physics. We believe that Dr. Tsao is qualified to serve on our Board of Directors because of his co-development of our molecular counting platform, extensive technical expertise in molecular biology, and deep knowledge of the precision diagnostics industry.

Ross Taylor has served as our Chief Financial Officer since January 2024, bringing three decades of financial leadership to the Company. Prior to joining BillionToOne, Mr. Taylor was Chief Financial Officer for Codexis, Inc., a publicly traded enzyme engineering company, from 2019 to February 2023. Previously, he served as Chief Financial Officer of Abaxis, Inc., a publicly traded medical technology company, acquired by Zoetis for \$2.0 billion. At Abaxis, he first held the role of Vice President of Business Development & Investor Relations from 2014 to 2015, before being appointed CFO from August 2015 through the company's successful acquisition in July 2018. Early in his career, Mr. Taylor spent more than a decade as an equity research analyst at leading Wall Street firms including CL King & Associates, UBS, Smith Barney, and CJ Lawrence, providing deep expertise in capital markets and strategic financial planning. Mr. Taylor holds an MBA from Columbia Business School and a B.A. in economics from Duke University.

Shan Riku Sakakibara joined BillionToOne in 2019 as one of our first employees and currently serves as our Chief Product Officer. Prior to her role as Chief Product Officer, Ms. Riku Sakakibara served in other executive positions, most recently as Senior Vice President of Product. Ms. Riku Sakakibara oversees both clinical and software product management, marketing, translational research, and clinical and medical affairs at BillionToOne. Ms. Riku Sakakibara has over 15 years of experience in launching and managing a wide range of products from software products to precision diagnostics clinical assays. Previously, Ms. Riku Sakakibara served as a Senior Product Manager and Portfolio Strategy Manager at Natera, Inc. from 2015 to 2017. Ms. Riku Sakakibara started her career at McKinsey & Co., where she worked with Fortune 100 companies. Ms. Riku Sakakibara graduated with a B.S. in chemistry from Massachusetts Institute of Technology, holds an MBA from Stanford University, and an MPA/ID from Harvard University.

Thomas Lynch joined BillionToOne as our General Counsel in October 2022. Mr. Lynch brings over two decades of experience leading legal teams. Prior to joining us, he served as Chief Compliance Officer, Advanced Healthcare Solutions at Fortive Corporation, a publicly traded provider of connected workflow solutions technologies, from April 2021 to October 2022. From 2018 to April 2021, Mr. Lynch served as the Chief Legal Officer at Nuwellis, a publicly traded medical device company. From 2015 to 2018, Mr. Lynch served as the Chief Administrative Officer and General Counsel at Orexigen Therapeutics, a publicly traded biotechnology company, which filed a voluntary petition for Chapter 11 bankruptcy in March 2018. In June 2018, Mr. Lynch was appointed as president of Orexigen Therapeutics to manage its restructuring. Mr. Lynch also held various senior legal and compliance positions at Boston Scientific Corporation and Novartis Pharma, earlier in his career. Mr. Lynch began his legal career at Dorsey & Whitney LLP. Mr. Lynch earned a B.A. in history from Stanford University, a JD from Boston College Law School and an MA in teaching from the University of St. Thomas, where he serves as an Adjunct Professor of Law.

Nancy Johnson joined BillionToOne in April 2019, even prior to the initial commercialization of our products, and has built both our prenatal and oncology commercial organizations as our Senior Vice President of Sales and Commercial Operations. Ms. Johnson brings more than 20 years of diagnostic sales leadership experience in both start-up and large-scale sales organizations. Most recently, Ms. Johnson played a key role in commercial strategy and execution at Foundation Medicine, a publicly traded molecular information company, that was acquired by Roche during her tenure. Prior to Foundation Medicine, she held several commercial leadership positions at various molecular diagnostic companies. Ms. Johnson started her career as a board-certified Medical Technologist and earned a B.S. in medical technology from Creighton University.

John ten Bosch joined BillionToOne in September 2020 as our Laboratory Director and has since been promoted multiple times, most recently to the role of Senior Vice President of Laboratory Operations. Dr. ten Bosch brings

over 15 years of experience leading high-complexity CLIA laboratories, with expertise in regulatory oversight, clinical laboratory operations, and test development. Prior to joining BillionToOne, he worked at Kaiser Permanente from 2012 to 2020, where he served as both Laboratory Director and Director of Quality for the Molecular Pathology and Cytogenetics laboratories. Dr. ten Bosch graduated magna cum laude from the University of California, Davis with a B.S. in Genetics. He earned his Ph.D. in Molecular and Cell Biology from the University of California, Berkeley, and completed postdoctoral fellowships at Stanford and UCLA.

John Lister joined BillionToOne in July 2025 as our Chief Administrative Officer. Prior to joining BillionToOne, Mr. Lister served as Chief Operating Officer of the Tidepool Project, a diabetes software company, from June 2022 through June 2025. From January 2020 through January 2023, Mr. Lister provided strategic commercial, corporate finance and legal advice to companies in the healthcare space, including Tandem Diabetes, Zoe Global, WaveForm Diabetes and Candid Dental. Previously, Mr. Lister worked for Dexcom, Inc., a publicly-traded producer of continuous glucose monitoring systems, from 2008 to 2019. Mr Lister served in various executive positions at Dexcom, including as General Counsel & Head of Human Resources from 2008 to 2015, and as General Manager for Dexcom's International business from 2015 to 2019. Mr. Lister began his career as an attorney at Fenwick & West LLP. Mr. Lister earned a B.A. in government and literature from Claremont McKenna College and a JD from University of San Francisco Law School.

Non-employee directors

Thomas Bremner has been a member of our Board of Directors since March 2022. Mr. Bremner is currently a partner of the Growth Equity team of Adams Street Partners, LLC, a global private equity investment management firm, and has been employed by Adams Street since 2013. Mr. Bremner's experience with the growth and development of healthcare companies provides our Board of Directors with a unique perspective on our long-term strategy. Mr. Bremner holds a B.S. in finance from the University of Dayton and an MBA from University of Chicago Booth School of Business. We believe that Mr. Bremner is qualified to serve on our Board of Directors because of his years of experience as an advisor to a wide range of healthcare companies.

Krishna Swaroop Kolluri has been a member of our Board of Directors since 2019. Mr. Kolluri has over 30 years of experience as a successful serial entrepreneur, CEO, senior operating executive, and venture capitalist. Mr. Kolluri is a founding partner of Neotribe Ventures, an investment firm founded in 2017 that invests in breakthrough technology companies. Prior founding Neotribe, Mr. Kolluri was the General Partner of New Enterprise Associates from 2006 to 2016, focusing on venture financing with early stage companies. Mr. Kolluri received a B.Tech. in Mechanical Engineering from the Indian Institute of Technology Madras, India, and his Masters in Industrial Engineering from the University at Buffalo. We believe that Mr. Kolluri is qualified to serve on our Board of Directors because of his extensive executive management and venture capital experience.

Firat Ileri has been a member of our Board of Directors since 2019. Mr. Ileri is currently the managing partner of Hummingbird Ventures a global venture capital firm with over \$1 billion in assets under management, which he joined in 2012. Mr. Ileri earned his B.S. in electrical engineering and computer science and in management science, and a Masters of Engineering in electrical engineering and computer science, all from Massachusetts Institute of Technology. We believe that Mr. Ileri is qualified to serve on our Board of Directors because of his venture capital experience in the biopharmaceutical and technology industries.

Akshay Rai has been a member of our Board of Directors since May 2024. Mr. Rai is a professional investor with over 18 years of experience investing in public and private equities, with a focus on healthcare and life sciences. He currently leads U.S. healthcare investments for Premji Invest, investing in growth stage private companies. Mr. Rai has been with Premji Invest since July 2010 and helped establish the U.S. healthcare investments practice for the firm, which includes investments in companies like Moderna, Devoted Health and Iora Health, among others. Prior to joining Premji Invest, Mr. Rai was part of the equity research team at Citigroup in India.

Mr. Rai holds a bachelor of engineering degree from National Institute of Technology Karnataka and an MBA from the Indian Institute of Management Bangalore. We believe that Mr. Rai is qualified to serve on our Board of Directors because of his investment experience with both private and public healthcare companies.

Family relationships

There are no family relationships among any of our executive officers or directors.

Board composition

After the completion of this offering, the number of directors will be fixed by our Board of Directors, subject to the terms of our Post-IPO Certificate of Incorporation and Post-IPO Bylaws as each are in effect after this offering. Each of our current directors will continue to serve as a director until the election and qualification of his or her successor, or until his or her earlier death, resignation, or removal. In accordance with the terms of our Post-IPO Certificate of Incorporation and Post-IPO Bylaws that will be effective immediately prior to the completion of this offering, our Board will be divided into three classes, Class I, Class II, and Class III, with members of each class serving staggered three-year terms. Effective immediately prior to the completion of this offering, our Board will be divided into the following classes:

- Class I, which will consist of Oguzhan Atay and Akshay Rai, whose terms will expire at our first annual meeting of stockholders to be held after the completion of this offering;
- Class II, which will consist of David Tsao and Thomas Bremner, whose terms will expire at our second annual meeting of stockholders to be held after the completion of this offering; and
- Class III, which will consist of Firat Ileri and Krishna Swaroop Kolluri, whose terms will expire at our third annual meeting of stockholders to be held after the completion of this offering.

At each annual meeting of stockholders to be held after the initial classification, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following their election and until their successors are duly elected and qualified. The authorized size of our Board is currently six members and may be changed only by resolution by a majority of the Board. We expect that additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of the Board may have the effect of delaying or preventing changes in our control or management. Once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, no member of our Board may be removed from office by our stockholders except for cause by the affirmative vote of two-thirds of the voting power of our then-outstanding capital stock.

Our directors were elected to and currently serve on the Board of Directors pursuant to the Voting Agreement. See the section titled “Certain relationships and related party transactions—Voting agreement.” This agreement will terminate upon the completion of this offering, after which there will be no further contractual obligations regarding the election of our directors. Following this offering, pursuant to the listing standards of Nasdaq, our director nominees must either be selected, or recommended for the Board’s selection, by independent directors constituting a majority of the Board’s independent directors in a vote in which only independent directors participate.

Director independence

Our Board of Directors has undertaken a review of the independence of the directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise

independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning such director's background, employment and affiliations, including family relationships, our Board of Directors determined that Thomas Bremner, Krishna Swaroop Kolluri, Firat Ileri, and Akshay Rai representing four of our six directors, are "independent directors" as defined under current rules and regulations of the SEC and the listing standards of the Nasdaq Global Select Market (Nasdaq). In making these determinations, our Board considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances that our Board deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director and the transactions involving them described in "Certain relationships and related party transactions."

Board leadership structure

Our Board of Directors is currently chaired by our Chief Executive Officer and Co-Founder, Dr. Atay. Our Board of Directors does not have a policy that requires the roles of Chief Executive Officer and Chairman of the Board to be separate. The Board believes that Mr. Atay's service as both Chief Executive Officer and Chairman of the Board is in the best interest of us and our stockholders.

Our corporate governance guidelines, which will be in effect upon the effectiveness of the registration statement of which this prospectus forms a part, provide that, if the chairperson of our Board of Directors is not an independent director, the Board will appoint an independent director as a lead independent director. Firat Ileri currently serves as our lead independent director. The lead independent director's responsibilities include: facilitating communication between management, the independent directors, and the Chairman of the Board; actively participating in setting agendas for Board meetings; presiding at executive sessions of the Board; and performing such other duties as specified by the Board. Our corporate governance guidelines further provide that the Board periodically reviews its leadership structure and may separate or combine the roles of the Chairman of the Board and Chief Executive Officer when and if it deems it advisable and in the best interests of the Company and its stockholders to do so.

Role of the board in risk oversight

One of the key functions of our Board of Directors is informed oversight of our risk management process. In particular, our Board of Directors is responsible for monitoring and assessing strategic risk exposure. Our executive officers are responsible for the day-to-day management of the material risks we face. Our Board of Directors administers its oversight function directly as a whole. Our Board of Directors will also administer its oversight through various standing committees that address risks inherent in their respective areas of oversight. For example, our audit committee, which will be constituted prior to the completion of this offering, will be responsible for overseeing the management of risks associated with our financial reporting, accounting and auditing matters; our compensation committee oversees the management of risks associated with our compensation policies and programs; and our full Board will oversee the management of risks associated with director independence, conflicts of interest, composition and organization of our Board of Directors and director succession planning.

Board committees

Our Board of Directors has established a compensation committee, and intends to establish an audit committee in connection with this offering, each of which is expected to have the composition and responsibilities described below upon the effectiveness of the registration statement of which this prospectus forms a part. As permitted by the listing standards of Nasdaq, the independent directors on our Board will fulfill the responsibilities of a nominating and corporate governance committee. From time to time, our Board may establish other committees to facilitate the management of our business.

Audit committee

Upon the effectiveness of the registration statement of which this prospectus forms a part, our audit committee will consist of Akshay Rai and Thomas Bremner, with Mr. Bremner serving as the chairperson, and each of whom our Board of Directors will determine meets the independence requirements for audit committee members under the listing standards of Nasdaq and Rule 10A-3 of the Exchange Act, and the financial literacy requirements under the rules and regulations of Nasdaq and the SEC. In addition, our Board of Directors has determined that Mr. Bremner is an audit committee "financial expert" as defined by Item 407(d) of Regulation S-K under the Securities Act. Pursuant to Nasdaq's phase-in rules for newly listed companies, we have one year from the date on which we are first listed on Nasdaq for our audit committee to be made up of three independent directors. We intend to appoint an additional independent director to our audit committee within the applicable time period. Our audit committee will, among other things:

- select and oversee the independent registered public accounting firm;
- review and resolve any disagreements arising between management and the independent registered public accounting firm;
- review and approve audit and any non-audit services provided by the independent registered public accounting firm;
- help oversee our internal controls and disclosure controls and procedures;
- develop procedures for employees to anonymously submit accounting or audit concerns;
- review policies on risk assessment and risk management; and
- review related party transactions.

Our audit committee will operate under a written charter that satisfies the applicable rules of the SEC and the listing standards of Nasdaq.

Compensation committee

Our compensation committee consists of Thomas Bremner, Krishna Swaroop Kolluri and Firat Ileri, with Mr. Kolluri serving as the chairperson, and each of whom our Board of Directors will determine is a non-employee member of our Board of Directors as defined in Rule 16b-3 under the Exchange Act. The composition of our compensation committee will meet the requirements for independence under the current listing standards of Nasdaq and current SEC rules and regulations. Our compensation committee will, among other things:

- review and approve (or recommend to independent members of our Board of Directors) executive officer compensatory arrangements and succession plans, and ensure compliance with all legal and regulatory requirements;
- review and recommend to our Board of Directors the compensation to be paid to non-employee members of the Board of Directors;
- review, approve, and administer our employee benefit and equity incentive plans;
- administer our policy for the recovery of erroneously awarded compensation;
- review and establish general compensation and benefits policies, as well as our overall compensation philosophy; and
- retain compensation consultants and other advisors.

Our compensation committee will operate under a written charter that satisfies the applicable rules of the SEC and the listing standards of Nasdaq.

Code of conduct

Concurrently with this offering, we intend to adopt an amended and restated Code of Conduct applicable to all of our employees, executive officers, and directors. Following the completion of this offering, the Code of Conduct will be available on our website at <https://billiontoone.com/>. We expect that any amendments to the Code of Conduct, or any waivers of its requirements for directors and officers, will be disclosed on our website as required by applicable law or the listing standards of Nasdaq. The inclusion of our website address in this prospectus does not include or incorporate by reference into this prospectus the information on or accessible through our website.

Compensation committee interlocks and insider participation

None of our executive officers currently serves, or in the past year has served, as a member of the Board of Directors or compensation committee of any entity that has one or more executive officers serving on our Board of Directors or compensation committee. None of the members of our compensation committee is an officer or employee of our company, nor have they ever been an officer or employee of our company.

Director compensation

Drs. Atay and Tsao serve as our directors as well as our Chief Executive Officer and Chief Technology Officer, respectively. Neither of them has received any compensation for their service as directors for the year ended December 31, 2024. The compensation received by each of Drs. Atay and Tsao as employees is set forth in the section titled "Executive compensation—Summary compensation table."

During the year ended December 31, 2024, we did not pay any fees to, make any equity awards or non-equity awards to, or pay any other compensation to the non-employee members of our Board of Directors, other than reimbursement of direct expenses incurred in connection with attending meetings of our Board of Directors or its committees.

Non-employee director compensation policy

We intend to adopt a non-employee director compensation policy, pursuant to which our non-employee directors will be eligible to receive compensation for service on our Board of Directors and committees of our Board of Directors, to be effective following the completion of this offering.

Executive compensation

Our named executive officers, which consist of our principal executive officer and our two other most highly compensated officers for our fiscal year ended December 31, 2024, are:

- Oguzhan Atay, PhD, Chief Executive Officer;
- Ross Taylor, Chief Financial Officer; and
- Nancy Johnson, Senior Vice President of Sales and Commercial Operations.

Summary compensation table

The following table shows information regarding the compensation of our named executive officers for the fiscal year ended December 31, 2024.

Name and principal position	Year	Salary (\$)	Bonus (\$) ⁽¹⁾	Option awards (\$) ⁽²⁾	Non-equity incentive plan compensation (\$) ⁽³⁾	All other compensation (\$) ⁽⁴⁾	Total (\$)
Oguzhan Atay, PhD Chief Executive Officer	2024	303,739	55,722	—	—	11,603	371,064
Ross Taylor Chief Financial Officer	2024	296,969	148,899	1,611,750	—	4,829	2,063,447
Nancy Johnson Senior Vice President of Sales and Commercial Operations	2024	256,764	—	234,400	129,383	20,603	641,150

- (1) The amount in this column reported for Dr. Atay represents a cash incentive bonus earned with respect to fiscal year 2024 that was paid in 2025. The amount in this column reported for Mr. Taylor represents (i) \$100,000 in a sign-on bonus paid to Mr. Taylor in connection with commencement of employment with us and (ii) a cash incentive bonus of \$48,899 earned with respect to fiscal year 2024 that was paid in 2025.
- (2) The amounts in this column represent the aggregate grant date fair value of option awards granted to the named executive officer, computed in accordance with FASB ASC Topic No. 718. See Note 10 of the notes to our audited financial statements included elsewhere in this prospectus for a discussion of the assumptions made by us in determining the grant date fair value of our equity awards.
- (3) This amount relates to commissions earned under a sales commission arrangement established for Ms. Johnson. Pursuant to this arrangement, Ms. Johnson was eligible to earn commissions for each fiscal quarter based upon her percentage achievement of specific sales targets established for each fiscal quarter.
- (4) The amounts in this column reported for Dr. Atay and Mr. Taylor represent matching contributions under our 401(k) plan. The amount in this column reported for Ms. Johnson represents: (i) \$9,000 in car allowance for use of her personal vehicle and (ii) \$11,602 in matching contributions under our 401(k) plan.

Narrative explanation of compensation arrangements with our named executive officers

Base salaries and annual incentive opportunities

We pay each of our executives, including our named executive officers, a base salary to compensate them for services rendered to our company. As of December 31, 2024, our named executive officers base salaries were as follows: \$306,000 for Dr. Atay, \$306,000 for Mr. Taylor, and \$270,300 for Ms. Johnson. In addition, each of our named executive officers has previously become eligible to be considered for a discretionary annual incentive bonus, subject to their continued employment through the date that bonuses are paid. Our Board of Directors has approved an increase of each named executive officer's base salary to \$700,000 for Dr. Atay, \$500,000 for Mr. Taylor and \$400,000 for Ms. Johnson, and set the target amount of each named executive officer's annual incentive bonus opportunity to an amount equal to 100% for Dr. Atay, 50% for Mr. Taylor and 30% for Ms. Johnson, in each case effective as of the closing date of this offering.

Equity compensation

Historically, the equity compensation granted to our named executive officers has consisted of stock options. For a description of the stock options granted to our named executive officers in fiscal year 2024, please see the “Outstanding equity awards at 2024 fiscal year-end” table below.

Employee benefits and perquisites

Our named executive officers are eligible to participate in our health and welfare plans to the same extent as are full-time employees generally. We generally do not provide our named executive officers with perquisites or other personal benefits.

Retirement benefits

We have established a 401(k) tax-deferred savings plan, which permits participants, including our named executive officers, to make contributions by salary deduction pursuant to Section 401(k) of the Internal Revenue Code. Our named executive officers are eligible to participate in the 401(k) plan on the same terms as other full-time employees, including a 100% company matching contribution of the first 3% of an employee's contribution, and then 50% of the next 2% of an employee's contribution.

Employment arrangements with named executive officers

We previously entered into an employment offer letter agreement with each named executive officer that sets forth the initial terms and conditions of the named executive officer's employment, including initial base salary, equity grants and employee benefits eligibility. In addition, prior to this offering, our Board of Directors has approved the Severance Plan (as defined below) pursuant to which our named executive officers will be participants and will each be eligible to receive certain severance and change in control benefits, as described in “—Severance and change in control benefits” below. The Severance Plan will supersede and replace any existing employment or severance agreement between the Company and our named executive officers.

Outstanding equity awards at 2024 fiscal year-end

The following table sets forth information regarding each unexercised option held by each of our named executive officers as of December 31, 2024.

The vesting schedule applicable to each outstanding award is described in the footnotes to the table below.

Unless otherwise noted, all of the outstanding equity awards reported in the following table were granted under our 2018 Plan.

Name	Number of securities underlying unexercised options exercisable (#)	Number of securities underlying unexercised options unexercisable (#)	Option exercise price (\$)	Option expiration date
Oguzhan Atay, PhD	640,000	—	2.80	06/07/2031
Ross Taylor	—	175,000 ⁽¹⁾	11.55	01/13/2034
Nancy Johnson	833	19,167 ⁽²⁾	17.12	10/16/2034
	11,666	28,334 ⁽³⁾	11.55	10/17/2033
	20,312	4,688 ⁽⁴⁾	2.80	10/14/2031
	25,000	—	2.80	06/07/2031
	125,000	—	0.45	08/20/2029

- (1) Option vests and becomes exercisable with respect to 1/4 of the shares on the one-year anniversary of January 8, 2024, and vests and becomes exercisable with respect to 1/48th of the shares in equal monthly installments thereafter, subject to the named executive officer's continued service to the Company through the applicable vesting date.
- (2) Option vests and becomes exercisable in 48 equal monthly installments beginning with October 6, 2024, subject to the named executive officer's continued service to the Company through the applicable vesting date.
- (3) Option vests and becomes exercisable in 48 equal monthly installments beginning with October 1, 2023, subject to the named executive officer's continued service to the Company through the applicable vesting date.
- (4) Option vests and becomes exercisable in 48 equal monthly installments beginning with September 1, 2021, subject to the named executive officer's continued service to the Company through the applicable vesting date.

Severance and change in control benefits

Our Board of Directors has approved the BillionToOne, Inc. Executive Severance Plan (the Severance Plan) prior to this offering to offer severance benefits to our named executive officers and to certain other key executives and employees (each, a Participant). The compensation committee of the Board has the authority to designate the executives and key employees who will be offered an opportunity to participate in the Severance Plan and will administer the Severance Plan.

To participate in the Severance Plan, the Participant must enter into a Participation Agreement (each a, Participation Agreement), which provides that the terms and conditions of the Severance Plan shall supersede and replace any existing employment or severance agreement between us and the Participant. Each of Dr. Atay, Mr. Taylor and Ms. Johnson will be eligible to participate in our Severance Plan pursuant to which Dr. Atay will be a Tier 1 Participant, and each of Mr. Taylor and Ms. Johnson will be Tier 2 Participants.

Tier 1, Tier 2, and Tier 3 Participants are entitled to the following severance benefits, as applicable:

Termination that Does Not Qualify as a Change in Control Termination. In the event of an Involuntary Termination (or, in the case of a Tier 3 Participant, a Termination Without Cause) that is not a Change in Control

Termination, a Participant will be eligible to receive the following benefits, provided the Participant signs a release of claims:

- Continuation of the Participant's base salary for a period of (i) in the case of Tier 1 Participants, 12 months, (ii) in the case of Tier 2 Participants, 9 months, or, (iii) in the case of a Tier 3 Participant, 6 months.
- Continuation of the Participant's health and welfare benefits for the shorter of (i) in the case of Tier 1 Participants, 12 months, in the case of Tier 2 Participants, 9 months, or, in the case of a Tier 3 Participant, 6 months, (ii) until the date of the Participant's eligibility for health insurance coverage in connection with new employment, or (iii) the expiration of the Participant's eligibility for the continuation coverage under COBRA.

Termination in Connection with a Change in Control Termination. In the event of an Involuntary Termination (or, in the case of a Tier 3 Participant, a Termination Without Cause) that occurs within 12 months following a Change in Control, a Participant will be eligible to receive the following benefits, as applicable, provided the Participant signs a release of claims:

- A lump sum cash payment equal to a percentage multiplied by the sum of (i) the Participant's annual base salary and (ii) the Participant's annual target bonus, with such percentage equal to 150%, in the case of a Tier 1 Participant, 100% in the case of a Tier 2 Participant, and 75% in the case of a Tier 3 participant.
- With respect to time-based equity awards, full vesting of any outstanding and then-unvested time-based equity awards held by the Participant.
- With respect to performance-based equity awards, if any, such performance-based awards held by the Participant shall vest based on the terms of the applicable award agreement for the performance-based award.
- A lump sum cash payment equal to the product of (i) the employer's portion of the Participant's monthly COBRA premiums and (ii) in the case of a Tier 1 Participant, 18 months, in the case of a Tier 2 Participant, 12 months, or, in the case of Tier 3 Participant, 9 months.

The terms "Change in Control," "Involuntary Termination," and "Termination Without Cause" shall have the meanings ascribed to such terms in the Severance Plan.

Equity plans

2025 equity incentive plan

Our 2025 plan was adopted by our Board of Directors on October 7, 2025, will be submitted to our stockholders for approval prior to this offering, and will become effective upon the effectiveness of the registration statement of which this prospectus is a part. Our 2025 Plan is intended to replace our 2018 Plan. However, awards outstanding under the 2018 Plan will continue to be governed by their existing terms. It is expected that our 2025 Plan will have the features described below.

Share reserve

The number of shares of our Class A common stock available for issuance under our 2025 Plan will equal the sum of 6% of the Class A common stock on a fully diluted basis after giving effect to this offering (assuming the conversion of all Class B common stock to Class A common stock, the exercise of any outstanding warrants and the Preferred Stock Conversion and the Reclassification, and including, but not limited to, shares subject to outstanding awards under the 2018 Plan, and the issuance of the Class A common stock contemplated to be sold in this offering, but assuming no exercise by the underwriters of their option to purchase additional

shares), plus up to 8,930,919 shares remaining available for issuance under, or issued pursuant to or subject to awards granted under, our 2018 Plan. The number of shares reserved for issuance under our 2025 Plan will be increased automatically on the first business day of each of our fiscal years, commencing in 2027 and ending in (and including) 2035, by a number equal to the lesser of:

- 5% of the shares of Class A common stock outstanding on the last business day of the prior fiscal year; or
- the number of shares determined by our Board of Directors.

In general, to the extent that any awards under our 2025 Plan are forfeited, terminate, expire or lapse without the issuance of shares, or if we repurchase the shares subject to awards granted under our 2025 Plan, those shares will again become available for issuance under our 2025 Plan, as will shares applied to pay the exercise or purchase price of an award or to satisfy tax withholding obligations related to any award.

Administration

The compensation committee of our Board of Directors will administer our 2025 Plan. The compensation committee will have complete discretion to make all decisions relating to our 2025 Plan and outstanding awards, including repricing outstanding options and modifying outstanding awards in other ways.

Eligibility

Employees, non-employee directors, consultants and advisors will be eligible to participate in our 2025 Plan.

Under our 2025 Plan, the aggregate grant date fair value of awards granted to our non-employee directors may not exceed \$750,000 in any one fiscal year, provided, however, that such limitation that will not apply in the fiscal year in which a non-employee director is initially appointed to our Board of Directors or with respect to the non-executive chair of our Board of Directors.

Types of awards

Our 2025 Plan provides for the following types of awards:

- incentive and nonstatutory stock options;
- stock appreciation rights;
- restricted shares; and
- restricted stock units.

Options and stock appreciation rights

The exercise price for options granted under our 2025 Plan may not be less than 100% of the fair market value of our Class A common stock on the grant date. Optionees will be permitted to pay the exercise price in cash or, with the consent of the compensation committee:

- with shares of Class A common stock that the optionee already owns;
- by an immediate sale of shares through a broker approved by us;
- by instructing us to withhold a number of shares having an aggregate fair market value that does not exceed the exercise price; or
- by other methods permitted by applicable law.

An optionee who exercises a stock appreciation right receives the increase in value of our Class A common stock over the base price. The base price for stock appreciation rights may not be less than 100% of the fair market value of our Class A common stock on the grant date. The settlement value of a stock appreciation right may be paid in cash, shares of our common stock or a combination.

Options and stock appreciation rights vest as determined by the compensation committee. In general, they will vest over a four-year period following the date of grant. Options and stock appreciation rights expire at the time determined by the compensation committee but in no event more than ten years after they are granted. These awards generally expire earlier if the participant's service terminates earlier.

Restricted shares and restricted stock units

Restricted shares and restricted stock units may be awarded under our 2025 Plan in return for any lawful consideration, and participants who receive restricted shares or stock units generally are not required to pay cash for their awards. In general, these awards will be subject to vesting. Vesting may be based on length of service, the attainment of performance-based milestones or a combination of both, as determined by the compensation committee.

Corporate transactions

In the event we are a party to a merger, consolidation or certain change in control transactions, outstanding awards granted under our 2025 Plan, and all shares acquired under our 2025 Plan, will be subject to the terms of the definitive transaction agreement (or, if there is no such agreement, as determined by our compensation committee). Unless an award agreement provides otherwise, such treatment may include any of the following with respect to each outstanding award:

- the continuation, assumption or substitution of an award by a surviving entity or its parent;
- the cancellation of an award without payment of any consideration;
- the cancellation of the vested portion of an award (and any portion that becomes vested as of the effective time of the transaction) in exchange for a payment equal to the excess, if any, of the value that the holder of each share of our Class A common stock receives in the transaction over (if applicable) the exercise price otherwise payable in connection with the award; or
- the assignment of any reacquisition or repurchase rights held by us in respect of an award of restricted shares to the surviving entity or its parent (with proportionate adjustments made to the price per share to be paid upon exercise of such rights).

The compensation committee is not required to treat all awards, or portions thereof, in the same manner.

The vesting of an outstanding award may be accelerated by the administrator upon the occurrence of a change in control, whether or not the award is to be assumed or replaced in the transaction, or in connection with a termination of service following a change in control transaction. A change in control includes:

- any person acquiring beneficial ownership of more than 50% of our total voting power;
- the sale or other disposition of all or substantially all of our assets; or
- our merger or consolidation after which our voting securities represent 50% or less of the total voting power of the surviving or acquiring entity.

Changes in capitalization

In the event of certain changes in our capital structure without our receipt of consideration, such as a stock split, reverse stock split or dividend paid in Class A common stock, proportionate adjustments will automatically be made to:

- the maximum number and kind of shares available for issuance under our 2025 Plan, including the maximum number and kind of shares that may be issued upon the exercise of incentive stock options;
- the maximum number and kind of shares covered by, and exercise price, base price or purchase price, if any, applicable to each outstanding stock award; and
- the maximum number and kind of shares by which the share reserve may increase automatically each year.

In the event that there is a declaration of an extraordinary dividend payable in a form other than our Class A common stock in an amount that has a material effect on the price of our Class A common stock, a recapitalization, a spin-off or a similar occurrence, the compensation committee may make such adjustments to any of the foregoing as it deems appropriate, in its sole discretion.

Amendments or termination

Our Board of Directors may amend, suspend or terminate our 2025 Plan at any time. If our Board of Directors amends our 2025 Plan, it does not need stockholder approval of the amendment unless required by applicable law, regulation or rules. Our 2025 Plan will terminate automatically 10 years after the later of the date when our Board of Directors adopted our 2025 Plan or approved the latest share increase that was also approved by our stockholders.

2018 stock plan

Our Board of Directors adopted and our stockholders approved our 2018 Plan in December 2018. After completion of this offering, no further awards will be made under the 2018 Plan and the outstanding awards will continue to be governed by their existing terms, except that our Class A common stock will be the class of stock underlying the outstanding awards. In addition, we will make adjustments to the number of shares and the exercise price per share underlying outstanding awards to reflect changes made to our capital structure in connection with this offering. This summary, however, is not intended to be a complete description of the 2018 Plan and is qualified in its entirety by reference to the complete text of the 2018 Plan, which is filed as an exhibit to the registration statement of which this prospectus is a part. To the extent there is a conflict between the terms of this summary and the 2018 Plan, the terms of the 2018 Plan will control.

Types of awards

The 2018 Plan provides for the grant of incentive stock options, or ISOs, nonstatutory stock options, or NSOs, and awards of restricted stock (collectively, stock awards). ISOs may be granted only to our employees, but not employees of our affiliates. All other awards may be granted to our employees, our non-employee directors and consultants and the employees and consultants of our affiliates.

Share reserve

As of June 30, 2025, we have reserved 12,409,025 shares of our common stock for issuance under the 2018 Plan, all of which may be issued as incentive stock options. Unissued shares subject to awards that expire or

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become unexercisable without being exercised in full or are surrendered pursuant to an option exchange program and shares that are forfeited, cancelled, reacquired by us or withheld in payment of the purchase price or exercise price of an award or in satisfaction of withholding taxes will again become available for issuance under the 2018 Plan or, following completion of this offering, under the 2025 Plan.

Administration

Our Board of Directors, or a committee thereof, has administered the 2018 Plan since its adoption; however, following this offering, the compensation committee of our Board of Directors will generally administer the 2018 Plan. The administrator has complete discretion to make all decisions relating to the 2018 Plan and outstanding awards.

Eligibility

Our employees, non-employee members of our Board of Directors and consultants, including those of our affiliates, are eligible to participate in the 2018 Plan. However, only our direct employees are eligible to receive incentive stock options.

Options

The exercise price for options granted under the 2018 Plan is determined by the administrator, but, in the case of ISOs, may not be less than 100% of the fair market value of our common stock on the grant date. Optionees may pay the exercise price in cash or cash equivalents or by one, or any combination of, the following forms of payment, as permitted by the administrator in its sole discretion:

- Delivery of a promissory note, with the recourse, interest, security and redemption provisions determined by the administrator to the extent permitted under and in accordance with applicable law;
- Cancellation of indebtedness;
- Surrender of shares of common stock that the optionee already owns; or
- If our shares of common stock are publicly traded, through a sale of shares subject to the option through a securities broker; or Other methods permitted under applicable laws.

Options vest as determined by the administrator. In general, we have granted options that vest over a four-year period. Options expire at the time determined by the administrator, but in no event more than ten years after they are granted, and generally expire earlier if the optionee's service terminates.

Restricted shares

Restricted shares may be awarded or sold under the 2018 Plan in return for cash or cash equivalents or, as permitted by the administrator in its sole discretion, in exchange for services rendered to us, or through any other means permitted by applicable law. Restricted shares vest as determined by the administrator. The plan administrator determines the terms and conditions of restricted shares, including vesting and forfeiture terms. If a participant's service relationship with us ceases for any reason, we may receive any or all of the shares of common stock held by the participant that have not vested as of the date the participant terminates service with us through a forfeiture condition or a repurchase right.

Corporate transactions

In the event that we are a party to a merger, consolidation or the capital reorganization or business combination transaction, including any transaction or series of transaction in which any person becomes the

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beneficial owner of more than 50% of our then outstanding capital stock, or in the event of a sale of all or substantially all of our assets, awards granted under the 2018 Plan will be treated in the manner determined by the administrator. Such treatment may include, without limitation, one or more of the following with respect to outstanding awards:

- The continuation, assumption or substitution of an award by the surviving entity or its parent;
- Cancellation of the award in exchange for a payment equal to the excess, if any, of the value of the shares subject to the award over any exercise price per share applicable to the award; or
- Cancellation of the award without payment of any consideration.

The administrator is not obligated to treat all awards in the same manner.

Changes in capitalization

In the event of certain specified changes in the capital structure of our common stock, such as a stock split, reverse stock split, stock dividend, combination, consolidation, or reclassification of our shares of common stock, proportionate adjustments will automatically be made in (i) each of the number and kind of shares available for future grants under the 2018 Plan, (ii) the number and kind of shares covered by each outstanding option and all restricted shares, (iii) the exercise price per share subject to each outstanding option and (iv) any repurchase price applicable to shares granted under the 2018 Plan. In the event of any increase or decrease in the number of issued shares without the receipt of consideration by the Company, an extraordinary cash dividend that has a material effect on the fair market value of our common stock, a recapitalization, a rights offering, a reorganization, merger, spin-off, split-up, change in corporate structure or other similar occurrence, the administrator shall make adjustments, in its sole discretion, to one or more of the items described above.

Transferability

A participant generally may not transfer stock awards under our 2018 Plan other than by will, the laws of descent and distribution, or as otherwise provided under our 2018 Plan.

Amendments or termination

Our Board of Directors may amend or terminate our 2018 Plan at any time, but no amendment or termination shall be made that would materially and adversely affect the rights of any participant under any outstanding stock award without the participant's consent. The Company shall obtain stockholder approval of any amendment to the 2018 Plan to the extent necessary to comply with applicable laws. The 2018 Plan provides that it will terminate automatically ten years after adoption, provided, however, it will terminate earlier upon the completion of this offering, but as noted above, awards outstanding under the 2018 Plan will remain outstanding and will continue to be governed by their existing terms.

Employee stock purchase plan

General

Our ESPP was adopted by our Board of Directors on October 7, 2025, will be submitted to our stockholders for approval prior to this offering, and will become effective upon the effectiveness of the registration statement of which this prospectus forms a part.

The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code.

Share reserve

The number of shares of our Class A common stock available for issuance under our ESPP will equal 1% of our Class A common stock on a fully diluted basis after giving effect to this offering (assuming the conversion of all Class B common stock to Class A common stock, the exercise of any outstanding warrants and the Preferred Stock Conversion and the Reclassification, and including, but not limited to, shares subject to outstanding awards under the 2018 Plan, and the issuance of the Class A common stock contemplated to be sold in this offering, but assuming no exercise by the underwriters of their option to purchase additional shares). The number of shares reserved for issuance under our ESPP will automatically be increased on the first business day of each of our fiscal years, commencing in 2027 and ending in (and including) 2035, by a number equal to the lesser of:

- 1% of the shares of Class A common stock outstanding on the last business day of the prior fiscal year; or
- the number of shares determined by our Board of Directors.

Notwithstanding the foregoing, no more than 8,400,000 shares of Class A common stock in total may be issued under our ESPP. The number of shares reserved under our ESPP will automatically be adjusted in the event of a stock split, stock dividend or a reverse stock split (including an adjustment to the per-purchase period share limit).

Administration

The compensation committee of our Board of Directors will administer our ESPP.

Eligibility

All of our employees will be eligible to participate if we employ them for more than 20 hours per week and for five or more months per year. Eligible employees may begin participating in our ESPP at the start of any offering period.

Offering periods

Each offering period will last a number of months determined by the compensation committee, not to exceed 27 months. A new offering period will begin periodically, as determined by the compensation committee. Offering periods may overlap or may be consecutive.

Amount of contributions

Our ESPP will permit each eligible employee to purchase Class A common stock through payroll deductions. Each employee's payroll deductions may not exceed 15% of the employee's cash compensation. Each participant may purchase up to the number of shares determined by our Board of Directors on any purchase date, not to exceed 7,500 shares. The value of the shares purchased in any calendar year may not exceed \$25,000. Participants may withdraw their contributions at any time before stock is purchased.

Purchase price

The price of each share of Class A common stock purchased under our ESPP will not be less than 85% of the lower of the fair market value per share of Class A common stock on the first day of the applicable offering period or the fair market value per share of Class A common stock on the purchase date.

Other provisions

Employees may end their participation in our ESPP at any time. Participation ends automatically upon termination of employment with us. If we experience a change in control, our ESPP will end and shares will be purchased with the payroll deductions accumulated to date by participating employees. Our Board of Directors or our compensation committee may amend or terminate our ESPP at any time.

Certain relationships and related party transactions

The following is a description of transactions since January 1, 2022, or currently proposed, to which we have been or will be a participant, in which the amount involved exceeded \$120,000 and in which any of our executive officers, directors or beneficial holders of more than 5% of our capital stock (or any immediate family member of, or person sharing the household with, any of these individuals or entities), which we collectively refer to as a related party, had or will have a direct or indirect material interest, other than compensation arrangements for our directors and executive officers, which are disclosed elsewhere in this prospectus.

Series D redeemable convertible preferred stock financing

In May 2024, we issued and sold an aggregate of 4,656,233 shares of our Series D redeemable convertible preferred stock at a cash purchase price of \$28.0204 per share for an aggregate purchase price of \$130.5 million (the Series D Financing). Each share of Series D redeemable convertible preferred stock will convert automatically into a share of our Class A common stock, on a one-for-one basis, immediately prior to the completion of this offering.

The following table summarizes purchases of our Series D redeemable convertible preferred stock by entities affiliated with certain of our directors and holders of more than 5% of our capital stock.

Purchaser	Series D redeemable convertible preferred stock	
	Number of shares	Aggregate purchase price
Entities affiliated with Adams Street Partners ⁽¹⁾	535,321	\$ 14,999,908
Hummingbird Ventures ⁽²⁾	446,103	\$ 12,499,984
Libertus Capital I ⁽³⁾	249,817	\$ 6,999,972
Entities and individuals affiliated with Premji Invest ⁽⁴⁾	1,802,255	\$ 50,499,906

(1) Entities affiliated with Adams Street Partners that purchased shares of our Series D redeemable convertible preferred stock include: (i) Adams Street 2019 Direct Growth Equity Fund LP, (ii) Adams Street 2020 Direct Growth Equity Fund LP, (iii) Adams Street 2021 Direct Growth Equity Fund LP, (iv) Adams Street 2022 Direct Growth Equity Fund LP, (v) Adams Street Private Equity Navigator Fund LLC (f/k/a Adams Street Global Private Markets Fund LP), (vi) Adams Street Growth Equity Fund VII LP, and (vii) FCPR GF—Lumyna Private Equity World Fund. Thomas Bremner, a member of our Board of Directors, is a partner at Adams Street Partners.

(2) Entities affiliated with Hummingbird Ventures that purchased shares of Series C redeemable convertible preferred stock include Hummingbird Dragons CommV. Firat Ileri, a member of our Board of Directors, is the managing partner of Hummingbird Ventures.

(3) Entities affiliated with Libertus Capital that purchased shares of our Series C redeemable convertible preferred stock include: (i) Libertus Capital I, and (ii) Libertus Capital II. Libertus holds greater than 5% of our capital stock.

(4) Entities and individuals affiliated with Premji Invest that purchased shares of our Series D redeemable convertible preferred stock include: (i) Akshay Rai, (ii) Directed Trust Company FBO Eric Tong Roth IRA, (iii) Eric Aisi Tong, (iv) Andrew Chang, (v) Wipro Enterprises Private Limited, (vi) T.K. Kurien, (vii) Sandesh Kaveripatnam, and (viii) Vedant Agrawal. Akshay Rai, a member of our Board of Directors, is Vice President of Healthcare & Biotechnology Investments at Premji Invest.

2022 convertible note financing

In September 2022, we entered into convertible promissory note agreements whereby we sold and issued convertible promissory notes in an aggregate principal amount of \$30.0 million (the 2022 Note Financing). Each convertible promissory note had an interest rate of 8% per annum. The aggregate principal and accrued interest converted into 1,726,823 shares of our Series C-1 redeemable convertible preferred stock at a conversion price of \$19.6143 per share upon the closing of our Series D financing in May 2024, and the rights and obligations under the convertible promissory note agreements were terminated and canceled. Each share of Series C-1 redeemable convertible preferred stock will convert automatically into a share of our Class A common stock, on a one-for-one basis, immediately prior to the completion of this offering.

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The following table summarizes purchases of our convertible promissory notes in the 2022 Note Financing by entities affiliated with certain of our directors and holders of more than 5% of our capital stock.

Purchaser	Aggregate principal amount of convertible promissory notes	
Entities affiliated with Adams Street Partners ⁽¹⁾	\$	3,000,000
Entities affiliated with Libertus Capital ⁽²⁾	\$	15,000,000

- (1) Entities affiliated with Adams Street Partners that purchased convertible promissory notes in our 2022 Note Financing include: (i) Adams Street 2019 Direct Growth Equity Fund LP, (ii) Adams Street 2020 Direct Growth Equity Fund LP, (iii) Adams Street 2021 Direct Growth Equity Fund LP, (iv) Adams Street 2022 Direct Growth Equity Fund LP, (v) Adams Street Private Equity Navigator Fund LLC (f/k/a Adams Street Global Private Markets Fund LP), (vi) Adams Street Growth Equity Fund VII LP, and (vii) FCPR GF—Lumyna Private Equity World Fund. Thomas Bremner, a member of our Board of Directors, is a partner at Adams Street Partners.
- (2) Libertus Capital holds greater than 5% of our capital stock. Entities affiliated with Libertus Capital that purchased convertible promissory notes in our 2022 Note Financing include: (i) Libertus Capital I and (ii) Libertus Capital II.

Series C redeemable convertible preferred stock financing

From March through September 2022, we issued and sold an aggregate of 5,628,825 shares of our Series C redeemable convertible preferred stock at a cash purchase price of \$25.4937 per share for an aggregate purchase price of approximately \$143.5 million. Each share of Series C redeemable convertible preferred stock will convert automatically into a share of our Class A common stock, on a one-for-one basis, immediately prior to the completion of this offering.

The following table summarizes purchases of our Series C redeemable convertible preferred stock by entities affiliated with certain of our directors and holders of more than 5% of our capital stock.

Purchaser	Series C redeemable convertible preferred stock	
	Number of shares	Aggregate purchase price
Entities affiliated with Adams Street Partners ⁽¹⁾	1,176,761	\$ 29,999,991.94
Hummingbird Ventures ⁽²⁾	1,706,303	\$ 43,499,976.80
Entities affiliated with Libertus Capital ⁽³⁾	784,505	\$ 19,999,935.13
Entities affiliated with Neotribe Ventures ⁽⁴⁾	242,216	\$ 6,174,982.04

- (1) Entities affiliated with Adams Street Partners that purchased shares of our Series C redeemable convertible preferred stock include: (i) Adams Street 2019 Direct Growth Equity Fund LP, (ii) Adams Street 2020 Direct Growth Equity Fund LP, (iii) Adams Street 2021 Direct Growth Equity Fund LP, (iv) Adams Street 2022 Direct Growth Equity Fund LP, (v) Adams Street Private Equity Navigator Fund LLC (f/k/a Adams Street Global Private Markets Fund LP), (vi) Adams Street Growth Equity Fund VII LP, and (vii) FCPR GF—Lumyna Private Equity World Fund. Thomas Bremner, a member of our Board of Directors, is a partner at Adams Street Partners.
- (2) Entities affiliated with Hummingbird Ventures that purchased shares of Series C redeemable convertible preferred stock include: (i) Hummingbird Dragons CommV, and (ii) Hummingbird Opportunity Fund II CommV. Firat Ileri, a member of our Board of Directors, is the managing partner of Hummingbird Ventures.
- (3) Entities affiliated with Libertus Capital that purchase shares of Series C redeemable convertible preferred stock include: (i) Libertus Capital I and (ii) Libertus Capital II. Libertus Capital holds greater than 5% of our capital stock.
- (4) Entities affiliated with Neotribe Ventures that purchased shares of our Series C redeemable convertible preferred stock include Neotribe SPV I BTO, LLC. Krishna Swaroop Kolluri, a member of our Board of Directors, is a managing director at Neotribe Ventures.

Secondary sales

Pursuant to our 2018 Plan and the ROFR (as defined below), which is described below, certain holders of our capital stock and we or our assignees have a right of first refusal to purchase shares of our capital stock proposed to be sold by certain of our stockholders to other parties. These rights will terminate upon completion of this offering. We waived or allowed to expire our right of first refusal in connection with the following transactions involving directors, officers and holders of more than 5% of our capital stock:

In April 2022, Dr. Tsao entered into stock purchase agreements with us and certain affiliates of Libertus Capital, which holds more than 5% of our capital stock. Pursuant to these agreements, Dr. Tsao sold an aggregate of 196,126 shares of common stock for aggregate cash proceeds of \$4,999,977.43 at a price per share of \$25.4937.

In April 2022, Dr. Atay entered into stock purchase agreements with us and certain affiliates of Libertus Capital. Pursuant to these agreements, Dr. Atay sold an aggregate of 196,126 shares of our common stock for \$4,999,977.41 aggregate cash proceeds at a price of \$25.4937 per share.

In November 2022, entities affiliated with Libertus Capital, which holds more than 5% of our capital stock, purchased an aggregate of 87,700 shares of our common stock for \$1,788,641.00 aggregate cash proceeds at a price of \$20.395 per share, which included 30,000 shares purchased from Shan Riku Sakakibara, our Chief Product Officer.

In June 2024, entities affiliated with Libertus Capital, which holds more than 5% of our capital stock, purchased an aggregate of 52,750 shares of our common stock for \$1,182,655.00 aggregate cash proceeds at a price of \$22.42 per share, which included 9,500 shares purchased from John ten Bosch, our Senior Vice President of Laboratory Operations.

Directed share program

At our request, the underwriters have reserved up to approximately shares of Class A common stock being offered by this prospectus for sale, at the initial public offering price, to our officers, directors and employees through a directed share program. The directed share program will not limit the ability of our directors, officers or holders of more than 5% of our capital stock, to purchase more than \$120,000 in value of our Class A common stock. We do not currently know the extent to which these related persons will participate in our directed share program, if at all, or the extent to which they will purchase more than \$120,000 in value of our Class A common stock.

Investors' rights agreement

We have entered into an Amended and Restated Investors' Rights Agreement, dated May 14, 2024, by and among the Company and the investors listed on schedule A thereto (the IRA), including entities with which certain of our directors are affiliated. These stockholders are entitled to rights with respect to the registration of their shares following this offering. For a description of these registration rights, see the section titled "Description of capital stock—Registration rights." Other than these registration rights, all other terms of the IRA will terminate in connection with this offering.

Voting agreement

We have entered into an Amended and Restated Voting Agreement by and between the Company and certain holders of our redeemable convertible preferred stock, dated May 14, 2024 (the Voting Agreement), including entities with which certain of our directors are affiliated. Under the Voting Agreement, certain holders of our capital stock have agreed as to the manner in which they will vote their shares of our capital stock on certain matters, including with respect to the election of directors. The Voting Agreement will terminate upon the completion of this offering, at which time there will be no further contractual obligations regarding the manner in which shares are voted with respect to the election of our directors.

Right of first refusal and co-sale agreement

We have entered into an Amended and Restated Right of First Refusal and Co-Sale Agreement by and between the Company and certain holders of our redeemable convertible preferred stock, dated May 14, 2024 (the ROFR), including entities with which certain of our directors are affiliated. Under the ROFR, certain holders of our capital stock have the right of first refusal and co-sale relating to the shares of our common stock held by the parties to the agreement. Upon the completion of this offering, the ROFR will terminate.

Indemnification agreements

Our amended and restated Post-IPO Certificate of Incorporation will contain provisions limiting the liability of directors and officers, and our Post-IPO Bylaws will provide that we will indemnify each of our directors and executive officers to the fullest extent permitted under Delaware law. Our Post-IPO Certificate of Incorporation and Post-IPO Bylaws will also provide our Board of Directors with discretion to indemnify our employees and other agents when determined appropriate by the Board of Directors. In addition, we have entered into or intend to enter into an indemnification agreement with each of our directors, which will require us to indemnify them. For more information regarding these agreements, see the section titled “—Limitations on liability and indemnification of directors and officers.”

Other transactions

To facilitate the Class B Stock Exchange, we will enter into exchange agreements with our Co-Founders, effective as of immediately prior to effectiveness of the filing of our Post-IPO Certificate of Incorporation, pursuant to which 4,552,650 shares of our Class A common stock held by our Co-Founders, or entities will automatically be exchanged for an equivalent number of shares of Class B common stock immediately prior to the completion of this offering.

Limitations on liability and indemnification of directors and officers

Our Post-IPO Certificate of Incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. The Post-IPO Certificate of Incorporation will provide that our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability:

- for any breach of the director’s duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- in respect of unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL;
- an officer in any action by or in the right of the Company; or
- for any transaction from which the director derives any improper personal benefit.

Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our Post-IPO Certificate of Incorporation will provide that if Delaware law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law. Our Post-IPO Certificate of Incorporation and our bylaws will provide that we are required to indemnify our executive officers and directors to the fullest

extent permitted by Delaware law. Our Post-IPO Bylaws will also provide that, on satisfaction of certain conditions, we will advance the expenses incurred by a director or officer in advance of the final disposition of an action or proceeding, and permit us to secure insurance on behalf of any director, officer, employee, or other enterprise agent for any liability arising out of his or her action in that capacity, whether or not Delaware law would otherwise permit indemnification.

We have entered into, and expect to continue to enter into, indemnification agreements with each of our directors and executive officers and certain other key employees. With certain exceptions, these agreements will provide for indemnification for related expenses including attorneys' fees, judgments, fines, and settlement amounts incurred by any of these individuals in connection with any action, proceeding, or investigation. We believe that these provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also currently carry and intend to continue to carry liability insurance for our directors and officers.

The limitation of liability and indemnification provisions in our Post-IPO Certificate of Incorporation and our Post-IPO Bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers, or employees for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers, or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Related party transaction policy

Our Board of Directors has adopted a formal written policy providing that we are not permitted to enter into any transaction that exceeds \$120,000 in any given year and in which any related party has a direct or indirect material interest without the consent of our audit committee. Our audit committee will have the primary responsibility for reviewing and approving or disapproving such "related party transactions." The charter of our audit committee will provide that our audit committee shall review and approve in advance any related party transaction. In approving or rejecting any such transaction, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to our audit committee, including whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction.

All of the transactions described in this section were entered into prior to the adoption of this policy. Although we have not had a written policy for the review and approval of transactions with related parties, our Board of Directors has historically reviewed and approved any transaction where a director or officer had a financial interest, including the transactions described above. Prior to approving such a transaction, the material facts as to the relationship or interest of the relevant director, officer or holder of five percent or more of any class of our voting securities in the agreement or transaction was disclosed to our Board of Directors. Our Board of Directors took this information into account when evaluating the transaction and in determining whether such transaction was fair to us and in the best interest of all our stockholders.

Principal stockholders

The following table sets forth the beneficial ownership of our capital stock as of September 30, 2025, and as adjusted to reflect the sale of Class A common stock offered by us in this offering, for:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- each of our named executive officers;
- each of our directors; and
- all of our current executive officers and directors as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting or investment power with respect to those securities. The information contained in the following table is not necessarily indicative of beneficial ownership for any other purpose, and the inclusion of any shares in the table does not constitute an admission of beneficial ownership of those shares. Unless otherwise indicated by the footnotes below, we believe, based on the information furnished to us, that the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

The percentage ownership information shown in the table prior to this offering is based upon 35,680,833 shares of Class A common stock and 4,552,650 shares of Class B common stock outstanding as of September 30, 2025, assuming (i) the Preferred Stock Conversion, (ii) the Reclassification, and (iii) the Class B Stock Exchange. The percentage ownership information shown in the table after this offering is based upon _____ shares of Class A common stock and 4,552,650 shares of Class B common stock outstanding immediately after the closing of the offering, assuming no exercise of the underwriters' option to purchase additional shares of Class A common stock. We have deemed shares of our Class A common stock subject to stock options that are currently exercisable or exercisable within 60 days of September 30, 2025 to be outstanding and to be beneficially owned by the person holding the stock option for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

In addition, the table below excludes any potential purchases in this offering by the beneficial owners identified in the table below, including in the directed share program.

Except as otherwise noted below, the address for persons listed in the table is c/o BillionToOne, Inc., 1035 O'Brien Drive, Menlo Park, CA 94025.

Name of beneficial owner	Class A shares beneficially owned before this offering		Class B shares beneficially owned before this offering		% total voting power before this offering	Class A shares beneficially owned after this offering		Class B shares beneficially owned after this offering		% total voting power after this offering
	Number	%	Number	%		Number	%	Number	%	%
Named executive officers and directors:										
Oguzhan Atay ⁽¹⁾	909,659	2.5%	2,227,542	48.9%	32.3%					
David Tsao ⁽²⁾	674,829	1.9	2,325,108	51.1	33.5					
Nancy Johnson ⁽³⁾	230,249	*	—	*	*					
Ross Taylor ⁽⁴⁾	80,208	*	—	*	*					
Thomas Bremner ⁽⁵⁾	1,897,272	5.3	—	*	2.3					
Firat Ileri ⁽⁶⁾	7,916,218	22.2	—	*	9.7					
Krishna Swaroop Kolluri ⁽⁷⁾	4,359,505	12.2	—	*	5.4					
Akshay Rai ⁽⁸⁾	1,787,090	5.0	—	*	2.2					
All current executive officers and directors as a group (12 persons) ⁽⁹⁾	16,444,585	48.8	4,552,650	100	81.5					
5% Stockholders:										
Entities affiliated with Hummingbird Ventures ⁽¹⁰⁾	7,887,237	22.1	—	*	9.7					
Entities affiliated with Libertus Capital ⁽¹¹⁾	3,561,609	10.0	—	*	4.4					
Pamir Gelenbe ⁽¹²⁾	3,708,102	10.4	—	*	4.6					
Entities affiliated with Neotribe Ventures ⁽¹³⁾	4,359,505	12.2	—	*	5.4					

(*) Represents beneficial ownership of less than 1%

(1) Consists of (i) 2,227,542 shares of Class B common stock held by Dr. Atay and (ii) 709,659 shares of Class A common stock issuable to Dr. Atay upon exercise of stock options within 60 days of September 30, 2025. Also consists of 200,000 shares of Class A common stock held by Dr. Atay's spouse. Dr. Atay disclaims beneficial ownership of the shares held by his spouse.

(2) Consists of (i) 2,325,108 shares of Class B common stock held by Dr. Tsao; and (ii) 674,829 shares of Class A common stock issuable to Dr. Tsao upon exercise of stock options within 60 days of September 30, 2025.

(3) Consists of (i) 29,000 shares of Class A common stock held by Ms. Johnson; and (ii) 201,249 shares of Class A common stock issuable to Ms. Johnson upon exercise of stock options within 60 days of September 30, 2025.

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- (4) Consists of 80,208 shares of Class A common stock issuable to Mr. Taylor upon exercise of stock options within 60 days of September 30, 2025.
- (5) Consists of (i) 152,440 shares of Class A common stock held by Adams Street 2019 Direct Growth Equity Fund LP; (ii) 155,711 shares of Class A common stock held by Adams Street 2020 Direct Growth Equity Fund LP; (iii) 176,271 shares of Class A common stock held by Adams Street 2021 Direct Growth Equity Fund LP; (iv) 269,918 shares of Class A common stock held by Adams Street 2022 Direct Growth Equity Fund LP; (v) 240,072 shares of Class A common stock held by; (vi) 675,352 shares of Class A common stock held by Adams Street Growth Equity Fund VII LP; and Adams Street Private Equity Navigator Fund LLC (f/k/a Adams Street Global Private Markets Fund LP) (vi) 227,508 shares of Class A common stock held by FCPR GF—Lumyna Private Equity World Fund. Adams Street Partners, LLC is the managing member of the general partner of each of Adams Street 2019 Direct Growth Equity Fund LP, Adams Street 2020 Direct Growth Equity Fund LP, Adams Street 2021 Direct Growth Equity Fund LP, Adams Street 2022 Direct Growth Equity Fund LP, Adams Street Growth Equity Fund VII LP, and Adams Street Private Equity Navigator Fund LLC (f/k/a Adams Street Global Private Markets Fund LP) (collectively, the U.S. Funds) and, as a result, may be deemed to beneficially own the shares held by the U.S. Funds. Furthermore, Adams Street Partners, LLC, the Sous- Délégué Financier of the Délégué Financier of the management company of FCPR GF—Lumyna Private Equity World Fund (Lumyna and together with the U.S. Funds, the Funds) and, as a result, may be deemed to beneficially own the shares held by Lumyna. Thomas S. Bremner, Jeffrey T. Diehl, Brian Dudley, Elisha P. Gould, Robin Murray and Fred Wang, each of whom is a partner of Adams Street Partners, LLC (or a subsidiary thereof), may be deemed to have shared voting and investment power over the shares held by the Funds. The address for each entity referenced above is 1 North Wacker Drive, Suite 2200, Chicago, IL 60606-2807.
- (6) Consists of (i) the shares of Class A common stock referenced in footnote 10 and (ii) 28,981 shares of Class A common stock held directly by Mr. Ileri.
- (7) Consists of the shares of Class A common stock referenced in footnote 13.
- (8) Consists of (i) 2,676 shares of Class A common stock held directly by Mr. Rai and (ii) 1,784,414 shares of Class A common stock held by Wipro Enterprises Private Limited (Wipro), of which Mr. Rai is the nominee/investor director appointed by Wipro Enterprises Limited. Mr. Rai will not have voting or dispositive control of the securities described in clause (ii) of the prior sentence while such securities are held by Wipro and thus disclaims beneficial ownership of such securities. The address for each of the entities and individuals listed in this footnote is 2180 Sand Hill Road, Ste. 100, Menlo Park, California 94025.
- (9) Includes 1,891,151 shares of Class A common stock issuable upon exercise of stock options within 60 days of September 30, 2025.
- (10) Consists of (i) 2,631,664 shares of Class A common stock held by Hummingbird Opportunity Fund II CommV; (ii) 2,580,833 shares of Class A common stock held by Hummingbird Ventures III CommV; (iii) 2,015,118 shares of Class A common stock held by Hummingbird Dragons CommV; (iv) 18,845 shares of Class A common stock held by Hummingbird Collective CommV; and (v) 640,727 shares of Class A common stock held by HB&Q NV (HB&Q COMPARTMENT III). Humming Bird Ventures Management NV is the managing member of Hummingbird Opportunity Fund II CommV, Hummingbird Ventures III CommV, Hummingbird Dragons CommV, Hummingbird Collective CommV, and HB&Q NV (HB&Q COMPARTMENT III) (the Hummingbird Funds) and, as a result, may be deemed to beneficially own shares held by the Hummingbird Funds. Mr. Ileri, Barend Van den Brande, and Lukas Decoster are partners of Hummingbird Ventures Management NV and may be deemed to have shared voting and investment power over the shares held by the Hummingbird Funds. The address for each of the entities and individuals listed in this footnote is Square Victoria Regain 1, 1210 Sint-Joost-ten-Node, Belgium.
- (11) Consists of (i) 2,585,520 shares of Class A common stock held by Libertus Capital I; (ii) 99,940 shares of Class A common stock held by Libertus Capital I (HV); and (iii) 876,149 shares of Class A common stock held by Libertus Capital II. Libertus Capital S.A.R.L. is the general partner of Libertus Capital I, Libertus Capital I (HV) and Libertus Capital II (the Libertus Funds) and, as a result, may be deemed to beneficially own shares held by the Libertus Funds. Pamir Gelenbe, Johannes Dercksen and Pierre Ribeiro are members of the board of directors of Libertus Capital S.A.R.L. and may be deemed to have shared voting and investment power over the shares held by the Libertus Funds. The address for each of the entities and individuals listed in this footnote is 31 rue de Hollerich, L-1741, Luxembourg.
- (12) Consists of (i) 35,338 shares of Class A common stock held directly by Mr. Gelenbe; (ii) 111,155 shares of Class A common stock held by GOPAE Turquoise Strategies Pte. Ltd.; (iii) 2,585,520 shares of Class A common stock held by Libertus Capital I; (iv) 99,940 shares of Class A common stock held by Libertus Capital I (HV); and (v) 876,149 shares of Class A common stock held by Libertus Capital II. Mr. Gelenbe and Gulnar Hasnain are the controlling shareholders of GOPAE Turquoise Strategies Pte. Ltd., and as a result, they may be deemed to beneficially own shares held by GOPAE Turquoise Strategies Pte. Ltd. Mr. Gelenbe and Ms. Hasnain are also the controlling shareholders of PG Consulting Services LTD, which is the sole shareholder of Libertus Capital S.A.R.L., the general partner of the Libertus Funds and, as a result they may be deemed to beneficially own shares held by the Libertus Funds. The address for each of the entities and individuals listed in this footnote is 31 rue de Hollerich, L-1741, Luxembourg.
- (13) Consists of (i) 1,297,799 shares of Class A common stock held by Neotribe Ignite Fund I, L.P.; (ii) 242,216 shares of Class A common stock held by Neotribe SPV I BTO, LLC; and (iii) 2,819,490 shares of Class A common stock held by NeoTribe Ventures I, L.P., for itself and as nominee for NeoTribe Associates I, L.P. Krishna Swaroop Kolluri is the general partner for each of Neotribe Ignite Fund I, L.P. and NeoTribe Ventures I, L.P. and NeoTribe Associates I, L.P., and the managing member of Neotribe SPV I BTO, LLC and may be deemed to have beneficial ownership of the shares held by each of them. The address for each of the entities and individuals listed in this footnote is 1300 El Camino Real, Suite 100, Menlo Park, California 94025.

Description of capital stock

The following is a summary of our capital stock, certain provisions of our Post-IPO Certificate of Incorporation and Post-IPO Bylaws as each will be in effect upon the completion of this offering, our IRA, and relevant provisions of Delaware law. Because it is only a summary, it does not contain all the information that may be important to you. These descriptions are qualified in their entirety by our Post-IPO Certificate of Incorporation, our Post-IPO Bylaws, and our IRA, which are each filed as exhibits to our registration statement of which this prospectus is a part, as well as the relevant provisions of the DGCL.

General

Immediately prior to the completion of this offering, our Post-IPO Certificate of Incorporation will provide for two series of common stock. In addition, our Post-IPO Certificate of Incorporation will authorize shares of undesignated preferred stock, the rights, preferences, and privileges of which may be designated from time to time by our Board of Directors.

Immediately prior to the completion of this offering, our authorized capital stock will consist of _____ shares, all with a par value of \$ _____ per share, of which:

- _____ shares are designated as Class A common stock;
- _____ shares are designated as Class B common stock; and
- _____ shares are designated as preferred stock.

Common stock

Upon completion of this offering, we will have two series of authorized common stock: Class A common stock and Class B common stock. The rights of the holders of our Class A common stock and our Class B common stock are identical, except with respect to voting, conversion and transfer rights.

As of June 30, 2025, after giving effect to (i) the Preferred Stock Conversion, (ii) the Reclassification and (iii) the Class B Stock Exchange, as if each event had occurred on June 30, 2025, we had outstanding _____ shares of Class A common stock and _____ shares of Class B common stock.

Dividend rights

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our Class A common stock and Class B common stock are entitled to receive dividends out of funds legally available if our Board of Directors, in its discretion, determines to issue dividends and only then at the times and in the amounts that our Board of Directors may determine. See the section titled “Dividend policy” for more information.

Voting rights

Holders of our Class A common stock will be entitled to one vote and holders of our Class B common stock will be entitled to 15 votes for each share held on all matters submitted to a vote of stockholders. The holders of our Class A common stock and Class B common stock will vote together as a single class, unless otherwise required by law or our Post-IPO Certificate of Incorporation. Delaware law could require either holders of our Class A common stock or Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend our Post-IPO Certificate of Incorporation to increase or decrease the par value of a class of our capital stock, then that class would be required to vote separately to approve the proposed amendment; and

- if we were to seek to amend our Post-IPO Certificate of Incorporation in a manner that alters or changes the powers, preferences, or special rights of a class of our capital stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment.

The holders of our Class A common stock and our Class B common stock will not have cumulative voting rights in the election of directors.

Conversion rights

Holders of our Class A common stock will have no conversion rights.

Each outstanding share of our Class B common stock will be convertible at any time at the option of the holder into one share of our Class A common stock. In addition, each share of our Class B common stock will convert automatically into one share of our Class A common stock upon any transfer, whether or not for value, which occurs after the completion of this offering, except for certain permitted transfers set forth in our Post-IPO Certificate of Incorporation, including to related entities and for estate-planning purposes. Once converted into our Class A common stock, such Class B common stock will not be reissued.

In addition, each share of Class B common stock held by a Founder and such Founder's permitted transferees will automatically convert into one share of Class A common stock upon the earlier of (i) the date that is between 90 days and 270 days, as determined by the board of directors, after the death or incapacitation of such Founder or (ii) the date that is between 61 and 180 days, as determined by the board of directors, after the date on which such Founder is no longer serving as an officer or director of the Company.

All of the outstanding shares of our Class B common stock will convert automatically on a one-for-one basis into shares of our Class A common stock upon the earliest of (i) seven years from the date of filing the Post-IPO Certificate of Incorporation, and (ii) the date specified by a vote of the holders of Class B common stock representing a majority of the outstanding shares of Class B common stock. Following the conversion of all outstanding shares of our Class B common stock into Class A common stock, no further shares of our Class B common stock will be issued.

Right to receive liquidation distributions

Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our Class A common stock and our Class B common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

No preemptive or similar rights

Our shares of common stock are not entitled to preemptive rights and are not subject to conversion, redemption or sinking fund provisions (except, in respect of our Class B common stock, for the conversion rights noted above). The rights, preferences, and privileges of the holders of our common stock will be subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

Preferred stock

As of June 30, 2025, there were 29,084,235 shares of our redeemable convertible preferred stock outstanding. Immediately prior to the completion of this offering, each outstanding share of redeemable convertible preferred stock will convert into one share of our common stock pursuant to the Preferred Stock Conversion.

Upon the filing and effectiveness of our Post-IPO Certificate of Incorporation, our Board of Directors may, without further action by our stockholders, fix the rights, preferences, privileges, and restrictions of up to an aggregate of _____ shares of preferred stock in one or more series and authorize their issuance. These rights, preferences, and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms, and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock, and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring, or preventing a change of control or other corporate action. Upon the completion of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Stock options

As of June 30, 2025, options to purchase an aggregate of 8,930,919 shares of common stock were outstanding at a weighted-average exercise price of approximately \$10.59 per share. For additional information regarding the terms of our stock options outstanding under our 2018 Plan, see the section titled “Executive compensation—Equity plans.”

Warrants

As of June 30, 2025, we had outstanding warrants to purchase (i) an aggregate of up to 80,357 shares of our common stock with an exercise price of \$2.80 per share (the 2021 Common Warrant), (ii) an aggregate of up to 41,209 shares of our common stock with an exercise price of \$10.92 per share (the 2022 Common Warrant and together with the 2021 Common Warrant, the Common Warrants) and (iii) an aggregate of up to 9,660 shares of our Series A-6 redeemable convertible preferred stock with an exercise price of \$2.5879 per share (the A-6 Warrant). In connection with this offering, the 2021 Common Warrant, the 2022 Common Warrant and the A-6 Warrant will become exercisable for an aggregate of 80,357 shares, 41,209 shares and 9,660 shares, respectively, of our Class A common stock at an exercise price of \$2.80 per share for the 2021 Common Warrant, \$10.92 per share for the 2022 Common Warrant, and \$2.5879 per share for the A-6 Warrant.

Registration rights

After the completion of this offering, holders of 37,706,613 shares of our Class A common stock (including, following the Class B Stock Exchange, shares of our Class A common stock issuable upon the conversion of shares of Class B common stock) will be entitled to certain rights with respect to registration of such shares under the Securities Act pursuant to the terms of the IRA between us and the holders of these shares, which was entered into in connection with our redeemable convertible preferred stock financings. These shares are referred to as registrable securities.

The IRA includes demand, piggyback and Form S-3 registration rights as described more fully below.

Demand registration rights

At any time beginning six months after this offering, the holders of registrable securities have the right to make up to two demands that we file a registration statement under the Securities Act with having an aggregate offering price, net of selling expenses, of at least \$20 million, subject to specified exceptions.

Piggyback registration rights

If we register any of its securities for public sale solely for cash (other than a registration pursuant to the demand registration rights described above, a registration for a direct listing, a registration relating solely to our equity incentive plans, a registration relating to a reorganization transaction under Rule 145, a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the registrable securities, or a registration statement where the only common stock being registered is common stock issuable upon conversion of debt securities that are also being registered), the holders of our registrable securities then outstanding will each be entitled to notice of the registration and will have the right to include their shares in the registration statement.

These piggyback registration rights are subject to specified conditions and limitations, including the right of the underwriters of any underwritten offering to limit the aggregate value of registrable securities to be included in the registration statement, but not below 25% of the total value of securities included in such registration.

We expect that the requisite stockholders who are party to our IRA will waive their rights with respect to the notice of this offering and to the inclusion of their registrable shares in this offering.

Registration on Form S-3

If we are eligible to file a registration statement on Form S-3, the holders of at least 30% of the registrable securities then outstanding have the right to demand that we file registration statements on Form S-3; provided, that the aggregate offering price, net of selling expenses, of the securities to be sold under the registration statement is at least \$10 million. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Termination of registration rights

The registration rights will survive this offering and will terminate after the earlier of either five years following the completion of this offering and a liquidation event, and, with respect to any particular stockholder, when such stockholder can sell all its shares in compliance with Rule 144(b)(i) or if such stockholder holds 1% or less of the outstanding common stock and is able to sell all of its registrable securities during a three month period in compliance with Rule 144 under the Securities Act.

Anti-takeover provisions

Some provisions of Delaware law, our Post-IPO Certificate of Incorporation, and our Post-IPO Bylaws contain or will contain provisions that could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares. These provisions may also have the effect of preventing changes in the composition of our Board of Directors and management. These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Anti-takeover statute

We are subject to Section 203 of the DGCL, which prohibits persons deemed to be “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by our Board of Directors.

Preferred stock

Our Board of Directors will have the authority, without further action by our stockholders, to issue up to _____ shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our Board of Directors. The existence of authorized but unissued shares of preferred stock would enable our Board of Directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest, or other means.

Stockholder meetings

Our Post-IPO Bylaws will provide that, once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, a special meeting of stockholders may be called only by our chairman of the Board of Directors, chief executive officer or president (in the absence of a chief executive officer), or by a resolution adopted by a majority of our Board of Directors.

Requirements for advance notice of stockholder nominations and proposals

Our Post-IPO Bylaws will establish advance notice procedures with respect to stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors, other than nominations made by or at the direction of the Board of Directors, or a committee thereof. Our Post-IPO Bylaws will also specify certain requirements regarding the form and content of a stockholder’s notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our meetings of stockholders.

Stockholder action

Our Post-IPO Certificate of Incorporation and Post-IPO Bylaws will provide that, once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, stockholders will not be able to take action by written consent, and will only be able to take action at annual or special meetings of our stockholders.

Classified board

Our Board of Directors will be divided into three classes. The directors in each class will serve for a three-year term, one class being elected each year by our stockholders. For more information on the classified board, see the section titled “Management—Board composition.” This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Removal of directors

Our Post-IPO Certificate of Incorporation will provide that, once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, no member of our Board of Directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the affirmative vote of two-thirds of the voting power of our then-outstanding capital stock.

Stockholders not entitled to cumulative voting

Our Post-IPO Certificate of Incorporation will not permit stockholders to cumulate their votes in the election of directors.

Choice of forum

Upon the completion of this offering, our Post-IPO Certificate of Incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our Post-IPO Certificate of Incorporation or our Post-IPO Bylaws or any action asserting a claim against us that is governed by the internal affairs doctrine. Our Post-IPO Certificate of Incorporation will also provide that the U.S. federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

Some companies that adopted a similar federal district court forum selection provision were subject to a suit in the Chancery Court of Delaware by stockholders who asserted that the provision is not enforceable. While the Delaware Supreme Court held that such federal district court forum selection provision was in fact valid, there can be no assurance that federal courts or other state courts will follow the holding of the Delaware Supreme Court or determine that the our federal district court forum selection provision should be enforced in a particular case.

These choice of forum provisions do not apply to actions brought to enforce a duty or liability created by the Exchange Act. We intend for the choice of forum provision regarding claims arising under the Securities Act to apply despite the fact that Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all actions brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. There is uncertainty as to whether a court would enforce such provision with respect to claims under the Securities Act, and our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

These exclusive forum provisions may limit the ability of our stockholders to bring a claim in a judicial forum that such stockholders find favorable for disputes with us or our directors, officers or employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find such provisions contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, financial condition and operating results.

Amendment of charter provisions

Once our Class B common stock no longer represents a majority of voting power of our outstanding capital stock, the amendment of any of the above provisions, except for the provision making it possible for our Board of Directors to issue preferred stock, would require approval of two-thirds of the voting power of our then-outstanding capital stock.

Transfer agent and registrar

Upon the completion of this offering, the transfer agent and registrar for our Class A common stock and Class B common stock will be Fidelity Stock Transfer Solutions. The transfer agent's address is 245 Summer Street, V7A, Boston, Massachusetts 02210.

Nasdaq Global Select Market listing

We have applied to list our Class A common stock on the Nasdaq Global Select Market under the trading symbol "BLLN," and this offering is contingent upon obtaining approval of such listing.

Shares eligible for future sale

Prior to this offering, no public market existed for our Class A common stock, and although we expect that our Class A common stock will be approved for listing on Nasdaq, we cannot assure investors that there will be an active public market for our Class A common stock following this offering. We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our Class A common stock. Future sales of substantial amounts of common stock in the public market, or the possibility of these sales or issuances occurring, could adversely affect the prevailing market price of our Class A common stock or impair our ability to raise equity capital.

Upon the completion of this offering, based on the number of our shares outstanding as of June 30, 2025 and after giving effect to the Preferred Stock Conversion, the Reclassification and the Class B Stock Exchange, as if each event had occurred on June 30, 2025, we will have an aggregate of _____ shares of our Class A common stock (or _____ shares of our Class A common stock if the underwriters exercise in full their option to purchase additional shares) and an aggregate of _____ shares of our Class B common stock outstanding. This includes all shares of Class A common stock that we are selling in this offering, which shares may be resold in the public market immediately unless purchased by our affiliates, and assumes no additional exercise of outstanding options or warrants other than as described elsewhere in this prospectus.

The remaining 40,169,279 shares of our Class A common stock (including 4,552,650 shares of Class A common stock issuable upon the conversion of outstanding Class B common stock) will be “restricted securities,” as that term is defined in Rule 144. Restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below. Substantially all of these shares will be subject to a lock-up period under the lock-up agreements and market stand-off agreements described below.

As a result of these lock-up and market stand-off agreements, and subject to the provisions of Rules 144 or 701, _____ shares of our Class A common stock will be available for sale in the public market as follows (assuming no exercise of outstanding stock options subsequent to June 30, 2025):

- beginning on the date of this prospectus, all shares of our Class A common stock sold in this offering will be eligible for immediate sale in the public market, unless purchased by our affiliates; and
- beginning 180 days after the date of this prospectus, 40,169,279 additional shares of Class A common stock (including 4,552,650 shares of Class A common stock issuable upon the conversion of outstanding Class B common stock) will become eligible for sale in the public market, of which _____ shares will be held by affiliates and subject to the volume, manner of sale, and other restrictions of Rule 144, as described below.

In addition, after this offering, up to 4,623,888 shares of Class A common stock may be issued upon exercise of outstanding stock options as of June 30, 2025.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, an eligible stockholder is entitled to sell such shares without complying with the manner of sale, volume limitation, or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. To be an eligible stockholder under Rule 144, such stockholder must not be deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and must have beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner

other than our affiliates. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144, subject to the expiration of the lock-up agreements and/or market stand-off arrangements described below, which prevent the sale of shares.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell shares on expiration of the lock-up agreements and/or market stand-off arrangements described below, subject, in the case of restricted securities, to such shares having been beneficially owned for at least six months. Beginning 90 days after the date of this prospectus, within any three-month period, such stockholders may sell a number of shares that does not exceed the greater of:

- 1% of the number of shares of Class A common stock then outstanding, which will equal _____ shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares of common stock from us; or
- the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 under the Securities Act, or Rule 701, generally allows a stockholder who was issued shares under a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days, to sell these shares in reliance on Rule 144, but without being required to comply with the public information, holding period, manner of sale limitations, volume limitation, or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required by that rule to wait until 90 days after the date of this prospectus before selling those shares under Rule 701, subject to the expiration of the lock-up agreements and market stand-off arrangements described below.

Form S-8 registration statements

We intend to file one or more registration statements on Form S-8 under the Securities Act with the SEC as soon as practicable after the time at which the registration statement of which this prospectus forms a part becomes effective to register the offer and sale of shares of our Class A common stock that are subject to outstanding stock options and Class A common stock issued or issuable under our employee benefit plans as defined in Form S-8. These registration statements will become effective immediately on filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements and/or market stand-off arrangements described below and Rule 144 limitations applicable to affiliates.

Lock-up agreements and market stand-off arrangements

We will agree that we will not, subject to certain exceptions, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right, or warrant to purchase, hedge, lend, or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with the

SEC a registration statement under the Securities Act relating to any shares of our Class A common stock or securities convertible into or exchangeable or exercisable for any shares of our Class A common stock, or (ii) enter into any swap, hedging or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of any shares of Class A common stock or any such other securities, or publicly disclose the intention to undertake any of the foregoing (regardless of whether any of these transactions are to be settled by the delivery of shares of Class A common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC for a period of 180 days after the date of this prospectus, other than the shares of our Class A common stock to be sold in this offering and certain other exceptions.

Our directors and executive officers, and substantially all of our securityholders (such persons, the lock-up parties) have entered, or will enter, into lock-up agreements with the underwriters or are subject to market stand-off arrangements prior to the commencement of this offering pursuant to which each lock-up party, with limited exceptions, for a period of 180 days after the date of this prospectus (such period, the restricted period), may not and may not cause any of their direct or indirect affiliates to, without the prior written consent of J.P. Morgan Securities LLC, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including without limitation, our common stock or such other securities which may be deemed to be beneficially owned by the lock-up party in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) (collectively with the common stock, the lock-up securities) or (ii) enter into any hedging, swap or other agreement or transactions that transfers, in whole or in part, any of the economic consequences of ownership of the lock-up securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of the lock-up securities, in cash or otherwise, (iii) make any demand for or exercise any right with respect to the registration of any lock-up securities, or (iv) publicly disclose the intention to do any of the foregoing.

Registration rights

Upon the completion of this offering, the holders of 37,706,613 shares of our Class A common stock or their permitted transferees (including, following the Class B Stock Exchange, shares of our Class A common stock issuable upon the conversion of shares of Class B common stock), will be entitled to certain rights with respect to the registration of the offer and sale of their shares under the Securities Act. All such shares are covered by lock-up agreements or market stand-off arrangements. Following the expiration of the lock-up and market stand-off period, registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately on the effectiveness of the registration. See the section titled “Description of capital stock—Registration rights” for additional information.

Rule 10b5-1 plans

After this offering, certain of our employees, including our executive officers, and/or directors may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements or market stand-off arrangements relating to the offering described above.

Material U.S. federal income tax consequences to non-U.S. holders of our Class A common stock

The following is a general discussion of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our Class A common stock issued pursuant to this offering. All prospective non-U.S. holders of our Class A common stock should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our Class A common stock. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our Class A common stock (other than an entity or arrangement that is treated as a partnership or pass-through entity for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes, any of the following:

- an individual citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in the United States or under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is includable in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust if (1) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more “U.S. persons,” as defined under the Code (as defined below), have the authority to control all substantial decisions of the trust or (2) such trust has made a valid election to be treated as a U.S. person for U.S. federal income tax purposes.

This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended (the Code), existing, temporary and proposed U.S. treasury regulations promulgated thereunder (Treasury Regulations), judicial opinions, published positions of the Internal Revenue Service (the IRS), and other applicable authorities, all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change could alter the tax consequences to non-U.S. holders described in this prospectus. This discussion assumes that a non-U.S. holder holds shares of our Class A common stock as a capital asset (generally, property held for investment) for U.S. federal income tax purposes. This discussion does not address all aspects of U.S. federal income taxation that may be important to a particular non-U.S. holder in light of that non-U.S. holder’s individual circumstances, nor does it address any aspects of the unearned income Medicare contribution tax pursuant to the Health Care and Education Reconciliation Act of 2010, any U.S. federal tax consequences (such as gift or estate taxes) other than income taxes, any U.S. alternative minimum taxes, the impact of special tax accounting rules under Section 451(b) of the Internal Revenue Code of 1986, as amended (the Code), or any state, local or non-U.S. taxes. This discussion may not apply, in whole or in part, to particular non-U.S. holders in light of their individual circumstances or to holders subject to special treatment under the U.S. federal income tax laws (such as taxpayers that have elected mark-to-market accounting, insurance companies, tax-exempt organizations, government organizations, tax-qualified retirement plans, financial institutions, brokers or dealers in securities, pension plans, “controlled foreign corporations,” “passive foreign investment companies,” corporations that accumulate earnings to avoid U.S. federal income tax, corporations organized outside of the United States, any state thereof or the District of Columbia that are nonetheless treated as U.S. taxpayers for U.S. federal income tax purposes, non-U.S. holders that hold our Class A common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment, holders who own, actually or constructively, more than 5% of our Class A common stock, certain former U.S. citizens or long-term residents, and persons who acquire our Class A common stock through the exercise of an option or otherwise as compensation).

If a partnership (or other entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our Class A common stock, the tax treatment of a partner (or equivalent) therein will generally depend on the status of the partner and the activities of the partnership. Partners of a partnership holding our Class A common stock should consult their tax advisor as to the particular U.S. federal income tax consequences applicable to them.

We have not sought and will not seek any ruling from the IRS with respect to the statements made and the conclusions reached in the following discussion. There can be no assurance that the IRS will not challenge one or more of the tax consequences described herein, or that any such challenge would not be sustained by a court.

THIS SUMMARY IS FOR GENERAL INFORMATION ONLY AND IS NOT INTENDED TO CONSTITUTE A COMPLETE DESCRIPTION OF ALL TAX CONSEQUENCES FOR NON-U.S. HOLDERS RELATING TO THE OWNERSHIP AND DISPOSITION OF OUR CLASS A COMMON STOCK. PROSPECTIVE HOLDERS OF OUR CLASS A COMMON STOCK SHOULD CONSULT WITH THEIR TAX ADVISORS REGARDING THE TAX CONSEQUENCES TO THEM (INCLUDING THE APPLICATION AND EFFECT OF ANY FEDERAL, STATE, LOCAL, AND NON-U.S. TAX LAWS) OF THE OWNERSHIP AND DISPOSITION OF OUR CLASS A COMMON STOCK.

Dividends

As discussed in the section titled “Dividend policy,” we do not expect to declare or make any distributions on our Class A common stock in the foreseeable future. If we do pay dividends on shares of our Class A common stock, however, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital that is applied against and reduces, but not below zero, a non-U.S. holder’s adjusted tax basis in shares of our Class A common stock. Any excess will be treated as capital gain and such gain will be subject to the treatment described below under the section titled “—Gain on sale or other disposition of Class A common stock.” Any such distributions will also be subject to the discussion below under the section titled “—Backup withholding and information reporting” and “—Foreign account tax compliance act.”

Any dividend paid to a non-U.S. holder on our Class A common stock that is not effectively connected with a non-U.S. holder’s conduct of a trade or business in the United States will generally be subject to U.S. withholding tax at a 30% rate. The withholding tax might apply at a reduced rate, however, under the terms of an applicable income tax treaty between the United States and the non-U.S. holder’s country of residence. You should consult your own tax advisors regarding your entitlement to benefits under a relevant income tax treaty. Generally, in order for the applicable withholding agent to withhold tax at a lower treaty rate, a non-U.S. holder must certify its entitlement to treaty benefits. A non-U.S. holder generally can meet this certification requirement by providing an IRS Form W-8BEN, W-8BEN-E or other appropriate IRS W-8 form (or any successor or substitute form thereof) to the applicable withholding agent. If the non-U.S. holder holds the stock through a financial institution or other agent acting on the holder’s behalf, the holder will be required to provide appropriate documentation to the holder’s agent. The holder’s agent will then be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. Any such certifications provided to an applicable withholding agent or intermediary must be updated periodically. If you are eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty, you may generally obtain a refund or credit of any excess amounts withheld by filing an appropriate claim for a refund with the IRS in a timely manner.

Dividends received by a non-U.S. holder that are effectively connected with a U.S. trade or business conducted by the non-U.S. holder, and if required by an applicable income tax treaty between the United States and the

non-U.S. holder's country of residence, are attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States, are not subject to U.S. withholding tax. To obtain this exemption, a non-U.S. holder must provide the applicable withholding agent with an IRS Form W-8ECI (or any successor or substitute form thereof) properly certifying such exemption, and periodically update such certification. Such effectively connected dividends, although not subject to withholding tax, are taxed at the same U.S. federal income tax rates applicable to U.S. persons, net of certain deductions and credits. In addition to being taxed at U.S. federal income tax rates, dividends received by a corporate non-U.S. holder that are effectively connected with a U.S. trade or business of the corporate non-U.S. holder may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable tax treaty.

Gain on sale or other disposition of Class A common stock

Subject to the discussion below under the section titled "—Backup withholding and information reporting" and "—Foreign Account Tax Compliance Act," non-U.S. holders will generally not be subject to U.S. federal income tax on any gains realized on the sale, exchange or other disposition of our Class A common stock unless:

- the gain (1) is effectively connected with the conduct by the non-U.S. holder of a U.S. trade or business and (2) if required by an applicable income tax treaty between the United States and the non-U.S. holder's country of residence, is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States (in which case the special rules described below apply);
- the non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of the sale, exchange or other disposition of our Class A common stock, and certain other requirements are met (in which case the gain would be subject to a flat 30% tax, or such reduced rate as may be specified by an applicable income tax treaty, which may be offset by U.S. source capital losses, even though the individual is not considered a resident of the United States), provided that the non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses; or
- the rules of the Foreign Investment in Real Property Tax Act (FIRPTA), treat the gain as effectively connected with a U.S. trade or business.

The FIRPTA rules may apply to a sale, exchange or other disposition of our Class A common stock if we are, or were within the shorter of the five-year period preceding the disposition and the non-U.S. holder's holding period, a U.S. real property holding corporation, or USRPHC. In general, we would be a USRPHC if interests in U.S. real property comprised at least half of the value of our worldwide real property and our other assets held for use in a trade or business. Although there can be no assurances, we believe that we are not currently and will not become a USRPHC for U.S. federal income tax purposes, and the remainder of this discussion so assumes. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our U.S. and worldwide real property interests plus our other assets used or held for use in a trade or business, there can be no assurance that we will not become a USRPHC in the future. Even if we are or were to become a USRPHC gain arising from the sale or other taxable disposition by a non-U.S. holder will not be subject to U.S. federal income tax if our Class A common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such non-U.S. holder owned, actually and constructively, 5% or less of our Class A common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the non-U.S. holder's holding period. If the foregoing exception does not apply, and we are a USRPHC, a Non-U.S. Holder's proceeds received on the disposition of our Class A common stock will generally be subject to withholding at a rate of 15%. No assurances can be provided that our Class A common stock will be regularly traded on an established securities market for the purposes of the rule described above.

If any gain from the sale, exchange or other disposition of our Class A common stock, (1) is effectively connected with a U.S. trade or business conducted by a non-U.S. holder and (2) if required by an applicable income tax treaty between the United States and the non-U.S. holder's country of residence, is attributable to a permanent establishment or fixed maintained by such non-U.S. holder in the United States, then the gain generally will be subject to U.S. federal income tax at the same rates applicable to U.S. persons, net of certain deductions and credits. If the non-U.S. holder is a corporation, under certain circumstances, that portion of its earnings and profits that is effectively connected with its U.S. trade or business, subject to certain adjustments, generally would be subject also to a "branch profits tax" at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty.

Backup withholding and information reporting

The applicable withholding agent must report annually to the IRS and to each non-U.S. holder the amount of dividends paid to, and the tax withheld with respect to, each non-U.S. holder. These reporting requirements apply regardless of whether withholding was reduced or eliminated by an applicable tax treaty. Copies of this information reporting may also be made available under the provisions of a specific tax treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above under the section titled "—Dividends," will generally be exempt from U.S. backup withholding.

A non-U.S. holder will generally be subject to backup withholding for dividends on our Class A common stock paid to such holder unless such holder certifies under penalties of perjury that, among other things, it is a non-U.S. holder (and the payer does not have actual knowledge or reason to know that such holder is a U.S. person), generally on a properly executed IRS Form W-8BEN or W-8BEN-E or other appropriate IRS Form W-8 (or any successor or substitute form thereof), or otherwise establishes an exemption.

Information reporting and backup withholding generally are not required with respect to the amount of any proceeds from the sale or other disposition of our Class A common stock by a non-U.S. holder outside the United States through a foreign office of a foreign broker that does not have certain specified connections to the United States. However, if a non-U.S. holder sells or otherwise disposes of its shares of Class A common stock through a U.S. broker or the U.S. offices of a foreign broker, the broker will generally be required to report the amount of proceeds paid to the non-U.S. holder to the IRS and impose backup withholding on that amount unless such non-U.S. holder provides appropriate certification to the broker of its status as a non-U.S. holder (and the payer does not have actual knowledge or reason to know that such holder is a U.S. person) or otherwise establishes an exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder generally can be credited against the non-U.S. holder's U.S. federal income tax liability, if any, or refunded, provided that the required information is furnished to the IRS in a timely manner. Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them.

Foreign account tax compliance act

Under the Foreign Account Tax Compliance Act (FATCA), a withholding tax of 30% applies to certain payments to foreign financial institutions, including investment funds, and certain other non-U.S. entities that fail to comply with certain information reporting and certification requirements pertaining to their direct and indirect U.S. securityholders and/or U.S. accountholders and do not otherwise qualify for an exemption. Under applicable Treasury Regulations and IRS guidance, this withholding currently applies to payments of dividends,

if any, on, and, subject to the proposed Treasury Regulations discussed below, gross proceeds from the sale or other disposition of our Class A common stock. An intergovernmental agreement between the United States and a foreign country may modify the requirements described in this paragraph.

While, beginning on January 1, 2019, withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of our Class A common stock, proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers (including applicable withholding agents) generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

If withholding under FATCA is required on any payment related to our Class A common stock, investors not otherwise subject to withholding (or that otherwise would be entitled to a reduced rate of withholding) on such payment may be required to seek a refund or credit from the IRS.

Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our Class A common stock.

THE PRECEDING DISCUSSION OF U.S. FEDERAL TAX CONSIDERATIONS IS FOR GENERAL INFORMATION PURPOSES ONLY. IT IS NOT LEGAL OR TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE, LOCAL, AND NON-U.S. TAX CONSEQUENCES OF PURCHASING, HOLDING, AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

Underwriting

We are offering the shares of Class A common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, Piper Sandler & Co., Jefferies LLC and William Blair & Company, L.L.C. are acting as joint book-running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of Class A common stock listed next to its name in the following table:

Name	Number of shares
J.P. Morgan Securities LLC	
Piper Sandler & Co.	
Jefferies LLC	
William Blair & Company, L.L.C.	
Stifel, Nicolaus & Company, Incorporated	
Wells Fargo Securities, LLC	
BTIG, LLC	
Total	

The underwriters are committed to purchase all the shares of Class A common stock offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the shares of Class A common stock directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ _____ per share. After the initial offering of the shares to the public, if all of the shares of Class A common stock are not sold at the initial public offering price, the underwriters may change the offering price and the other selling terms. Sales of any shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to _____ additional shares of Class A common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of Class A common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of Class A common stock less the amount paid by the underwriters to us per share of Class A common stock. The underwriting fee is \$ _____ per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without option to purchase additional shares exercise	With full option to purchase additional shares exercise
Per share	\$	\$
Total	\$	\$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$. We have agreed to reimburse the underwriters for expenses relating to the clearance of this offering with the Financial Industry Regulatory Authority, Inc. (FINRA) in an amount up to \$.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We will agree that we will not, subject to certain exceptions, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, hedge, lend, or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with, the SEC a registration statement under the Securities Act relating to any shares of our Class A common stock or securities convertible into or exchangeable or exercisable for any shares of our Class A common stock, or (ii) enter into any swap, hedging or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of any shares of Class A common stock or any such other securities, or publicly disclose the intention to undertake any of the foregoing (regardless of whether any of these transactions are to be settled by the delivery of shares of Class A common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC for a period of 180 days after the date of this prospectus, other than the shares of our Class A common stock to be sold in this offering.

The restrictions on our actions, as described above, do not apply to certain transactions, including (i) the issuance of shares of common stock or securities convertible into or exercisable for shares of our common stock pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of warrants or options (including net exercise) or the settlement of restricted stock units (RSUs) (including net settlement), in each case outstanding on the date of the underwriting agreement and described in this prospectus; (ii) grants of stock options, stock awards, restricted stock, RSUs, or other equity awards and the issuance of shares of our common stock or securities convertible into or exercisable or exchangeable for shares of our common stock (whether upon the exercise of stock options or otherwise) to our employees, officers, directors, advisors, or consultants pursuant to the terms of an equity compensation plan in effect as of the closing date of this offering and described in this prospectus, provided that such recipients enter into a lock-up agreement with the underwriters; (iii) the issuance of up to 5% of the outstanding shares of our common stock, or securities convertible into, exercisable for, or which are otherwise exchangeable for, our common stock, immediately following the closing date of this offering, in acquisitions or other similar strategic transactions, provided that such recipients enter into a lock-up agreement with the underwriters; or (iv) the filing of any registration statement on Form S-8 relating to securities granted or to be granted pursuant to any plan in effect on the date of the underwriting agreement and described in this prospectus or any assumed benefit plan pursuant to an acquisition or similar strategic transaction.

Our directors and executive officers, and substantially all of our securityholders (such persons, the lock-up parties) have entered, or will enter, into lock-up agreements or are subject to market stand-off arrangements

with the underwriters prior to the commencement of this offering pursuant to which each lock-up party, with limited exceptions, for a period of 180 days after the date of this prospectus (such period, the restricted period), may not and may not cause any of their direct or indirect affiliates to, without the prior written consent of J.P. Morgan Securities LLC, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including without limitation, our common stock or such other securities which may be deemed to be beneficially owned by the lock-up party in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) (collectively with the common stock, the lock-up securities), (ii) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the lock-up securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of the lock-up securities, in cash or otherwise, (iii) make any demand for or exercise any right with respect to the registration of any lock-up securities, or (iv) publicly disclose the intention to do any of the foregoing.

Such persons or entities have further acknowledged that these undertakings preclude them from engaging in any hedging or other transactions or arrangements (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition or transfer (whether by the lock-up party or any other person) of any economic consequences of ownership, in whole or in part, directly or indirectly, of any lock-up securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of lock-up securities, in cash or otherwise.

The restrictions described in the immediately preceding paragraph and contained in the lock-up agreements between the underwriters and the lock-up parties do not apply, subject in certain cases to various conditions, to certain transactions, including (a) transfers of lock-up securities: (i) as a bona fide gift or gifts, or for bona fide estate planning purposes, (ii) by will or intestacy, (iii) to any trust for the direct or indirect benefit of the lock-up party or the immediate family of the lock-up party, or if the lock-up party is a trust, to a trust or beneficiary of the trust or to the estate of a beneficiary of such trust, (iv) to a partnership, limited liability company or other entity of which the lock-up party and its immediate family are the legal and beneficial owner of all of the outstanding equity securities or similar interests, (v) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (iv), (vi) in the case of a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate of the lock-up party, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the lock-up party or its affiliates (including, for the avoidance of doubt, where the lock-up party is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership), or (B) as part of a distribution to members or stockholders of the lock-up party; (vii) by operation of law, such as pursuant to a qualified domestic order, divorce settlement, divorce decree or separation agreement, (viii) to us from an employee upon death, disability or termination of employment, in each case, of such employee, (ix) as part of a sale of lock-up securities acquired (A) from underwriters in this offering or (B) in open market transactions after the completion of this offering, (x) to us in connection with the vesting, settlement, or exercise of restricted stock units, options, warrants or other rights to purchase shares of our common stock (including, in each case, by way of "net" or "cashless" exercise), including for the payment of exercise price, tax or remittance payments due as a result of the vesting, settlement, or exercise of such restricted stock units, options, warrants or rights, provided that any such shares of our common stock received upon such exercise, vesting or settlement shall be subject to the terms of such lock-up agreement, and provided

further that any such restricted stock units, options, warrants or rights are held by the lock-up party pursuant to an agreement or equity awards granted under a stock incentive plan or other equity award plan, each such agreement or plan which is described in this prospectus, (xi) in "sell to cover" or similar open market transactions by an employee of the Company (who is not a Section 16 officer or director of the Company) of up to \$10 million of shares of common stock (in the aggregate for all employees) during the restricted period to satisfy tax withholding obligations as a result of the exercise, vesting and/or settlement of equity awards (including options) held by the lock-up party and issued pursuant to a plan or arrangement described in this prospectus, or (xii) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction approved by our Board of Directors and made to all holders of our capital stock involving a change of control (the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons, of shares of capital stock if, after such transfer, such person or group of affiliated persons would hold more than 90% of our outstanding voting securities (or the surviving entity)), provided that in the event that such tender offer, merger, consolidation or other similar transaction is not completed, all such lock-up securities shall remain subject to the restrictions in the immediately preceding paragraph; (b) the exercise of outstanding options, settlement of restricted stock units or other equity awards or exercise of warrants pursuant to plans described in this prospectus, provided that any lock-up securities received upon such exercise, vesting or settlement would be subject to restrictions similar to those in the immediately preceding paragraph; (c) the conversion, exchange or reclassification of outstanding equity securities into shares of our common stock or warrants to acquire shares of our common stock, provided that any such shares of our common stock or warrants received upon such conversion would be subject to restrictions similar to those in the immediately preceding paragraph; and (d) the establishment by lock-up parties of trading plans pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of the lock-up securities, provided that (1) such plans do not provide for the transfer of lock-up securities during the restricted period, and (2) any required public announcement or filing under the Exchange Act made by any person regarding the establishment of such plan during the restricted period shall include a statement that the undersigned is not permitted to transfer, sell or otherwise dispose of securities under such plan during the restricted period in contravention of restrictions similar to those in the immediately preceding paragraph and no public filing, report or announcement by any party shall be made voluntarily in connection with such trading plan.

J.P. Morgan Securities LLC, in its sole discretion, may release the securities subject to any of the lock-up agreements with the underwriters described above, in whole or in part at any time.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

We have applied to have our Class A common stock approved for listing on the Nasdaq Global Select Market under the trading symbol "BLLN," and this offering is contingent upon obtaining such approval.

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of Class A common stock in the open market for the purpose of preventing or retarding a decline in the market price of the Class A common stock while this offering is in progress. These stabilizing transactions may include making short sales of Class A common stock, which involves the sale by the underwriters of a greater number of shares of Class A common stock than they are required to purchase in this offering, and purchasing shares of Class A common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount.

The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the Class A common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the Class A common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase Class A common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the Class A common stock or preventing or retarding a decline in the market price of the Class A common stock, and, as a result, the price of the Class A common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on Nasdaq, in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our Class A common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for shares of our Class A common stock, or that the shares will trade in the public market at or above the initial public offering price.

Other relationships

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the

underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Directed share program

At our request, the underwriters have reserved up to 5% of the shares of Class A common stock being offered by this prospectus for sale, at the initial public offering price, to our officers, directors and employees through a directed share program. Shares purchased through the directed share program will not be subject to a lock-up restriction, except in the case of shares purchased by any of our directors or officers. We do not know if these parties will choose to purchase all or any portion of these reserved shares, but the number of shares of our Class A common stock available for sale to the general public will be reduced to the extent these individuals or entities purchase such reserved shares. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus. J.P. Morgan Securities LLC will administer our directed share program. We will agree to indemnify the underwriters against certain liabilities and expenses, including liabilities under the Securities Act, in connection with sales of the shares reserved for the directed share program.

Selling restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to prospective investors in the European Economic Area

In relation to each Member State of the European Economic Area (each a Relevant State), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

- (i) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;
- (ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the underwriters; or
- (iii) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus

Regulation. and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and to us that it is a “qualified investor” within the meaning of Article 2(e) of the Prospectus Regulation. In the case of any shares being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters have been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an “offer to the public” in relation to shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

Notice to prospective investors in the United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which (i) has been approved by the Financial Conduct Authority or (ii) is to be treated as if it had been approved by the Financial Conduct Authority in accordance with the transitional provisions in Article 74 (transitional provisions) of the Prospectus Amendment etc (EU Exit) Regulations 2019/1234, except that the shares may be offered to the public in the United Kingdom at any time:

- (i) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;
- (ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of underwriters for any such offer; or
- (iii) in any other circumstances falling within Section 86 of the FSMA,

provided that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an “offer to the public” in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are “qualified investors” (as defined in the Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the Order) and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons) or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Notice to prospective investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to prospective investors in Switzerland

This prospectus does not constitute an offer to the public or a solicitation to purchase or invest in any shares. No shares have been offered or will be offered to the public in Switzerland, except that offers of shares may be made to the public in Switzerland at any time under the following exemptions under the Swiss Financial Services Act (FinSA):

- (i) to any person which is a professional client as defined under the FinSA;
- (ii) to fewer than 500 persons (other than professional clients as defined under the FinSA), subject to obtaining the prior consent of the representatives of the underwriters for any such offer; or
- (iii) in any other circumstances falling within Article 36 FinSA in connection with Article 44 of the Swiss Financial Services Ordinance, provided that no such offer of shares shall require the Company or any investment bank to publish a prospectus pursuant to Article 35 FinSA.

The shares have not been and will not be listed or admitted to trading on a trading venue in Switzerland.

Neither this document nor any other offering or marketing material relating to the shares constitutes a prospectus as such term is understood pursuant to the FinSA and neither this document nor any other offering or marketing material relating to the shares may be publicly distributed or otherwise made publicly available in Switzerland.

Notice to prospective investors in the Dubai International Financial Centre

This document relates to an Exempt Offer in accordance with the Markets Law, DIFC Law No. 1 of 2012, as amended. This document is intended for distribution only to persons of a type specified in the Markets Law,

DIFC Law No. 1 of 2012, as amended. It must not be delivered to, or relied on by, any other person. The Dubai Financial Services Authority (DFSA) has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for this document. The securities to which this document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this document you should consult an authorized financial advisor.

In relation to its use in the DIFC, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the securities may not be offered or sold directly or indirectly to the public in the DIFC.

Notice to prospective investors in the United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the Dubai International Financial Centre) other than in compliance with the laws of the United Arab Emirates (and the Dubai International Financial Centre) governing the issue, offering and sale of securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the Dubai International Financial Centre) and is not intended to be a public offer. This prospectus has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority, Financial Services Regulatory Authority (FSRA) or the Dubai Financial Services Authority (DFSA).

Notice to prospective investors in Australia

This prospectus:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth) (the Corporations Act);
- has not been, and will not be, lodged with the Australian Securities and Investments Commission (ASIC), as a disclosure document for the purposes of the Corporations Act and does not purport to include the information required of a disclosure document for the purposes of the Corporations Act; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, available under section 708 of the Corporations Act (Exempt Investors).

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares of our Class A common stock under this prospectus will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares of our Class A common stock you undertake to us that you will not, for a period of 12 months from the date of issue of the shares, offer,

transfer, assign or otherwise alienate those shares of our Class A common stock to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

Notice to prospective investors in Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any “resident” of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

Notice to prospective investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (the SFO) of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the CO) or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the SFO and any rules made thereunder.

Notice to prospective investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, no shares have been or will be offered or sold and no shares have been or will be made the subject of an invitation for subscription or purchase, and no prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, has been or will be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act 2001 of Singapore, as modified or amended from time to time (the SFA)) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Singapore SFA Product Classification — In connection with Section 309B of the SFA and the CMP Regulations 2018, unless otherwise specified before an offer of shares of our Class A common stock, we have determined, and hereby notify all relevant persons (as defined in Section 309A(1) of the SFA), that the shares of Class A common stock are “prescribed capital markets products” (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Notice to prospective investors in Bermuda

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

Notice to prospective investors in Saudi Arabia

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Rules on the Offer of Securities and Continuing Obligations Regulations as issued by the board of the Saudi Arabian Capital Market Authority (CMA) pursuant to resolution number 3-123-2017 dated 27 December 2017, as amended (the CMA Regulations). The CMA does not make any representation as to the accuracy or completeness of this document and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial adviser.

Notice to prospective investors in the British Virgin Islands

The shares are not being, and may not be offered to the public or to any person in the British Virgin Islands for purchase or subscription by or on behalf of us. The shares may be offered to companies incorporated under the BVI Business Companies Act, 2004 (British Virgin Islands) (BVI Companies), but only where the offer will be made to, and received by, the relevant BVI Company entirely outside of the British Virgin Islands.

Notice to prospective investors in China

This prospectus will not be circulated or distributed in the PRC and the shares will not be offered or sold, and will not be offered or sold to any person for re-offering or resale directly or indirectly to any residents of the PRC (for such purposes, not including the Hong Kong and Macau Special Administrative Regions or Taiwan), except pursuant to any applicable laws and regulations of the PRC. Neither this prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with applicable laws and regulations.

Notice to prospective investors in Korea

The shares have not been and will not be registered under the Financial Investments Services and Capital Markets Act of Korea and the decrees and regulations thereunder (the FSCMA), and the shares have been and will be offered in Korea as a private placement under the FSCMA. None of the shares may be offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law of Korea and the decrees and regulations thereunder (the FETL). Furthermore, the purchaser of the shares shall comply with all applicable regulatory requirements (including but not limited to requirements under the FETL) in connection with the purchase of the shares. By the purchase of the shares, the relevant holder thereof will be deemed to represent and warrant that if it is in Korea or is a resident of Korea, it purchased the shares pursuant to the applicable laws and regulations of Korea.

Notice to prospective investors in Malaysia

No prospectus or other offering material or document in connection with the offer and sale of the shares has been or will be registered with the Securities Commission of Malaysia (Commission) for the Commission's approval pursuant to the Capital Markets and Services Act 2007. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Malaysia other than (i) a closed end fund approved by the Commission; (ii) a holder of a Capital Markets Services Licence; (iii) a person who acquires the shares, as principal, if the offer is on terms that the shares may only be acquired at a consideration of not less than RM250,000 (or its equivalent in foreign currencies) for each transaction; (iv) an individual whose total net personal assets or total net joint assets with his or her spouse exceeds RM3 million (or its equivalent in foreign currencies), excluding the value of the primary residence of the individual; (v) an individual who has a gross annual income exceeding RM300,000 (or its equivalent in foreign currencies) per annum in the preceding twelve months; (vi) an individual who, jointly with his or her spouse, has a gross annual income of RM400,000 (or its equivalent in foreign currencies), per annum in the preceding twelve months; (vii) a corporation with total net assets exceeding RM10 million (or its equivalent in a foreign currencies) based on the last audited accounts; (viii) a partnership with total net assets exceeding RM10 million (or its equivalent in foreign currencies); (ix) a bank licensee or insurance licensee as defined in the Labuan Financial Services and Securities Act 2010; (x) an Islamic bank licensee or takaful licensee as defined in the Labuan Financial Services and Securities Act 2010; and (xi) any other person as may be specified by the Commission; provided that, in the each of the preceding categories (i) to (xi), the distribution of the shares is made by a holder of a Capital Markets Services License who carries on the business of dealing in securities. The distribution in Malaysia of this prospectus is subject to Malaysian laws. This prospectus does not constitute and may not be used for the purpose of public offering or an issue, offer for subscription or purchase, invitation to subscribe for or purchase any securities requiring the registration of a prospectus with the Commission under the Capital Markets and Services Act 2007.

Notice to prospective investors in Taiwan

The shares have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

Notice to prospective investors in South Africa

Due to restrictions under the securities laws of South Africa, no "*offer to the public*" (as such term is defined in the South African Companies Act, No. 71 of 2008 (as amended or re-enacted) (the South African Companies Act) is being made in connection with the issue of the shares in South Africa. Accordingly, this document does not, nor is it intended to, constitute a "*registered prospectus*" (as that term is defined in the South African Companies Act) prepared and registered under the South African Companies Act and has not been approved by, and/or filed with, the South African Companies and Intellectual Property Commission or any other regulatory

authority in South Africa. The shares are not offered, and the offer shall not be transferred, sold, renounced or delivered, in South Africa or to a person with an address in South Africa, unless one or other of the following exemptions stipulated in section 96 (1) applies:

- Section 96 (1) (a) the offer, transfer, sale, renunciation or delivery is to:
- (i) persons whose ordinary business, or part of whose ordinary business, is to deal in securities, as principal or agent;
 - (ii) the South African Public Investment Corporation;
 - (iii) persons or entities regulated by the Reserve Bank of South Africa;
 - (iv) authorized financial service providers under South African law;
 - (v) financial institutions recognised as such under South African law;
 - (vi) a wholly-owned subsidiary of any person or entity contemplated in (c), (d) or (e), acting as agent in the capacity of an authorized portfolio manager for a pension fund, or as manager for a collective investment scheme (in each case duly registered as such under South African law); or
 - (vii) any combination of the persons in (i) to (vi); or
- Section 96 (1) (b) the total contemplated acquisition cost of the securities, for any single addressee acting as principal is equal to or greater than ZAR1,000,000 or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act.

Information made available in this prospectus should not be considered as “*advice*” as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

Notice to prospective investors in Israel

This prospectus does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Israeli Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and “qualified individuals,” each as defined in the Addendum (as it may be amended from time to time), or, collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of the same and agree to it.

Notice to prospective investors in Mexico

The shares have not been and will not be registered with the Mexican National Securities Registry (Registro Nacional de Valores, or the RNV) maintained by the Mexican National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores, or the CNBV), and therefore, may not be offered or sold publicly in Mexico or otherwise be subject to intermediation activities in Mexico, however, the shares may only be offered

and sold in Mexico on a private placement basis to investors that qualify as institutional or qualified investors pursuant to the private placement exemption set forth in Article 8 of the Mexican Securities Market Law (Ley del Mercado de Valores) and regulations thereunder. The information contained in this prospectus is solely our responsibility and has not been reviewed or authorized by the CNBV and may not be publicly distributed in Mexico. In making an investment decision, all investors, including any Mexican investor, who may acquire the shares from time to time, must rely on their own examination of the Company and the terms of this offering and the notes, including the merits and risks involved.

Notice to prospective investors in India

This prospectus has not been and will not be registered as a prospectus with any registrar of companies in India. This prospectus has not been and will not be reviewed or approved by any statutory or regulatory authority in India, including the Securities and Exchange Board of India, Reserve Bank of India, any registrar of companies in India or any stock exchange in India. This prospectus and this offering of ordinary shares are not and should not be construed as an invitation, offer or sale of any securities to the public in India. Other than in compliance with the private placement exemptions under applicable laws and regulations in India, including the Companies Act, 2013, as amended, our ordinary shares have not been, and will not be, offered or sold to the public or any member of the public in India. This prospectus is strictly personal to the recipient and neither this prospectus nor the offering of our ordinary shares is calculated to result, directly or indirectly, in our ordinary shares becoming available for subscription or purchase by persons other than those receiving the invitation or offer. Each investor is deemed to have acknowledged, represented and agreed that it is eligible to invest in us and our ordinary shares under applicable laws, rules and regulations in India, without the requirement to obtain any prior approval, and that it is not prohibited or prevented under any law, rule or regulation in India from acquiring, owning or selling our ordinary shares.

Legal matters

The validity of the shares of Class A common stock being offered by this prospectus will be passed upon for us by Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, San Francisco, California. As of the date of this prospectus, an investment fund associated with Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP beneficially owned less than 0.1% of the outstanding shares of our common stock. Cooley LLP, San Francisco, California, is representing the underwriters in connection with this offering.

Experts

The financial statements as of December 31, 2024 and 2023 and for the years then ended included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Where you can find additional information

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of Class A common stock being offered by this prospectus, which constitutes a part of the registration statement. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the Class A common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

Upon the completion of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements, and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC. The address of the website is www.sec.gov. We also maintain a website at <https://billiontoone.com>, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. However, the information contained in or accessible through our website is not part of this prospectus or the registration statement of which this prospectus forms a part.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of BillionToOne, Inc.

Opinion on the Financial Statements

We have audited the accompanying 2024 financial statements of BillionToOne, Inc. and the 2023 consolidated financial statements of BillionToOne, Inc. and its subsidiary (collectively referred to as “the Company”), which comprise the balance sheets as of December 31, 2024 and 2023, and the related statements of operations and comprehensive loss, of redeemable convertible preferred stock and stockholders’ deficit and of cash flows for the years then ended, including the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP
Florham Park, New Jersey
June 20, 2025

We have served as the Company’s auditor since 2022.

BILLIONTOONE, INC.
Balance Sheets
(in thousands, except share amounts)

	December 31,	
	2023	2024
Assets		
Current assets:		
Cash and cash equivalents	\$ 97,268	\$ 191,477
Accounts receivable	9,090	24,709
Inventories	7,198	8,733
Prepaid expenses and other current assets	1,941	2,898
Total current assets	115,497	227,817
Property and equipment, net	17,479	17,111
Operating lease right-of-use assets, net	56,387	51,739
Other non-current assets	2,314	5,392
Total assets	<u>\$ 191,677</u>	<u>\$ 302,059</u>
Liabilities, redeemable convertible preferred stock, and stockholders' deficit		
Current liabilities:		
Accounts payable	\$ 3,211	\$ 4,304
Accrued expenses and other current liabilities	2,411	3,882
Accrued commissions	1,851	2,756
Accrued compensation and employee benefits	2,561	8,419
Deferred revenue, current	3,024	2,806
Operating lease liabilities, current	3,771	4,393
Financing lease liabilities, current	2,288	1,826
Convertible notes	47,686	-
Total current liabilities	66,803	28,386
Operating lease liabilities, non-current portion	55,195	50,802
Financing lease liabilities, non-current portion	2,406	874
Long-term debt	35,000	51,481
Other non-current liabilities	1,799	2,763
Total liabilities	<u>161,203</u>	<u>134,306</u>
Commitments and contingencies (Note 7)		
Redeemable convertible preferred stock, \$0.00001 par value; 23,161,933 and 29,544,989 shares authorized as of December 31, 2023 and 2024, respectively; 22,701,179 and 29,084,235 shares issued and outstanding as of December 31, 2023 and 2024, respectively; aggregate liquidation preference of \$232,025 and \$422,458 as of December 31, 2023 and 2024, respectively	<u>249,527</u>	<u>419,409</u>
Stockholders' deficit:		
Common stock, \$0.00001 par value; 42,176,761 and 51,100,000 shares authorized as of December 31, 2023 and 2024, respectively; 10,572,061 and 10,925,950 shares issued and outstanding as of December 31, 2023 and 2024, respectively	-	-
Additional paid-in capital	21,578	30,545
Accumulated deficit	(240,631)	(282,201)
Total stockholders' deficit	<u>(219,053)</u>	<u>(251,656)</u>
Total liabilities, redeemable convertible preferred stock, and stockholders' deficit	<u>\$ 191,677</u>	<u>\$ 302,059</u>

The accompanying notes are an integral part of these financial statements.

BILLIONTOONE, INC.
Statements of Operations and Comprehensive Loss
(in thousands, except per share amounts)

	Year Ended December 31,	
	2023	2024
Revenue	\$ 71,729	\$ 152,582
Cost of revenue	54,421	71,667
Gross profit	17,308	80,915
Operating expenses:		
Research and development	22,414	36,596
Selling, general and administrative	64,389	91,465
Total operating expenses	86,803	128,061
Loss from operations	(69,495)	(47,146)
Other income (expense):		
Interest income	3,456	5,819
Interest expense	(3,272)	(2,386)
Net gain on extinguishment of debt	-	7,289
Change in fair value of term loan	-	(3,137)
Change in fair value of convertible notes	(12,921)	(835)
Other expense, net	(442)	(1,145)
Total other income (expense)	(13,179)	5,605
Loss before provision for income taxes	(82,674)	(41,541)
Provision for income taxes	9	29
Net loss and comprehensive loss	\$ (82,683)	\$ (41,570)
Net loss per share:		
Basic and diluted	\$ (8.45)	\$ (4.12)
Weighted-average shares used in calculating net loss per share:		
Basic and diluted	9,783	10,080

The accompanying notes are an integral part of these financial statements.

BILLIONTOONE, INC.
Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit
(in thousands, except share data)

	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance at January 1, 2023	22,701,179	\$ 249,527	10,424,709	\$ -	\$ 16,140	\$ (157,948)	\$ (141,808)
Issuance of common stock upon exercise of stock options	-	-	147,352	-	518	-	518
Partial repayment of promissory note by executive	-	-	-	-	51	-	51
Stock-based compensation	-	-	-	-	4,854	-	4,854
Vesting of early exercises	-	-	-	-	15	-	15
Net loss	-	-	-	-	-	(82,683)	(82,683)
Balance at December 31, 2023	22,701,179	\$ 249,527	10,572,061	\$ -	\$ 21,578	\$ (240,631)	\$ (219,053)
Issuance of Series C-1 redeemable convertible preferred stock upon settlement of Convertible Notes	1,726,823	39,886	-	-	-	-	-
Issuance of Series D redeemable convertible preferred stock, net of issuance costs of \$474	4,656,233	129,996	-	-	-	-	-
Issuance of common stock upon exercise of stock options	-	-	380,639	-	1,146	-	1,146
Stock-based compensation	-	-	-	-	8,362	-	8,362
Repurchase of common stock	-	-	(26,750)	-	(546)	-	(546)
Vesting of early exercises	-	-	-	-	5	-	5
Net loss	-	-	-	-	-	(41,570)	(41,570)
Balance at December 31, 2024	29,084,235	\$ 419,409	10,925,950	\$ -	\$ 30,545	\$ (282,201)	\$ (251,656)

The accompanying notes are an integral part of these financial statements.

BILLIONTOONE, INC.
Statement of Cash Flows
(in thousands)

	Year Ended December 31,	
	2023	2024
Cash flows from operating activities:		
Net loss	\$ (82,683)	\$ (41,570)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	4,854	8,362
Depreciation and amortization	5,874	7,040
Amortization of debt discount costs and accretion of exit fees	540	341
Debt issuance costs on term loan expensed upon election of fair value option	-	453
Amortization of operating right-of-use assets	589	4,648
Loss on disposal of fixed assets	-	126
Change in fair value of common stock warrant liability	392	880
Change in fair value of redeemable convertible preferred stock warrants	48	84
Net gain on extinguishment of debt	-	(7,289)
Change in fair value of convertible notes	12,921	835
Change in fair value of term loan	-	1,481
<i>Changes in operating assets and liabilities:</i>		
Accounts receivable	(2,588)	(15,619)
Inventories	(1,412)	(1,535)
Prepaid expenses and other current assets	2,232	(860)
Other non-current assets	491	(3,101)
Accounts payable	151	877
Accrued expenses and other current liabilities	733	697
Accrued commissions	387	905
Accrued compensation and employee benefits	737	5,859
Deferred revenue	3,024	(218)
Operating lease liabilities	38	(3,771)
Net cash used in operating activities	(53,672)	(41,375)
Cash flows from investing activities:		
Proceeds from maturities of certificates of deposit	90,000	-
Deposits paid for financing leases	(988)	(31)
Purchases of property and equipment	(6,174)	(5,402)
Net cash provided by (used in) investing activities	82,838	(5,433)

BILLIONTOONE, INC.
Statement of Cash Flows—Continued
(in thousands)

	Year Ended December 31,	
	2023	2024
Cash flows from financing activities:		
Proceeds from issuance of debt, net	15,000	49,775
Repayment of debt upon extinguishment	-	(35,000)
Payment of exit fee and prepayment payable upon debt extinguishment	-	(1,688)
Principal payments on finance lease liabilities	(2,090)	(2,376)
Repurchase of common stock outstanding	-	(546)
Payment of debt issuance costs on term loan	-	(228)
Proceeds from exercise of stock options, net of repurchases	444	1,084
Proceeds from partial repayment of promissory note by executive	51	-
Proceeds from issuance of Series D redeemable convertible preferred stock, net of issuance costs	-	129,996
Net cash provided by financing activities	13,405	141,017
Net increase in cash and cash equivalents	42,571	94,209
Cash and cash equivalents at beginning of year	54,697	97,268
Cash and cash equivalents at end of year	\$ 97,268	\$ 191,477
Supplemental cash flow disclosure:		
Cash payments for interest	\$ 2,584	\$ 3,915
Cash paid for income taxes	\$ -	\$ 9
Supplemental non-cash investing and financing activities:		
Right-of-use assets obtained in exchange for new finance lease liabilities	\$ 2,795	\$ 395
Purchases of property and equipment in accounts payable and accrued expenses and other current liabilities	\$ -	\$ 1,001
Issuance of Series C-1 redeemable convertible preferred stock upon settlement of convertible notes	\$ -	\$ 39,886
Exercise of stock options for which cash has not been received	\$ 102	\$ 173

The accompanying notes are an integral part of these financial statements.

BILLIONTOONE, INC.
Notes to Financial Statements

(1) Description of Business

BillionToOne, Inc. (the “Company”, “we”, or “our”) was formed in 2016, and headquartered in Menlo Park, California. The Company is a precision diagnostics company that quantifies biology to create molecular diagnostics. The Company’s proprietary molecular counting platform is designed to detect and measure DNA molecules at the single-count level to help improve disease detection. The Company currently applies the proprietary technology to non-invasive prenatal screening (“Prenatal”) and liquid biopsy (“Oncology”).

(2) Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”). Prior to April 2024, the financial statements also included the Company’s wholly owned subsidiary SeqIndia Labs Private Limited which had immaterial activities and was not material to these financial statements and was divested in April 2024. Accordingly, in 2023, the financial statements were consolidated while in 2024 they were not. All intercompany transactions and balances have been eliminated upon consolidation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On a regular basis, management evaluates estimates, including, but not limited to: the fair value of common stock, stock-based compensation, deferred tax assets and liabilities, useful lives of long-lived assets, the incremental borrowing rate applied to operating and finance leases, determination of revenue recognition and accounts receivable, the valuation of warrants for common stock and warrants for redeemable convertible preferred stock, and valuation of debt and convertible notes. These estimates are inherently subject to judgment and actual results could differ from those estimates.

Emerging Growth Company

The Company is an emerging growth company, as defined by the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). Under the JOBS Act, emerging growth companies may delay adopting new or revised accounting standards that have different effective dates to public and private companies until the earlier of the date that (i) the company is no longer an emerging growth company or (ii) the Company affirmatively and irrevocably opts out of the extended transition period as permitted in the JOBS Act. As a result, these financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates. The Company expects to avail itself of the extended transition period for any other new or revised accounting standards during the period in which it remains an emerging growth company.

Liquidity

To date, the Company’s available liquidity and operations have been financed primarily through the issuance of convertible notes, redeemable convertible preferred stock and debt. The Company has incurred losses through the year ended December 31, 2024. The Company used \$53.7 million and \$41.4 million in operating activities for the years ended December 31, 2023 and 2024, respectively, and had an accumulated deficit of \$240.6 million and \$282.2 million as of December 31, 2023 and 2024, respectively. The Company continues to invest in the

BILLIONTOONE, INC.
Notes to Financial Statements

development and commercialization of its existing and future products and, consequently, it will need to generate additional revenues to achieve future profitability and may need to raise additional equity or debt financing. The Company believes its existing cash and cash equivalent balances and cash generated from sales will be sufficient to meet its cash needs for at least the next 12 months after the financial statements are available for issuance.

These financial statements were prepared under the assumption that the Company will continue as a going concern, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business, and do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

Risks and Uncertainties

Certain of the Company's product candidates are in clinical development or in preclinical development. If the Company is unable to advance its product candidates through clinical development, obtain regulatory approval and ultimately commercialize its product candidates, or experiences significant delays in doing so, the Company's business will be materially harmed. Even if the Company completes the necessary preclinical studies and clinical trials, the regulatory approval process is expensive, time-consuming and uncertain and may prevent the Company from obtaining clinical trial and marketing approvals for the commercialization of some or all of its product candidates. As a result, the Company cannot predict when, or if, and in which territories, it will obtain marketing approval to commercialize a product candidate.

The Company is subject to certain risks and uncertainties that the Company believes could have a material adverse effect on its future financial position or results of operations. As of the date of issuance of the financial statements, the Company is not aware of any specific event or circumstance that would require it to update its estimates, judgments, or the carrying value of its assets or liabilities. These estimates may change as new events occur and additional information is obtained and are recognized in the financial statements as soon as they become known. Actual results could differ from those estimates, and any such differences may be material to the Company's financial statements.

The Company is subject to regulation and enforcement by the federal government and by authorities in state and foreign jurisdictions in which the Company conducts business. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security laws and regulations. If the Company's operations are found to be in violation of any such laws or government regulations that apply to use, the Company may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of operations and exclusion from participation in federal and state healthcare programs.

Cash and Cash Equivalents

The Company's cash and cash equivalents consist of all highly liquid investments deposited with banks, including money market funds. The money market fund policies require the weighted average maturity of the fund's securities holdings not to exceed 90 days.

Concentration of Credit Risk

Financial instruments that potentially expose the Company to significant concentration of credit risk consist primarily of cash and cash equivalents and accounts receivable. The Company's cash and cash equivalents are generally held with large financial institutions. Certain deposits held with these financial institutions are in excess of the amount of FDIC insured limits provided on such deposits.

BILLIONTOONE, INC.
Notes to Financial Statements

As of December 31, 2023 and 2024, no customers represented more than 10% of accounts receivable, and for the years ended December 31, 2023 and 2024, no customers represented more than 10% of the Company’s revenue.

Fair Value of Financial Instruments

The Company records certain of its financial assets and liabilities at fair value, including money market funds, which are measured at fair value using quoted prices in active markets (Level 1 inputs). The carrying amounts of the Company’s other financial instruments, which include cash, accounts receivable, and accounts payable approximate their fair values due to their short-term nature. The accounting guidance for fair value provides a framework for measuring fair value, clarifies the definition of fair value, and expands disclosures regarding fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The accounting guidance establishes a three-tiered hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value as follows:

Level 1 input	Quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity can access at the measurement date.
Level 2 input	Inputs other than the quoted prices included within Level 1 that are observable for the assets or liability, either directly or indirectly.
Level 3 input	Unobservable inputs for the assets or liability. Unobservable inputs shall be used to measure fair value to the extent that relevant observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date.

A financial instrument’s categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The Company’s money market funds are quoted in an active market and classified within Level 1 of the fair value hierarchy, which are measured at fair value based on the closing price as of the reporting date. The Company’s convertible notes and term loan, which the Company elected the fair value option for, and warrant liabilities are classified as Level 3 of the fair value hierarchy and are recorded at fair value on a recurring basis.

During the years ended December 31, 2023 and 2024, there was no change in the fair value of the convertible notes or loan agreement that was related to changes in credit risk.

Accounts Receivable and Allowances

The Company regularly assesses the collectability of accounts and reviews the allowance by considering factors such as historical experience, the age of the accounts receivable balances, and current economic conditions that may affect a customer’s ability to pay. Based on this assessment for credit losses the Company determined an allowance for credit losses was not needed given the payors from whom such receivables are collectible and the relatively short duration over which the majority of receivables are collected.

There was no allowance for credit losses as of December 31, 2023 and 2024. Account balances are written off against the allowance after all means of collection have been exhausted without success. During the years ended December 31, 2023 and 2024, there were no write-offs of accounts receivable.

Inventories

Inventories consist primarily of supplies for prenatal testing, consumables and lab supplies (including reagents) which are stated at the lower-of-cost or net realizable value. The cost of inventory is determined on an average

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cost method. Inventory that is obsolete or in excess of forecasted demand is written down to its estimated net realizable value. The Company periodically reviews its inventory and writes off products that are determined to be obsolete based on market factors, utilization rates and product expiration dates. Inventory write-downs are recognized as cost of revenue in the accompanying statements of operations and comprehensive loss. During the years ended December 31, 2023 and 2024, inventory write-downs totaled approximately \$0.1 million and \$0.1 million, respectively, and were related to expired and unusable products.

Property and Equipment, Net

Property and equipment, net is stated at historical cost less accumulated depreciation and amortization. Depreciation and amortization on property and equipment is calculated using the straight-line method over the estimated useful lives of the assets which are as follows:

Machinery and equipment	5 years
Furniture and fixtures	5 years
Automobiles	5 years
Computer hardware	3 years
Computer software	3 years
Leasehold improvements	Shorter of 10 years or remaining lease term

Maintenance and repairs are charged to expenses as incurred.

The Company entered into finance leases for certain lab equipment. The Company records amortization of assets leased in connection with finance lease arrangements as depreciation expense.

Impairment of Long-Lived Assets

The Company evaluates long-lived assets for indicators of possible impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets held and used is measured by comparison of the carrying amount of an asset or an asset group to estimated undiscounted future net cash flows expected to be generated by the asset or asset group. If the carrying amount of an asset exceeds these estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the assets exceeds the fair value of the asset or asset group. There were no such impairment losses during the years ended December 31, 2023 and 2024.

Leases

The Company determines if an arrangement is a lease, or contains a lease, by evaluating whether there is an identified asset and whether the Company controls the use of the identified asset throughout the period of use. The Company determines the classification of the lease, whether operating or financing, at the lease commencement date, which is the date the leased assets are made available for use.

If the Company determines a lease exists, the Company then determines whether the lease should be classified as an operating or finance lease. A lease is classified as a finance lease when one or more of the following criteria are met: (1) the lease transfers ownership of the asset by the end of the lease term, (2) the lease contains an option to purchase the asset that is reasonably certain to be exercised, (3) the lease term is for a major part of the

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remaining useful life of the asset, (4) the present value of the lease payments equals or exceeds substantially all of the fair value of the asset or (5) the asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term. A lease is classified as an operating lease if it does not meet any of these criteria. Operating leases consist of the Company's real estate facilities and finance leases consist of the Company's lab equipment.

At the lease commencement date, the Company records a right-of-use ("ROU") asset and a lease liability for all leases, except for short-term leases with an original term of 12 months or less, whereby the Company has elected a practical expedient not to recognize an ROU asset or lease liability for short term leases.

ROU assets are measured based on the corresponding lease liability adjusted for (i) payments made to the lessor at or before the commencement date, (ii) initial direct costs incurred and (iii) tenant incentives under the lease. All ROU assets are periodically reviewed for impairment in accordance with standards that apply to long-lived assets. Lease liabilities are recognized at the lease inception date based on the present value of lease payments over the lease term discounted based on the more readily determinable of (i) the rate implicit in the lease or (ii) the Company's incremental borrowing rate (which is the estimated rate the Company would be required to pay for a collateralized borrowing equal to the total lease payments over the term of the lease). Because the Company's leases generally do not provide an implicit rate, the Company estimates its incremental borrowing rate based on the information available such as credit rating, lease term and collateral at lease commencement date for borrowings with a similar term.

Lease expense for operating leases consists of the fixed lease payments recognized on a straight-line basis over the lease term plus variable lease payments as incurred. Lease expense for finance leases consists of the depreciation recognized on a straight-line basis over the lease term and interest expense on the lease liability based on the discount rate at lease commencement.

The Company does not assume renewals or early terminations unless it is reasonably certain the Company will exercise these options at commencement. The Company elected the practical expedient which allows the Company to not allocate consideration between lease and non-lease components. Variable lease payments are recognized in the period in which the obligation for those payments are incurred.

Revenue

The Company recognizes revenue upon transfer of control of promised goods and services in an amount that reflects the consideration it expects to be entitled to receive in exchange for those goods and services. Under ASC 606—*Revenue from Contracts with Customers* (ASC 606), the Company applies the following five-step approach:

- Identify the contract with a customer
- Identify the performance obligations in the contract
- Determine the transaction price
- Allocate the transaction price to the performance obligations in the contract
- Recognize revenue when, or as, a performance obligation is satisfied

The Company generates revenue primarily from prenatal and oncology testing services, which are referred to as testing services or test results. The Company considers the patient as its customer, that requests a test service through their physician. Test results are the single performance obligation being provided to customers. Testing service revenue is recognized at a point in time when test results are delivered to the ordering physician. The

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Company generally bills an insurance carrier, Medicaid or a patient or a combination of both upon delivery of test results.

The Company enters into contracts with third-party payors including insurance carriers and Medicaid to set the pricing for tests provided to patients. Due to the nature of these third-party payor contract arrangements, the total consideration the Company expects to collect for test results is variable as they are dependent on the terms negotiated with the third-party payor. The predominance of the Company's revenue is derived from payments by third-party insurance carriers.

The Company uses the expected value method of estimating variable consideration. The total consideration the Company expects to collect in exchange for the Company's products is an estimate and is largely variable in nature. Consideration includes reimbursement from both patients and insurance carriers. The Company establishes variable consideration by considering historical payment trends for tests delivered, test reimbursement disallowances, and contractual arrangements in place, among other factors, which is adjusted for current expectations. Current expectations of cash collections factor in changes in reimbursement rate trends, historical events not expected to recur, and future known changes such as anticipated contractual pricing changes or changes to insurance coverage. The Company also considers hindsight, where applicable, in estimates established for variable consideration and update those estimates when actual experience supports doing so. In establishing variable consideration, the Company considers payors with similar reimbursement characteristics together. The Company monitors the cash collections against the estimated variable consideration over the expected cash collection period and any difference is recognized as an adjustment to estimated revenues after such estimated cash collection period has closed.

In January 2023, the Company entered a partnership with Johnson & Johnson under which the Company is licensing the Company's proprietary knowledge, performing clinical trial support services including developing a clinical study assay, and other testing services to support a clinical trial for the counterparty. The Company concluded that the agreement with Johnson & Johnson was within the scope of ASC 606 because the counterparty in the agreement meets the definition of a customer. The Company evaluated the terms of the agreement for revenue recognition, including whether the services are capable of being distinct and considered distinct within the context of the contract. The Company concluded that the licensing of the know how is not distinct from the other promises within the agreement and, as a result, was treated as a single performance obligation. Under this contract the Company receives payments upon the achievement of milestones, including (i) receipt of approval of the trial, which was achieved in 2023, (ii) various patient enrollment milestones, and (iii) subsequent full trial completion, as well as reimbursement for testing services. In making assessment of whether variable consideration should be included in the transaction price, the Company considers the degree of complexity and uncertainty associated with each milestone and related testing services, and whether achievement of the milestones and testing services are dependent on parties other than the Company. The Company recognizes revenue for the single performance obligation over time as the related services are provided. The Company utilizes an input method to measure progress to depict the transfer of services as the Company believes it provides a faithful depiction of the transfer of services over the contract. In accordance with ASC 606, the Company applies the constraint on variable consideration and includes such amounts in the transaction price only to the extent that it is probable that a significant reversal of cumulative revenue will not occur when the associated uncertainty is resolved.

As of December 31, 2024, the Company's further performance obligations beyond one year were \$6.3 million. The Company expects to recognize substantially all of the remaining performance obligations as revenue over the 12 months following December 31, 2024.

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Disaggregation of revenue

The following table presents disaggregation of revenue by Oncology, Prenatal and Clinical trial support services:

	Year ended December 31,	
	2023	2024
	(in thousands)	
Prenatal	\$ 68,803	\$ 145,901
Oncology	-	2,944
Clinical trial support services	2,926	3,737
Total revenues	<u>\$ 71,729</u>	<u>\$ 152,582</u>

Substantially all revenues recognized for the years ended December 31, 2023 and 2024 was generated in the United States.

Deferred revenue

Deferred revenue, which is a contract liability, consists of billings or cash received for services in advance of revenue recognition and is recognized as revenue when all the Company's revenue recognition criteria are met. As of December 31, 2023 and 2024, the deferred revenue balance was \$3.0 million and \$2.8 million, respectively, all of which is considered short-term. For the years ended December 31, 2023 and 2024, revenue recognized from deferred revenue at the beginning of the period was \$0 and \$3.0 million, respectively. The decrease in deferred revenue balances as of December 31, 2024 as compared to December 31, 2023 is attributed to the timing of contractual payments for testing and consulting services and timing of delivery of the clinical test results and services.

Cost of Revenue

The Company's cost of revenue consists primarily of expenses related to reagents and consumables, test kits, personnel-related expenses such as salaries, stock-based compensation expense and related benefits for its operations and support personnel, shipping costs, overhead allocations, depreciation expense, facilities-related expenses and other services used in connection with delivering the Company's services.

Advertising Costs

Advertising costs are expensed as incurred. These amounts are included in selling, general and administrative expense in the statements of operations and comprehensive loss and amounted to approximately \$0.4 million and \$1.3 million for the years ended December 31, 2023 and 2024, respectively.

Research and Development

Research and development expenses consist primarily of personnel-related expenses such as salaries, stock-based compensation expense and related benefits for the Company's product development employees. Research and development expenses also include non-personnel costs such as materials and consumables used for research, clinical third-party services and consulting expenses, and an allocation of the Company's general overhead expenses. These costs are expensed in the period as incurred.

Selling, General and Administrative

Selling, general and administrative expenses consist primarily of personnel-related expenses such as salaries, stock-based compensation expense and related benefits for the Company's sales, marketing, and general and

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administrative employees. Selling, general and administrative expenses also include the Company's commission payments, marketing related expenses in promoting the Company's brand and tests, and training costs for the sales employees. All selling, general and administrative costs are expensed in the period as incurred.

Income Taxes

Income taxes are accounted for under the asset-and-liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided on deferred tax assets when it is more-likely-than-not that some portion or all of the net deferred tax assets will not be realized. The Company evaluates uncertain tax positions taken or expected to be taken in the course of preparing its tax return to determine whether the tax positions are more-likely-than-not of being sustained upon challenge by the applicable tax authority based on the technical merits of the position. The Company recognizes the effect of income tax positions only if those positions are more-likely-than-not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than a 50% likelihood of being realized upon ultimate settlement. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company recognizes interest and penalties related to income tax matters in provision for income taxes.

Comprehensive Loss

During the years ended December 31, 2023 and 2024, the Company did not have any other comprehensive income (loss) and, therefore, the net loss and comprehensive loss was the same.

Redeemable Convertible Preferred Stock

The Company records shares of redeemable convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. The redeemable convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, redemption is contingent upon the occurrence of certain events considered not solely within the Company's control. The Company has not adjusted the carrying values of the redeemable convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when a deemed liquidation event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of redeemable convertible preferred stock. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a deemed liquidation event will occur.

Redeemable Convertible Preferred Stock Warrants

Freestanding warrants to purchase shares of redeemable convertible preferred stock are classified as liabilities on the balance sheets at their estimated fair value because the underlying shares of redeemable convertible preferred stock are contingently redeemable and, therefore, may obligate the Company to transfer assets at some point in the future. Warrants to purchase shares of redeemable convertible preferred stock are recorded at fair value upon issuance and remeasured to fair value. Redeemable convertible preferred stock warrants are subject to re-measurement at each balance sheet date, and any change in fair value is recognized as other income (expense) in the statements of operations and comprehensive loss.

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Common Stock Warrants

Certain freestanding warrants to purchase shares of common stock are classified as liabilities on the balance sheets at their estimated fair value as the warrants allow the holders to put the warrants to the Company in exchange for a cash payment. Those puttable warrants to purchase shares of common stock are recorded at fair value upon issuance and remeasured to fair value. Common stock warrants are subject to re-measurement at each balance sheet date and any change in fair value is recognized as other income (expense) in the statements of operations and comprehensive loss (See Note 3).

Stock-Based Compensation

The Company measures stock-based compensation expense for all stock-based payment awards based on the estimated fair value of the awards on the date of grant. The fair value of each stock option granted is estimated using the Black-Scholes-Merton option valuation model (the “Black-Scholes Model”). The model requires the Company to make assumptions and judgments about the variable inputs used in the Black-Scholes Model, including expected term, the volatility of the Company’s common stock, and assumed risk-free interest rate. Stock-based compensation is recognized net of actual forfeitures on a straight-line basis over the requisite service period of the awards. The Company accounts for forfeitures as they occur.

The Company has granted awards to employees that vest based on continued service (service conditions). Stock-based compensation expense is recognized on a straight-line basis over the service period.

Segment information

Operating segments are defined as components of an entity for which separate financial information is available and that is regularly reviewed by the Chief Operating Decision Maker (“CODM”) in deciding how to allocate resources and assess performance. The Company’s Chief Executive Officer is the Company’s CODM. The CODM reviews financial information presented on a company-wide basis to make operating decisions, allocating resources, and evaluating financial performance. As such, the Company has determined that it is managed as one operating segment and one reportable segment.

Key areas of focus for the CODM when making decisions on the allocations of resources is cash used in operations as well as revenue, gross margin and net loss; this information is used by the CODM and compared to budgeted amounts in order for the CODM to make decisions on how resources should be allocated across the organization. The Company’s segment measure of profitability is net loss.

Segment revenues are derived from prenatal and oncology testing results, leveraging the Company’s diagnostic technology platform, which are delivered to patients, who are the Company’s customer. The Company’s customers are predominantly located in the United States. Substantially all of the Company’s long-lived assets are located in the United States. The Company’s technology platform is applied similarly in both the prenatal and oncology settings.

The financial statements provide the CODM with a view of the Company’s financial condition as it pertains to the Company’s assets, liabilities and expenses. Significant expense categories align with the expense categories and amounts presented on the statements of operations.

Recently Adopted Accounting Pronouncements

In November 2023, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*, which expands segment disclosures by requiring disclosure of significant segment expenses that are regularly provided

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to the CODM and included within each reported measure of segment profit and loss, an amount and description of its composition for other segment items, and interim disclosures of a reportable segment's profit or loss and assets. This guidance also requires disclosures of the title and position of the CODM, and an explanation of how the CODM uses the reported measures of segment profit or loss in assessing segment performance and deciding how to allocate resources. The Company adopted this ASU for its year ended December 31, 2024, and the adoption did not have a material impact on the Company's financial statements or disclosures.

Recently Issued Accounting Pronouncements not yet Adopted

In November 2024, the FASB issued ASU 2024-04, *Debt – Debt with Conversion and Other Options (Subtopic 470-20): Induced Conversions of Convertible Debt Instruments*. This ASU clarifies guidance on the requirements for determining whether certain settlements of convertible debt instruments should be accounted for as an induced conversion or extinguishment. This guidance is effective for the Company beginning on January 1, 2026, and early adoption is permitted, although the Company does not plan to early adopt. The Company is currently evaluating the impact of the adoption of this standard on the Company's financial statement disclosures.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures* ("ASU 2023-09"), which expands income tax disclosure requirements to include additional information related to the rate reconciliation of effective tax rates to statutory rates, as well as additional disaggregation of taxes paid. This ASU also removed disclosure related to certain unrecognized tax benefits and deferred taxes. ASU 2023-09 is effective for fiscal years beginning after December 15, 2024. This ASU may be applied prospectively or retrospectively, and early adoption is permitted. The Company is currently evaluating the impact of the adoption of this standard on the Company's financial statement disclosures.

In November 2024 and January 2025, FASB issued ASU 2024-03 and ASU 2025-01, respectively, *Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses*, which requires disclosure in the notes to the financial statements of specified information about an entity's certain costs and expenses. The amendments to the standards are effective for the Company's fiscal year beginning January 1, 2027 and interim periods beginning January 1, 2028. Early adoption is permitted. The amendments should be applied either prospectively to the financial statements issued for reporting periods after the effective date of this ASU or retrospectively to any or all prior periods presented in the financial statements. The Company is currently evaluating this ASU to determine the impact it may have on its financial statements and related disclosures.

(3) Fair Value Measurements

The fair value measurements of assets and liabilities that are measured at fair value on a recurring basis consisted of the following as of December 31, 2023 (in thousands):

	Level 1	Level 2	Level 3	Total
Redeemable convertible preferred stock warrants	\$ -	\$ -	\$ 146	\$ 146
Common stock warrants	-	-	1,653	1,653
Convertible notes	-	-	47,686	47,686
Total liabilities	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 49,485</u>	<u>\$ 49,485</u>

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The fair value measurements of assets and liabilities that are measured at fair value on a recurring basis consisted of the following as of December 31, 2024 (in thousands):

	Level 1	Level 2	Level 3	Total
Current assets:				
Money market funds	\$ 7,538	\$ -	\$ -	\$ 7,538
Total assets	<u>\$ 7,538</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 7,538</u>
Current liabilities:				
Redeemable convertible preferred stock warrants	\$ -	\$ -	\$ 230	\$ 230
Common stock warrants	-	-	2,533	2,533
Term Loan	-	-	51,481	51,481
Total liabilities	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 54,244</u>	<u>\$ 54,244</u>

Level 3 instruments consist of the Company's Series A-6 redeemable convertible preferred stock warrant liabilities, common stock warrant liabilities, a term loan and convertible notes.

The fair values of the Series A-6 redeemable convertible preferred stock warrant and common stock warrant are measured using a probability weighted option pricing model.

The significant assumptions used in preparing the option pricing model for valuing the common stock warrant liability as of December 31, 2023 and 2024 are as follows:

	December 31,	
	2023	2024
Stock price	\$ 13.41	\$ 20.32
Exercise price	\$2.80 – \$10.92	\$2.80 – \$10.92
Volatility	60.0%	84.0%
Expected term (years)	1.5	2.3
Risk-free rate	4.50%	4.14%
Dividend yield	-%	-%

The significant assumptions used in preparing the option pricing model for valuing the redeemable convertible preferred stock warrant liability as of December 31, 2023 and 2024 are as follows:

	December 31,	
	2023	2024
Stock price	\$ 17.45	\$ 25.83
Exercise price	\$ 2.59	\$ 2.59
Volatility	60.0%	84.0%
Expected term (years)	1.5	2.3
Risk-free rate	4.50%	4.14%
Dividend yield	-%	-%

The fair value of the convertible notes is measured based on the present value of the notes based on the fair market yield to maturity and an estimate of the probability of the notes' conversion features. The fair market yield was estimated based on publicly traded debt securities with similar maturities and risk. During the year ended December 31, 2024, the Company settled the convertible notes through the issuance of Series C-1 redeemable convertible preferred stock to the noteholders (See Note 9).

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The significant assumptions used in preparing discounted cash flow for valuing the convertible notes as of December 31, 2023 and right before the conversion date May 15, 2024 are as follows:

	December 31, 2023	May 15, 2024
Principal outstanding (in \$'000s)	30,000	30,000
Expected term (years)	0.7	-
Risk-free rate	5.26%	5.46%
Interest rate	8.00%	8.00%

During the year ended December 31, 2024, the Company entered into a new term loan agreement for which the Company elected to account for using the fair value option. As such, the fair value of the debt is calculated by using the probability weighting of the present value of settlement scenarios (See Note 10).

The significant assumptions used in preparing the income approach model for valuing the new term loan as of August 2, 2024 and December 31, 2024 are as follows:

	August 2, 2024	December 31, 2024
Discount rate	10.02%	9.37%
Annual interest rate	8.00%	8.00%
Expected term (years) – Scenario 1	5.73	5.32
Expected term (years) – Scenario 2	7.10	6.69

The common stock warrants, redeemable convertible preferred stock warrants, convertible notes and term loan are all classified as Level 3 fair value measurements due to the lack of relevant observable market data for the respective fair value inputs for each instrument.

The following table presents a summary of the changes in the fair value of the Company's Level 3 financial instruments (in thousands):

	Common Stock Warrants	Redeemable Convertible Preferred Stock Warrants	Convertible Notes	Term Loan
Balance at January 1, 2023	\$ 1,261	\$ 98	\$ 34,765	\$ -
Additions	-	-	-	-
Adjustment to fair value	392	48	12,921	-
Balance at December 31, 2023	1,653	146	47,686	-
Additions	-	-	-	50,000
Adjustment to fair value	880	84	835	1,481
Gain on extinguishment	-	-	(8,635)	-
Settlements	-	-	(39,886)	-
Balance at December 31, 2024	\$ 2,533	\$ 230	\$ -	\$ 51,481

For the years ended December 31, 2023 and 2024, the Company recognized losses related to the change in the fair value of the common stock warrant liability and redeemable convertible preferred stock warrant liability in other expense, net in the statements of operations and comprehensive loss. The Company will continue to recognize changes in the fair value of the common stock warrant liability and redeemable convertible preferred stock warrant liability until the warrants are exercised, expire, or qualify for equity classification.

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For the years ended December 31, 2023 and 2024, the Company recognized losses related to the change in the fair value of convertible notes in change in fair value of convertible notes in the statements of operations and comprehensive loss. During the year ended December 31, 2024, the convertible notes were settled in Series C-1 Redeemable Convertible Preferred Stock which was accounted for as a debt extinguishment as the settlement was not pursuant to the original conversion terms. The Company recorded a gain on extinguishment in net gain on extinguishment of debt in the statements of operations and comprehensive loss upon the conversion date (See Note 9).

For the year ended December 31, 2024, the Company recognized a loss related to the change in fair value of the term loan in change in fair value of term loan in the statements of operations and comprehensive loss.

The common stock warrant liability and redeemable convertible preferred stock warrant liabilities are recorded within other non-current liabilities on the balance sheets as of ended December 31, 2023 and 2024. The convertible notes are presented in current liabilities on the balance sheet as of December 31, 2023. The term loan is recorded within long-term debt on the balance sheet as of December 31, 2024.

The Company recognizes transfers among Level 1, Level 2 and Level 3 classifications as of the actual date of the events or change in circumstances that caused the transfers. During the years ended December 31, 2023 and 2024, the Company had no transfers of financial assets or liabilities between Level 1 and Level 2 or between Level 2 and Level 3 of the fair value hierarchy.

(4) Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

	2023	2024
Machinery and equipment	\$ 10,616	\$ 14,585
Equipment under finance lease	11,829	11,210
Furniture and fixtures	3,337	3,391
Automobiles	40	40
Computer hardware	1,154	1,770
Computer software	200	227
Construction in progress	497	2,747
Leasehold improvements	222	290
Property and equipment, gross	27,895	34,260
Less: Accumulated depreciation and amortization	(10,416)	(17,149)
Property and equipment, net	\$ 17,479	\$ 17,111

Depreciation and amortization expense for the years ended December 31, 2023 and 2024 was \$5.9 million and \$7.0 million, respectively. Amounts included in construction in progress consists of purchases of lab equipment that have not yet been placed into service.

Refer to Note 8 for additional details related to leased equipment.

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(5) Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	2023	2024
Accrued professional services	\$ 322	\$ 898
Accrued inventory purchases	290	443
Accrued property and other taxes	228	443
Accrued information technology purchases	136	250
Accrued legal expenses	87	191
Accrued phlebotomy expenses	64	171
Accrued insurance expenses	136	159
Accrued rent	604	160
Accrued interest	256	-
Accrued clinical expenses	40	98
Other	249	1,069
Accrued expenses and other current liabilities	<u>\$ 2,411</u>	<u>\$ 3,882</u>

(6) Redeemable Convertible Preferred Stock

As of December 31, 2023, redeemable convertible preferred stock consisted of the following (in thousands, except for share data):

	Shares Authorized	Shares Issued and Outstanding	Net Carrying Value	Aggregate Liquidation Preference
Series A-1	1,349,650	1,349,650	\$ 3,493	\$ 540
Series A-2	1,137,210	1,137,210	2,943	910
Series A-3	899,730	899,730	2,328	900
Series A-4	25,761	25,761	67	50
Series A-5	114,613	114,613	297	100
Series A-6	5,805,861	5,796,201	14,999	15,000
Series B-1	5,182,287	5,182,287	54,889	55,000
Series B-2	2,566,902	2,566,902	27,243	16,025
Series C	6,079,919	5,628,825	143,268	143,500
Total	<u>23,161,933</u>	<u>22,701,179</u>	<u>\$ 249,527</u>	<u>\$ 232,025</u>

As of December 31, 2024, redeemable convertible preferred stock consisted of the following (in thousands, except for share data):

	Shares Authorized	Shares Issued and Outstanding	Net Carrying Value	Aggregate Liquidation Preference
Series A-1	1,349,650	1,349,650	\$ 3,493	\$ 540
Series A-2	1,137,210	1,137,210	2,943	910
Series A-3	899,730	899,730	2,328	900
Series A-4	25,761	25,761	67	50
Series A-5	114,613	114,613	297	100
Series A-6	5,805,861	5,796,201	14,999	15,000
Series B-1	5,182,287	5,182,287	54,889	55,000
Series B-2	2,566,902	2,566,902	27,243	16,025
Series C	6,079,919	5,628,825	143,268	143,500
Series C-1	1,726,823	1,726,823	39,886	33,870
Series D	4,656,233	4,656,233	129,996	156,563
Total	<u>29,544,989</u>	<u>29,084,235</u>	<u>\$ 419,409</u>	<u>\$ 422,458</u>

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The rights, preferences and privileges of the Company's redeemable convertible preferred stock are as follows:

(i) *Dividends*

The holders of shares of redeemable convertible preferred stock shall be entitled to receive dividends prior and in preference to any declaration of dividends on common stock. Dividends are payable only when and if declared by the Company's Board of Directors and are not cumulative. After dividends paid on redeemable convertible preferred stock, any dividends or distribution should be distributed to the holders of common and redeemable convertible preferred stock on an as-converted basis. No dividends have been declared or paid through December 31, 2024.

(ii) *Liquidation Preference*

In the event of liquidation as approved by the Board of Directors, dissolution, or winding up of the Company, the holders of Series D shall be entitled to receive out of the proceeds or assets of this corporation available for distribution to its stockholders, prior and in preference to any distribution of proceeds to the holders of common stock, an amount per share equal the sum of 1.2 times the original issue price of \$28.0204, plus declared but unpaid dividends on such shares and (ii) the holders of each other series of redeemable convertible preferred stock shall be entitled to receive the assets of the Company available for distribution, prior and in preference to any distribution of proceeds to the holders of common stock, an amount per share equal to the sum of the applicable original issue price for such series of redeemable convertible preferred stock, plus declared but unpaid dividends on such share. If, upon occurrence of such event, the proceeds distributed among the holders of redeemable convertible preferred stock shall be insufficient to permit the payment to such holders of the full preferential amounts, then the entire proceeds available for distribution shall be distributed ratably among the holders of the redeemable convertible preferred stock in proportion to the full preferential amount.

(iii) *Conversion*

Each share of redeemable convertible preferred stock is convertible into common stock at any time after the issuance of the shares at the option of the holder (each share of Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6, Series B-1, Series B-2, Series C, Series C-1 and Series D is convertible to Common Stock). The conversion rate is determined by dividing the original issue price (as adjusted for any recapitalization) by the conversion price. The original issue prices of Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6, Series B-1, Series B-2, Series C, Series C-1 and Series D are \$0.4001, \$0.8002, \$1.0003, \$1.9409, \$0.8725, \$2.5879, \$10.6130, \$6.2429, \$25.4937, \$19.6143, and \$28.0204, respectively. The initial conversion price per share for each series of redeemable convertible preferred stock shall be the original issue price applicable to such series (1:1 conversion ratio), however that conversion price shall be subject to adjustment. There have been no adjustments to the conversion price since original issuance.

Each share of redeemable convertible preferred stock shall automatically be converted into such shares of common stock at the conversion rate at the time in effect for such series redeemable convertible preferred stock at the closing of this corporation's sale of its common stock in public offering, that results in at least \$100,000,000 of gross proceeds; at this corporation's initial listing of common stock on national securities exchange; in a Special Purpose Acquisition Company transaction, or the date or occurrence of an event specified by vote of redeemable convertible preferred stock (voting together as a single class and not as separate series, and on an as-converted basis).

(iv) *Voting Rights*

The holder of each share of redeemable convertible preferred stock shall have the right to one vote for each share of common stock into which such redeemable convertible preferred stock could then be converted.

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Thus, the holders of redeemable convertible preferred stock shall have the same voting rights as the holders of common stock.

As long as at least 1,449,050 shares of Series A redeemable convertible preferred stock remain outstanding, the holders of such shares of Series A redeemable convertible preferred stock shall be entitled to elect two directors of the Company at any election of directors. As long as at least 1,225,790 shares of Series C redeemable convertible preferred stock remain outstanding, the holders of such shares of Series C redeemable convertible preferred stock shall be entitled to elect one director of the Company at any election of directors. As long as at least 1,164,058 shares of Series D redeemable convertible preferred stock remain outstanding, the holders of such shares of Series D redeemable convertible preferred stock shall be entitled to elect one director of the Company at any election of directors. The holders of outstanding common stock shall be entitled to elect four directors of this Corporation at any election of directors.

(v) *Redemption*

The holders of redeemable convertible preferred stock have no voluntary rights to redeem shares. A liquidation, dissolution or winding up of the Company, a greater than 50% change in control, or a sale of substantially all of its assets would constitute a redemption event. Although the redeemable convertible preferred stock is not mandatorily or currently redeemable, given the shares are redeemable upon an event outside the Company's control, all shares of redeemable convertible preferred stock have been presented outside of permanent equity on the balance sheets. The carrying values of redeemable convertible preferred stock have not been accreted to their redemption values as redemption events are not probable to occur.

(7) Commitments and Contingencies

Legal Proceedings

From time to time, the Company is party to certain claims in the ordinary course of business. The Company, in conjunction with its legal counsel, assesses the need to record a liability for litigation or contingencies. A liability is recorded when and if it is determined that such a liability for litigation or contingencies is both probable and the amount can be reasonably estimated. The Company believes that it is not presently a party to any litigation of which the outcome, if determined adversely, would individually or in the aggregate be expected to have a material and adverse effect on the business, operating results, cash flows, or financial position. Legal fees are expensed in the period in which they are incurred.

Indemnification Agreements

The Company has entered into indemnification agreements with its directors and officers against any liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct of the individual.

Additionally, in the ordinary course of business, the Company enters into agreements of varying scope and terms pursuant to which it agrees to indemnify customers, vendors, lessors, business partners, and other parties with respect to certain matters, including, but not limited to, losses arising out of the breach of such agreements, services to be provided by the Company, or from intellectual property infringement claims made by third parties. For the year ended December 31, 2023 and 2024, no demands have been made upon the Company to provide indemnification under such agreements, and there are no claims that the Company is aware of that could have a material adverse effect on its financial position, results of operations, or cash flows. Accordingly, the Company has no liabilities recorded for these agreements as of December 31, 2023 and 2024.

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(8) Leases

Operating Leases

In February 2021, the Company entered into a lease agreement for office and laboratory space in Menlo Park, CA which will expire in February 2031. In December 2022, the Company entered into a lease agreement for office and laboratory space in Union City, CA which will expire in June 2033. The Union City, CA lease contains a one-time tenant option to extend the lease term by a period of five years which the Company is not reasonably certain to exercise and which has been excluded from recognition in the Company's right-of-use assets and lease liabilities. The Company records rent expense associated with operating lease liabilities in operating expenses in the statements of operations and comprehensive loss.

In October 2023, the Company signed a lease amendment for the Union City, CA lease to increase the lease's tenant improvement allowance by approximately \$0.6 million. The increase in the allowance is amortized into the lease payments, resulting in a corresponding increase in total lease payments of \$0.6 million. The lease amendment was considered a lease modification under ASC 842 and the ROU asset and lease liability were remeasured at the modification date. The remeasurement of the lease resulted in an increase in both the operating ROU asset and the operating lease liability of approximately \$0.6 million.

In April 2024, the Company entered into a lease agreement for premises to be constructed in Austin, TX. The lease is expected to commence prior to December 31, 2026 at an initial rental rate of \$12.3 million per year. The lease agreement includes annual rent increases of 3% and is for a term of fifteen years and nine months. The agreement also includes a seven-year extension option that can be exercised by the Company. As part of the lease agreement, the Company remitted to the landlord \$2.0 million in respect of a security deposit and \$1.0 million in respect of the first month's rent payment, which were recorded in other non-current assets on the balance sheet for the year ended December 31, 2024.

The Company's operating lease costs were \$5.5 million and \$9.4 million during the years ended December 31, 2023 and 2024, respectively. The Company's variable lease expense totaled \$3.2 million and \$4.4 million for the years ended December 31, 2023 and 2024, respectively. The Company did not have any material short-term lease costs during the years ended December 31, 2023 and 2024.

Other information related to the Company's operating leases were as follows for the years ended December 31 (in thousands):

	2023	2024
Cash paid for amounts included in the measurement of operating lease liabilities within operating cash flows	\$ 4,872	\$ 8,516

As of December 31, 2023 and 2024, the weighted average remaining operating lease term was 8.8 years and 7.8 years, respectively.

As of December 31, 2023 and 2024, the weighted average discount rate used to estimate operating lease liabilities was 8.4% and 8.4%, respectively.

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As of December 31, 2024, future lease payments under operating leases were as follows (in thousands):

Year ending December 31:		
2025	\$	8,810
2026		9,115
2027		9,430
2028		9,757
2029		10,094
Thereafter		29,382
Total lease payments	\$	76,588
Less: imputed interest		(21,393)
Present value of operating lease liabilities	\$	<u>55,195</u>

Financing Leases

As of December 31, 2023 and 2024, the weighted average remaining financing lease term was 2.3 years and 1.8 years, respectively.

As of December 31, 2023 and 2024, the weighted average interest rate for the Company's financing leases was 6.5% and 6.5%, respectively.

As of December 31, 2024, future lease payments under financing leases were as follows (in thousands):

Year ending December 31:		
2025	\$	1,931
2026		536
2027		377
Total lease payments	\$	2,844
Less: interest expense		(144)
Present value of financing lease liabilities	\$	<u>2,700</u>

Other information related to the Company's financing leases were as follows for the years ended December 31 (in thousands):

	<u>2023</u>	<u>2024</u>
Amortization of right-of-use assets:	\$ 3,085	\$ 3,436
Operating cash flows from financing leases (interest paid):	361	243
Total finance lease cost	<u>\$ 3,446</u>	<u>\$ 2,619</u>

(9) Convertible Notes

In September 2022, the Company entered into a Note Purchase Agreement for unsecured Convertible Promissory Notes (the "Notes") to several note holders (the "Note Holders") with a principal sum of \$30.0 million together with interest thereon from the date of the Notes. The Notes accrue interest at a rate of 8.0% per annum, simple interest. The Notes were scheduled to mature on September 20, 2024, and the Company may not make prepayments without written consent of the majority Note holders.

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Holders of the Notes could have converted their notes into shares of common stock at or after an initial public offering at a conversion price dependent on the initial price per share offered in connection with the initial public offering; or 70% of the price per share payable to common stockholders in connection with another liquidation event.

Upon the Company's next equity financing, the Notes could have automatically converted into the equity issued in that financing (which was expected to be Series D redeemable convertible preferred stock) at a conversion price equal to the lower of 70% of the next equity price per share and an amount calculated by dividing a valuation cap of \$1 billion by the fully diluted number of shares.

Due to the presence of certain embedded derivatives within the Notes, the Company elected to account for the Notes using the fair value option and changes in fair value related to the Notes are recorded in other income (expense) in the Company's statements of operations and comprehensive loss. Changes in fair value attributable to credit risk are immaterial to the financial statements as of December 31, 2023 and 2024. Inputs for fair value were determined by evaluating the probability of various conversion scenarios and applicable market interest rates.

The estimated fair value of the Notes was determined by using a scenario-based analysis that estimated the fair value of the Notes based on the probability-weighted present value of expected future investment returns, considering possible outcomes available to the noteholder, including conversions to common stock and maturity. The estimated fair value of the Notes was \$47.7 million as of December 31, 2023.

During May 2024, concurrent with the issuance of Series D redeemable convertible preferred stock, and pursuant to negotiation with the Note Holders, the Company and Note Holders agreed to settle the Notes through the issuance of Series C-1 redeemable convertible preferred stock to the Note Holders instead of Series D redeemable convertible preferred stock. The Notes converted into an aggregate of 1,726,823 shares of Series C-1 redeemable convertible preferred stock at a conversion price of approximately \$19.6143 per share. The change in terms of the Notes was accounted for as a debt extinguishment as the settlement was not pursuant to the original conversion terms. Immediately prior to the extinguishment, the Company recorded a mark-to-market adjustment for the Notes resulting in a loss of \$0.8 million which was recorded to change in fair value of convertible notes in the Company's statements of operations and comprehensive loss. Upon extinguishment, the Company derecognized the Notes on the balance sheets at their fair value immediately prior to the extinguishment of \$48.5 million. The difference of \$8.6 million between the fair market value of the Series C-1 redeemable convertible preferred shares received by the Note Holders of \$39.9 million and the fair value of the Notes immediately prior to the extinguishment was recorded as a gain on debt extinguishment in the Company's statements of operations and comprehensive loss.

The Notes were subordinated in right of payment to all indebtedness between the Company and Western Alliance Bank ("WAB"). The Note Holders agreed, that as long as any debt remains outstanding with WAB or WAB has obligations to make additional credit extensions to the Company, the Note Holders would not have received any payment other than a conversion of the Notes into equity securities, unless otherwise agreed by WAB in writing. The priority to WAB excluded payments in cash, including interest, but did not preclude conversion of the Notes and related interest in shares. As of December 31, 2023, the Company had \$35.0 million of outstanding debt with WAB. The first payment due on the debt was in August 2025 and the last payment was in July 2027. As the Note was extinguished during 2024, no payments of cash were made to the Note Holders in principal or interest for the Notes.

(10) Long-term Debt

Western Alliance Bank Debt

In October 2021, the Company entered into a loan and security agreement (the "2021 LSA") with WAB, which provided the Company with three tranches of capital advances totaling \$15.0 million. The loan is collateralized

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by all property of the Company other than its Intellectual Property ("IP"). The advanced principal accrued interest based on the floating prime rate per annum, which was 3.25% at December 31, 2021. The first tranche of \$5.0 million was advanced on October 12, 2021 and the second tranche was advanced on December 17, 2021, both with a maturity date of October 12, 2025 and interest-only payments, at the floating rate, through May 1, 2023 and 30 equal monthly payments thereafter, of principal and interest. The Company drew down the third tranche on January 3, 2022 and elected to extend the interest only period by an additional 6 months followed by 24 months of amortization. The loans include a final payment of 3.75% of the advanced amount, or \$562,500, due upon the earlier of maturity or termination of the loan. The final payment was accreted to interest expense over the term of the loan. The term loan advances are secured by a lien on the Company's assets.

In July 2022, the Company amended its October 2021 loan and security agreement with WAB, such that WAB made four tranches of capital advances available to the Company for an aggregate amount up to \$35.0 million ("2022 LSA Amendment"). The advanced principal will accrue interest based on the floating prime rate per annum, which was 8.5% at December 31, 2023.

Under the 2022 LSA Amendment, the first tranche of \$20.0 million in principal was advanced on July 22, 2022 and was used to pay off the existing \$15.0 million in principal outstanding to WAB under the 2021 LSA, resulting in net proceeds to the Company of \$5.0 million. The second tranche of \$5.0 million in principal was advanced on January 25, 2023 and the third tranche of \$5.0 million in principal was advanced on July 7, 2023. The fourth tranche of \$5.0 million was advanced on October 11, 2023. The term loans have a maturity date of July 1, 2027. The term loans were interest-only through July 31, 2025, followed by 24 equal payments of principal plus interest. The loans required a final payment of 4.25% of the total advanced amount, which resulted in an exit fee liability of \$1.5 million payable at the maturity of the debt. The final payment was accreted to the debt balance and recognized as interest expense over the term of the loan.

The term loan advances were secured by a lien on the Company's assets. The Company was subject to certain financial and reporting covenants including a requirement for the Company to meet certain test volumes, measured quarterly on a trailing two quarter basis.

During August 2024, the Company elected to prepay the outstanding amount of the term loans of \$35.0 million in principal and the \$1.5 million exit fee that was due upon early loan payoff. The Company recognized a loss on the extinguishment of debt of \$1.3 million in the statements of operations and comprehensive loss. The loss on extinguishment consisted of incremental expense of \$0.8 million unaccreted exit fee liability, \$0.3 million unamortized debt issuance costs and a \$0.2 million prepayment fee assessed by the bank.

Oberland Note Purchase Agreement

In August 2024, the Company entered into a note purchase agreement (as amended from time to time, the "2024 Notes") with BWCB SA LLC (an entity affiliated with Oberland Capital Management, LLC ("Oberland Capital")), which provided the Company with up to four tranches of capital advances totaling up to \$140.0 million. The advanced principal accrues interest at a rate of 8.0% per annum. The first tranche of \$50.0 million was advanced on August 5, 2024, with a Maturity Date on the seventh anniversary of the first purchase date (August 31, 2031). The first tranche requires interest-only payments through August 31, 2031 and a lump sum payment due on August 31, 2031.

The second tranche of up to \$35.0 million in principal is available at the Company's option at any time prior to September 30, 2025 provided that the trailing six-month worldwide net revenue of the Company is at least \$80.0 million. The Company is required to sell the third tranche of notes in the principal amount of \$30.0 million prior to March 31, 2026 as the Company has achieved the thresholds triggering this tranche. The thresholds are

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trailing six-month revenue of at least \$112.5 million and a trailing six-month Gross Margin of the Company of at least 45%. The fourth tranche of up to \$25.0 million is available at the mutual agreement of the Company and Oberland Capital at any time prior to March 26, 2026. Gross Margin is defined as (I) net revenue minus cost of goods sold divided by (II) net revenue, expressed as a percentage. The fourth tranche of up to \$25.0 million in principal will be made available to the Company at the mutual agreement of the parties at any time prior to March 31, 2026.

The Company has the option at any time to prepay all of the then-outstanding notes, and Oberland Capital has the option to redeem the notes upon (i) a change in control of the Company, (ii) an event of default, or (iii) the maturity date. The repayment amount of the note shall equal to the following: (1) 130% of principal amount of notes if the payment is made within 24 months of issuance; (2) 145% of principal amounts of notes if the payment is made within 36 months of issuance; (3) if the payment is made within 48 months, an amount that would generate an internal rate of return ("IRR") for the purchasers of 12.25%; (4) if the payment is made within 60 months of issuance, an amount that would generate an IRR for the purchasers of 11.75%; (5) If the payment is made thereafter but before maturity, an amount that would generate an IRR for the purchasers of 11.25%; and (6) if the payment is made at maturity, an amount that would generate an IRR for the purchasers of 10.0%.

Under the terms of the 2024 Notes, on the last day of each fiscal quarter commencing with the fiscal quarter ending March 31, 2025, excluding any fiscal quarter with respect to which the Company's aggregate cash and cash equivalents is greater than 1.1 times the aggregate principal amount of the notes issued (the "Liquidity Condition") at all times during such fiscal quarter, the Company is required to achieve minimum thresholds for both trailing six month revenues and trailing six month gross margin. If the Liquidity Condition is not satisfied, the Company is required to have trailing six-month Net Revenue of not less than the amount shown for each applicable period in the table below, as well as a trailing six-month Gross Margin of not less than 30%, each as defined in the 2024 Notes. The Company was in compliance with all material financial covenants as of December 31, 2024.

Period	Minimum Trailing Six-Month Net Revenue Threshold (in millions)
Q1 2025	\$ 56.1
Q2 2025	\$ 65.6
Q3 2025	\$ 74.8
Q4 2025	\$ 82.8
Q1 2026	\$ 87.2
Q2 2026	\$ 101.8
Q3 2026	\$ 117.2
Q4 2026	\$ 120.0
Thereafter	\$ 120.0

The agreement also contains a revenue participation provision, under which, for any fiscal quarter, 0.01% of net revenue for such fiscal quarter (up to \$100.0 million of net revenue for each fiscal year) per each \$1.0 million principal amount of the notes will be payable to Oberland Capital. The revenue participation payments are additional financing costs of the loan and are included in the computation of the internal rate of return measures described two paragraphs above. Beginning with the fiscal year beginning January 1, 2025, the Company is required to make revenue participation payments under the agreement.

The term loan advances are secured by a lien on the Company's assets.

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The Company elected to account for the 2024 Notes using the fair value option and changes in fair value related to the 2024 Notes are recorded in change in fair value of term loan on the Company's statements of operations and comprehensive loss. The Company also elected to present interest incurred on the 2024 Notes in the change in fair value of the term loan; interest expense under the Oberland Capital arrangement was \$1.6 million for the year ended December 31, 2024.

The Company's total indebtedness as of December 31, 2023 and 2024 is as follows (in thousands):

As of December 31:	2023	2024
Long-term debt	\$ 35,000	\$ 51,481
Plus: accreted exit fee	441	-
Less: unamortized debt discount	(441)	—
Long-term debt, net	35,000	51,481
Less: current portion	-	-
Long-term debt, noncurrent portion	\$ 35,000	\$ 51,481

Future principal payments of the Company's long-term debt as of December 31, 2024 of \$50.0 million is due during the year ending December 31, 2031.

Redeemable Convertible Preferred Stock Warrants

The Company has issued Comerica Bank a warrant to purchase 9,660 Series A-6 redeemable convertible preferred shares at an exercise price of \$2.59 per share in connection with a former loan and security agreement entered into in March 2020. The warrants are exercisable until March 15, 2030. The warrants are classified as liabilities on the Company's balance sheet.

Common Stock Warrants

In connection with the 2021 LSA, the Company issued to WAB warrants to purchase shares of the Company's common stock at an exercise price of \$2.80 per share. The number of underlying shares of the warrants was initially 53,571 and was increased to 80,357 upon the funding of the loans in January 2022. The warrants will expire if unexercised on October 12, 2031. Upon the occurrence of an acquisition of the Company, if the acquiror shall not have assumed the warrants, WAB shall have the right to put the warrants back to the Company for cash equal to the greater of (x) \$450,000 or (y) the value of the aggregate consideration payable to WAB had WAB exercised the warrants immediately prior to exercise such put right.

In connection with the 2022 LSA Amendment, the Company issued up to 41,209 warrants for common stock at an exercise price of \$10.92 per share to WAB. 30,907 warrants were exercisable upon execution of the agreement; the remaining warrants become exercisable as the Company makes additional draws on the 2022 LSA Amendment. As of December 31, 2023 all of the warrants were exercisable. The warrants will expire if unexercised on July 22, 2032. Upon the occurrence of an acquisition of the Company, if the acquiror shall not have assumed the warrants, WAB shall have the right to put the warrants back to the Company for cash equal to the greater of (x) \$412,500 or (y) the value of the aggregate consideration payable to WAB had WAB exercised the warrants immediately prior to exercise such put right.

All the warrants issued to WAB are puttable warrants and thus are liability classified. The warrants were initially recognized at fair value with any subsequent changes in fair value to be recorded in other income (expense) in the statements of operations and comprehensive loss (See Note 3).

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The issuance date fair value of the warrants was determined using the option pricing model, with the following assumptions:

	<u>2021 LSA</u>	<u>2022 LSA Amendment</u>
Grant date	October 12, 2021	July 22, 2022
Dividend yield	0%	0%
Risk-free interest rate	1.59%	2.77%
Expected volatility	70%	78%
Expected term (in years)	10.00	10.00
Total grant date fair value	\$ 169,592	\$ 311,685

The fair value of the warrants as of their respective issuance dates were recorded as a debt discount that is being amortized to interest expense over the term of the loan.

(11) Common Stock

As of December 31, 2023 and 2024, the Company's Certificate of Incorporation, as amended, authorized the Company to issue 42,176,761 and 51,100,000 shares of common stock with a par value of \$0.00001, respectively. Total common stock outstanding as of December 31, 2023 and 2024 was 10,572,061 and 10,925,950, respectively. Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when and if declared by the Board of Directors, subject to the prior rights of holders of all series of stock outstanding. As of December 31, 2024, no dividends had been declared or paid.

The Company is required to reserve and keep available out of its authorized but unissued shares of common stock such a number of shares sufficient to affect the conversion of all outstanding shares of redeemable convertible preferred stocks, preferred stock and common stock warrants, and options granted and available for grant under the Company's stock option plan.

The amount of such shares of the Company's common stock reserved for these purposes at December 31, 2024, is as follows:

Series A-1 Redeemable Convertible Preferred Stock	1,349,650
Series A-2 Redeemable Convertible Preferred Stock	1,137,210
Series A-3 Redeemable Convertible Preferred Stock	899,730
Series A-4 Redeemable Convertible Preferred Stock	25,761
Series A-5 Redeemable Convertible Preferred Stock	114,613
Series A-6 Redeemable Convertible Preferred Stock	5,796,201
Series B-1 Redeemable Convertible Preferred Stock	5,182,287
Series B-2 Redeemable Convertible Preferred Stock	2,566,902
Series C Redeemable Convertible Preferred Stock	5,628,825
Series C-1 Redeemable Convertible Preferred Stock	1,726,823
Series D Redeemable Convertible Preferred Stock	4,656,233
Redeemable Convertible Preferred stock warrants	9,660
Common stock warrants	121,566
Options to purchase common stock	6,849,412
Stock options available for future grants	1,659,634
Total common stock reserved	<u>37,724,507</u>

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Stock Plan

In December 2018, the Company adopted the 2018 Stock Plan (the “2018 Plan”). The 2018 Plan authorizes the granting of stock options upon the approval of the Company’s Board of Directors, to employees and consultants providing services to the Company. Stock options granted under the 2018 Plan generally expire within 10 years from the date of grant and are generally issued at the fair value of the underlying shares of common stock on the date of grant as determined by the Company’s Board of Directors. The shares subject to each option typically allow for 25% of the shares to vest and become exercisable on the first anniversary of the vesting commencement date and thereafter, the remaining 75% will vest and become exercisable in 36 equal monthly installments. The Company may include other vesting terms from time to time.

Incentive and non-statutory stock options may be granted with exercise prices not less than 100% of the estimated fair value of the common stock on the date of grant, as determined by the Board of Directors.

Subject to Board approval at the grant date, if an option includes an “early exercise” feature, then such option shall be exercisable at any time but any unvested option shares shall be subject to the Company’s right to repurchase them at the original exercise price in the event that the optionee’s service is terminated for any reason. If an option does not permit early exercise, then such option shall not be exercisable with respect to unvested shares. As of December 31, 2024, the Company had authorized 10,904,372 shares of common stock reserved for issuance under the 2018 Plan.

Stock-based Compensation

The Company recognizes stock-based compensation expense for all stock-based payment awards based on the estimated fair value on the date of the grant. The Company recognizes the compensation cost on a straight-line basis over the requisite service period of the award. The fair value of stock options granted is estimated using the Black-Scholes Model utilizing the assumptions noted below:

- *Fair value of common stock.* The Board of Directors considers numerous objective and subjective factors to determine the fair value of the Company’s common stock options at each meeting in which awards are approved. The factors considered include, but are not limited to: (i) the results of contemporaneous independent third party valuations of the Company’s common stock; (ii) the prices, rights, preferences and privileges of the Company’s redeemable convertible preferred stock relative to those of its common stock; (iii) the lack of marketability of the Company’s common stock; (iv) actual operating and financial results; (v) current business conditions and projections; and (vi) the likelihood of achieving a liquidity event, such as an initial public offering or sale of the Company, given prevailing market conditions.
- *Expected volatility.* Expected volatility is a measure of the amount by which the stock price is expected to fluctuate. Since the Company does not have sufficient trading history of its common stock, it estimates the expected volatility of its stock options at their grant date by taking the weighted average historical volatility of a group of comparable publicly traded companies over a period equal to the expected life of the options.
- *Expected term.* Expected term represents the period over which the Company anticipates stock-based awards to be outstanding. The Company uses the simplified method to calculate the expected term estimate based on the options’ vesting term and contractual terms. Under the simplified method, the expected life is equal to the average of the stock-based award’s weighted average vesting period and its contractual term.
- *Risk-free interest rate.* The Company uses the average of the published interest rates of U.S. Treasury zero-coupon issues with terms consistent with the expected term of the awards for its risk-free interest rate.
- *Expected dividends.* The Company historically has not paid dividends on common stock and has no plans to issue dividends in the foreseeable future.

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The weighted average assumptions used to calculate the fair value of option grants issued under the 2018 Plan during the years ended December 31, 2023 and 2024 were as follows:

	2023	2024
Fair value of common stock	\$ 11.07	\$ 16.47
Dividend yield	-%	-%
Risk-free interest rate	4.0%	4.1%
Expected volatility	74%	68%
Expected term (in years)	5.99	6.01

A summary of the Company's stock option activity and related information is as follows:

	Number of Options Outstanding	Weighted Average Exercise Price Per Share	Weighted- Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of January 1, 2023	4,633,430	\$ 3.33	8.4	\$ 25,974
Granted	2,096,500	9.72		
Exercised	(147,352)	3.49		
Forfeited or expired	(389,342)	4.86		
Outstanding as of December 31, 2023	6,193,236	\$ 5.39	8.0	\$ 49,467
Granted	1,366,595	15.23		
Exercised	(380,639)	3.04		
Forfeited or expired	(329,780)	9.78		
Outstanding as of December 31, 2024	6,849,412	\$ 7.28	7.5	\$ 73,992
Vested and exercisable as of December 31, 2024	4,198,202	\$ 4.22	6.7	\$ 58,168
Vested and expected to vest as of December 31, 2024	6,849,933	\$ 7.28	7.5	\$ 74,000

The intrinsic value is calculated as the difference between the exercise price of the underlying stock option award and the estimated fair value of the Company's common stock. The total intrinsic values of options exercised during the years ended December 31, 2023 and 2024 was \$1.2 million and \$4.7 million, respectively.

During the year ended December 31, 2023, the weighted average grant-date fair value of options granted was \$7.75 per share, and the fair value of options vested during the period was \$4.4 million. During the year ended December 31, 2024, the weighted average grant-date fair value of options granted was \$10.89 per share, and the fair value of options vested during the period was \$7.2 million. The fair value is being expensed over the vesting period of the options, on a straight-line basis as the services are being provided.

As of December 31, 2024 there was approximately \$22.2 million of total unrecognized compensation cost related to unvested options, which is expected to be recognized over the weighted average period of 2.6 years.

BILLIONTOONE, INC.
Notes to Financial Statements

Restricted Stock Award Activity

A summary of the Company's restricted stock award activity and related information is as follows:

	Awards	Weighted-Average Grant Date Fair Value (per share)
Nonvested as of January 1, 2023	14,584	\$ 0.35
Issued	-	-
Vested	(14,584)	0.35
Forfeited	-	-
Nonvested as of December 31, 2023	-	-

There was no restricted stock award activity during the year ended December 31, 2024.

Stock-Based Compensation Expense

The table below shows stock-based compensation expense included in the statements of operations and comprehensive loss for the years ended December 31, 2023 and 2024 (in thousands):

	2023	2024
Cost of revenue	\$ 683	\$ 1,183
Research and development	1,450	2,341
Selling, general and administrative	2,721	4,838
Total stock-based compensation	\$ 4,854	\$ 8,362

Options Subject to Early Exercise

At the discretion of the Company's Board of Directors, certain options may be exercisable immediately at the date of grant but are subject to a repurchase right, under which the Company may buy back any unvested shares at their original exercise price in the event of an employee's termination prior to full vesting. The consideration received for an exercise of an unvested option is considered to be a deposit of the exercise price and the related dollar amount is recorded as a liability. The liabilities are reclassified into equity as the awards vest. As of December 31, 2023 and 2024, the liability was not material and included in accrued expenses and other current liabilities on the accompanying balance sheets related to 3,542 and 521 shares of early-exercised common stock options, respectively. Early exercised stock options are legally issued and outstanding and are included in issued and outstanding common shares.

Secondary Sales of Common Stock

During June 2024, investors of the Company acquired 52,750 shares of common stock at a price per share equal to \$22.42 per share from employee stockholders. During July 2024, investors of the Company acquired an additional 22,302 shares of common stock at a price per share equal to \$22.42 per share from a stockholder who was a former employee of the Company. As a result, the Company recorded a total of \$0.4 million for the year ended December 31, 2024 in stock-based compensation expense for the difference between the price paid by these investors and the estimated fair value of the acquired common stock from stockholders on the date of the transactions.

BILLIONTOONE, INC.
Notes to Financial Statements

Repurchase of Common Stock

In February 2024, the Company's Board of Directors agreed to repurchase a total of 26,750 shares of common stock that were held by a former employee of the Company. The repurchase price paid by the Company was \$20.3950 per share, resulting in a total repurchase cost of \$0.5 million. As the repurchase price paid by the Company to the former employee represented an excess over the common stock's estimated fair market value at the time, the Company accounted for this premium as stock-based compensation expense of \$0.2 million.

Option Exercises Under Promissory Notes

In January 2019, the Company granted and approved the purchase of 700,000 restricted stock awards in aggregate at a price of \$0.06 per share to two executives, and in exchange, the executives entered into full recourse promissory notes (the "Recourse Notes") for the amount of the exercise price of the restricted shares. The loans are due seven years from the loan date, except in the case of termination, public filing event, or disposition of common stock acquired via these notes in which case the loan becomes due sooner. The Notes carry interest rates of 2.89%, compounded annually. The balance of the Recourse Notes may be prepaid in whole or in part, at any time without penalty. Each loan is secured by the shares exercised by the loans, in addition to any and all other assets of the borrower. As of December 31, 2024, the loans were still outstanding. The terms of the loan require the loans to be repaid prior to termination or public offering.

In June 2021, the Company granted and approved the purchase of option awards at a price of \$2.80 per share to an executive, and in exchange, the executive entered into a full recourse promissory note for the amount of the exercise price of the restricted shares. The loan is due five years from the loan date, except in the case of termination, public filing event, or disposition of common stock acquired via these notes in which case the loan becomes due sooner. The Recourse Note bears interest of 1.00% per annum, compounded annually. The balance of the Note may be prepaid in whole or in part, at any time without penalty. Each loan is secured by the shares exercised by the loans, in addition to any and all other assets of the borrower. In November 2022, the executive partially repaid the promissory note, resulting in net proceeds to the Company of \$62,000. In June 2023, the executive fully repaid the promissory note, resulting in net proceeds to the Company of \$51,000.

The Recourse Notes issued were collateralized by the shares issued in exchange for the notes and were nonrecourse for accounting purposes as the Company did not intend nor has a history of demanding repayment of loan amounts in excess of the fair value of the shares. As such, for accounting purposes the exercised awards continue to be treated as unexercised awards and are not reflected as outstanding in the financial statements until the notes are repaid and the underlying awards have vested.

Incremental stock-based compensation expense was not material.

BILLIONTOONE, INC.
Notes to Financial Statements

(12) Income Taxes

The components of the provision for income taxes for the year ended December 31, 2023 and 2024 are as follows (in thousands):

	2023	2024
Current:		
Federal	\$ -	\$ -
State	9	29
Foreign	-	-
	<u>9</u>	<u>29</u>
Deferred:		
Federal	-	-
State	-	-
Foreign	-	-
	<u>-</u>	<u>-</u>
Total provision for income taxes	<u>\$ 9</u>	<u>\$ 29</u>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets as of December 31, 2023 and 2024 are as follows (in thousands):

	2023	2024
Deferred tax assets:		
Net operating loss carryforwards	\$ 35,228	\$ 36,725
Capitalized R&D expenditure	6,186	11,477
Accruals and reserves	944	2,322
R&D credits	2,424	3,768
Lease Liability	13,994	13,126
Stock-based compensation	-	859
Other	486	21
Total deferred tax asset	<u>59,262</u>	<u>68,298</u>
Deferred tax liabilities:		
Depreciation and amortization	(386)	(320)
Right of Use Asset	(13,382)	(12,304)
Total deferred tax liabilities	<u>(13,768)</u>	<u>(12,624)</u>
Less: valuation allowance	(45,494)	(55,674)
Net deferred tax assets	<u>\$ -</u>	<u>\$ -</u>

BILLIONTOONE, INC.
Notes to Financial Statements

The following table presents a reconciliation of the income tax expense computed at the statutory federal rate and the Company's income tax expense for the periods presented (in thousands):

	2023	2024
Tax at the federal statutory rate	\$ (17,250)	\$ (8,725)
Other nondeductible items	550	792
Stock-based compensation	832	1,359
Research and development credits	(796)	(994)
Change in valuation allowance	16,058	10,119
State taxes, net of federal benefits	(2,113)	(1,443)
Debt extinguishment gain or loss	-	(1,814)
Change in fair value of term loan	2,749	689
Other	(21)	46
Total provision for income taxes	<u>\$ 9</u>	<u>\$ 29</u>

The Company's actual tax expense differed from the statutory federal income tax expense using a tax rate of 21% for the years ended December 31, 2023 and 2024 primarily due to state income taxes, nondeductible expenses, research and development tax credits, change in fair value of term loan, and the change in valuation allowance.

As of December 31, 2023 and 2024, the Company had a net operating loss carryforwards of \$148.7 million and \$154.9 million for federal purposes, and \$73.8 million and \$78.6 million for state and city purposes, respectively. If not utilized, these carryforwards will begin to expire in 2036 for federal, and 2026 for state and city purposes.

Federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal net operating losses is limited to 80% of U.S. federal taxable income. Some but not all states conform to the federal treatment of net operating losses.

As of December 31, 2023, the Company had research and development tax credit carryforwards for federal tax purposes of \$2.6 million and state research and development tax credit carryforwards of \$1.4 million. As of December 31, 2024, the Company had research and development tax credit carryforwards for federal tax purposes of \$4.1 million and state research and development tax credit carryforwards of \$2.1 million. The federal research and development tax credit carryforwards will expire at various dates beginning in the year 2041. The Company's state research and development tax credit carryforwards do not expire.

Utilization of the net operating loss ("NOL") carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of NOL carryforwards and credits before utilization. Current laws impose substantial restrictions on the utilization of NOL carryforwards and credits in the event of an "ownership change" within a three-year period as defined by the Internal Revenue Code Section 382 ("Section 382"). If there should be an ownership change, the Company's ability to utilize its NOL carryforwards and credits could be limited. The Company has not performed a Section 382 analysis.

Based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets of the Company will not be fully realizable for the years ended December 31, 2023 and 2024. Accordingly, the Company has established a full valuation allowance against its net deferred tax assets due to the uncertainty surrounding the realization of such assets. The valuation allowance increased by approximately \$16.1 million and \$10.1 million during the years ended December 31, 2023 and 2024, respectively.

The Company records unrecognized tax benefits, where appropriate, for all uncertain income tax positions. The Company recorded unrecognized tax benefits for uncertain tax positions of \$1.4 million and \$2.2 million as of

BILLIONTOONE, INC.
Notes to Financial Statements

December 31, 2023 and 2024, respectively, none of which would impact the effective tax rate if recognized, because the benefit would be offset by an increase in the valuation allowance.

A reconciliation of the beginning and ending balance of total unrecognized tax benefits is as follows (in thousands):

	2023	2024
Unrecognized tax benefits - beginning of period	\$ 818	\$ 1,410
Increases related to current year's tax positions	629	774
Decreases related to prior years' tax positions	(37)	-
Unrecognized tax benefits - end of period	<u>\$ 1,410</u>	<u>\$ 2,184</u>

The Company's policy is to recognize interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense. During the year ended December 31, 2023 and 2024, the Company recognized no interest and penalties associated with unrecognized tax benefits. There are no tax positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly increase or decrease within 12 months of the reporting date.

Due to the net operating loss carryforwards, all years remain open for income tax examination by tax authorities in the United States, various states and foreign tax jurisdictions in which the Company files tax returns.

(13) Employee Benefit Plan

The Company sponsors a qualified 401(k) defined contribution plan covering eligible employees. Participants may contribute a portion of their annual compensation limited to a maximum annual amount set by the Internal Revenue Service. Employer contributions to the plan are discretionary. During the year ended December 31, 2023 and 2024, the Company contributed \$1.7 million and \$2.4 million to this plan, respectively.

(14) Related Party Transactions

During the year ended December 31, 2023, the Company's former CFO left the Company. Upon his departure, the Company's Board of Directors approved the extension of the exercise period to ten years from the date of grant for all of his common stock options that were fully vested at the time of his departure. The impact on the financial statements resulting from the extension of the exercise term was not material. In February 2024, the Company also repurchased 26,750 shares of common stock that were held by the former CFO. Please refer to Note 11 for additional information on this transaction.

There were no other material related party transactions during the year ended December 31, 2023 and 2024.

(15) Net Loss Per Share Attributable to Shareholders

The Company applies the two-class method when computing net loss per share attributable to common shareholders when shares meet the definition of participating securities. The two-class method determines net income (loss) per share of common stock and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires net income (loss) available to common stockholders for the period to be allocated between common stock and participating securities based upon their respective rights to receive dividends as if all income (loss) for the period had been distributed. The holders of the Company's redeemable convertible preferred stock would be entitled to dividends

BILLIONTOONE, INC.
Notes to Financial Statements

in preference to common stockholders, if declared. Such dividends are not cumulative. Any remaining earnings would be distributed among the holders of redeemable convertible preferred stock and common stock pro rata on an as-converted basis. The holders of the Company's redeemable convertible preferred stock are not contractually obligated to participate in the Company's losses.

Basic net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, less shares subject to repurchase. Diluted net loss per share is computed by including all potentially dilutive securities outstanding for the period using the treasury stock method or the if-converted method, as applicable. For periods in which the Company reports net losses, diluted net loss per common share is the same as basic net loss per common share as all potentially dilutive securities are anti-dilutive.

The following table sets forth the computation of basic and dilutive net loss per share attributable to common stockholders for the years ended December 31, 2023 and 2024 (in thousands, except per share amounts):

	2023	2024
Numerator:		
Net loss	\$ (82,683)	\$ (41,570)
Denominator:		
Weighted-average shares used in calculating net loss per share, basic and diluted	9,783	10,080
Net loss per share, basic and diluted	\$ (8.45)	\$ (4.12)

Since the Company was in a loss position for the period presented, basic net loss per share is the same as diluted net loss per share as the inclusion of all potential common shares outstanding would have been anti-dilutive.

Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows for the years ended December 31, 2023 and 2024:

	2023	2024
Redeemable convertible preferred stock	22,701,179	29,084,235
Outstanding stock options	6,193,236	6,849,412
Restricted stock awards in exchange for non recourse note	700,000	700,000
Warrants to purchase common stock	121,566	121,566
Warrants to purchase redeemable convertible preferred stock	9,660	9,660

(16) Subsequent Events

Management evaluates events occurring subsequent to the date of the financial statements in determining the accounting for and disclosure of transactions and events that affect the financial statements. Subsequent events have been evaluated through June 20, 2025, which is the date that the financial statements were available to be issued.

BILLIONTOONE, INC.
Balance Sheets (unaudited)
(in thousands, except share amounts)

	December 31, 2024	June 30, 2025
Assets		
Current assets:		
Cash and cash equivalents	\$ 191,477	\$ 188,958
Accounts receivable	24,709	30,438
Inventories	8,733	13,735
Prepaid expenses and other current assets	2,898	3,022
Total current assets	227,817	236,153
Property and equipment, net	17,111	19,106
Operating lease right-of-use assets, net	51,739	49,284
Other non-current assets	5,392	8,090
Total assets	<u>\$ 302,059</u>	<u>\$ 312,633</u>
Liabilities, redeemable convertible preferred stock, and stockholders' deficit		
Current liabilities:		
Accounts payable	\$ 4,304	\$ 7,948
Accrued expenses and other current liabilities	3,882	8,270
Accrued commissions	2,756	2,972
Accrued compensation and employee benefits	8,419	12,626
Deferred revenue, current	2,806	2,216
Operating lease liabilities, current	4,393	4,728
Financing lease liabilities, current	1,826	1,114
Total current liabilities	28,386	39,874
Operating lease liabilities, non-current	50,802	48,328
Financing lease liabilities, non-current	874	482
Long-term debt	51,481	52,072
Other non-current liabilities	2,763	2,721
Total liabilities	134,306	143,477
Commitments and contingencies (Note 7)		
Redeemable convertible preferred stock, \$0.00001 par value; 29,544,989 shares authorized as of December 31, 2024 and June 30, 2025; 29,084,235 shares issued and outstanding as of December 31, 2024 and June 30, 2025; aggregate liquidation preference of \$422,458 as of December 31, 2024 and June 30, 2025	419,409	419,409
Stockholders' deficit:		
Common stock, \$0.00001 par value, 51,100,000 shares authorized as of December 31, 2024 and June 30, 2025; 10,925,950 and 11,085,044 shares issued and outstanding as of December 31, 2024 and June 30, 2025, respectively	-	-
Additional paid-in capital	30,545	36,182
Accumulated deficit	(282,201)	(286,435)
Total stockholders' deficit	(251,656)	(250,253)
Total liabilities, redeemable convertible preferred stock, and stockholders' deficit	<u>\$ 302,059</u>	<u>\$ 312,633</u>

The accompanying notes are an integral part of these interim financial statements.

BILLIONTOONE, INC.
Statements of Operations and Comprehensive Loss (unaudited)
(in thousands, except per share amounts)

	Six Months Ended June 30,	
	2024	2025
Revenue	\$ 69,086	\$ 125,536
Cost of revenue	34,105	44,098
Gross profit	34,981	81,438
Operating expenses:		
Research and development	16,050	22,181
Selling, general and administrative	41,751	63,199
Total operating expenses	57,801	85,380
Loss from operations	(22,820)	(3,942)
Other income (expense):		
Interest income	2,196	2,957
Interest expense	(1,917)	(72)
Net gain on extinguishment of debt	8,635	-
Change in fair value of term loan	-	(3,102)
Change in fair value of convertible notes	(835)	-
Other expense, net	(443)	39
Total other income (expense)	7,636	(178)
Loss before provision for income taxes	(15,184)	(4,120)
Provision for income taxes	5	114
Net loss and comprehensive loss	\$ (15,189)	\$ (4,234)
Net loss per share:		
Basic and diluted	\$ (1.52)	\$ (0.41)
Weighted-average shares used in calculating net loss per share:		
Basic and diluted	10,020	10,349

The accompanying notes are an integral part of these interim financial statements.

BILLIONTOONE, INC.
Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit (unaudited)
(in thousands, except share data)

	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance at December 31, 2023	22,701,179	\$ 249,527	10,572,061	\$ -	\$ 21,578	\$ (240,631)	\$ (219,053)
Issuance of Series C-1 redeemable convertible preferred stock upon conversion of Convertible Notes	1,726,823	39,886	-	-	-	-	-
Issuance of Series D redeemable convertible preferred stock, net of issuance costs of \$474	4,656,233	130,022	-	-	-	-	-
Issuance of common stock upon exercise of stock options	-	-	233,458	-	636	-	636
Stock-based compensation	-	-	-	-	3,905	-	3,905
Repurchase of common stock	-	-	(26,750)	-	(546)	-	(546)
Vesting of early exercises	-	-	-	-	5	-	5
Net loss	-	-	-	-	-	(15,189)	(15,189)
Balance at June 30, 2024	29,084,235	\$ 419,435	10,778,769	\$ -	\$ 25,578	\$ (255,820)	\$ (230,242)
Balance at December 31, 2024	29,084,235	\$ 419,409	10,925,950	\$ -	\$ 30,545	\$ (282,201)	\$ (251,656)
Issuance of common stock upon exercise of stock options	-	-	159,094	-	531	-	531
Stock-based compensation	-	-	-	-	5,106	-	5,106
Net loss	-	-	-	-	-	(4,234)	(4,234)
Balance at June 30, 2025	29,084,235	\$ 419,409	11,085,044	\$ -	\$ 36,182	\$ (286,435)	\$ (250,253)

The accompanying notes are an integral part of these interim financial statements.

BILLIONTOONE, INC.
Statement of Cash Flows (unaudited)
(in thousands)

	Six Months Ended June 30,	
	2024	2025
Cash flows from operating activities:		
Net loss	\$ (15,189)	\$ (4,234)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	3,905	5,106
Depreciation and amortization	3,432	3,540
Amortization of debt issuance costs and accretion of exit fees	260	-
Amortization of operating right-of-use assets	2,276	2,455
Loss on disposal of fixed assets	-	3
Change in fair value of common stock warrant liability	356	(63)
Change in fair value of redeemable convertible preferred stock warrant liability	33	21
Net gain on extinguishment of debt	(8,635)	-
Change in fair value of convertible notes	835	-
Change in fair value of term loan	-	591
<i>Changes in operating assets and liabilities:</i>		
Accounts receivable	(9,905)	(5,729)
Inventories	72	(5,002)
Prepaid expenses and other current assets	(80)	2,418
Other non-current assets	(3,180)	(2,698)
Accounts payable	172	3,312
Accrued expenses and other current liabilities	1,600	2,393
Accrued commissions	597	216
Accrued compensation and employee benefits	2,674	4,207
Deferred revenue	(556)	(590)
Operating lease liabilities	(1,834)	(2,139)
Net cash provided by (used in) operating activities	(23,167)	3,807
Cash flows from investing activities:		
Purchases of property and equipment	(1,780)	(5,221)
Net cash used in investing activities	(1,780)	(5,221)
Cash flows from financing activities:		
Principal payments on finance lease liabilities	(1,174)	(1,011)
Repurchase of common stock outstanding	(546)	-
Payment of deferred offering costs	-	(625)
Proceeds from exercise of stock options, net of repurchases	639	531
Proceeds from issuance of Series D redeemable convertible preferred stock, net of issuance costs	130,022	-
Net cash provided by (used in) financing activities	128,941	(1,105)
Net increase (decrease) in cash and cash equivalents	103,994	(2,519)
Cash and cash equivalents at beginning of year	97,268	191,477
Cash and cash equivalents at end of year	\$ 201,262	\$ 188,958

	Six Months Ended June 30,	
	2024	2025
Supplemental cash flow disclosure:		
Cash payments for interest	\$ 1,656	\$ 2,583
Cash paid for income taxes	\$ 9	\$ 444
Supplemental non-cash investing and financing activities:		
Purchases of property and equipment in accounts payable and accrued expenses and other current liabilities	\$ 986	\$ 1,365
Issuance of Series C-1 redeemable convertible preferred stock upon settlement of convertible notes	\$ 39,886	\$ -
Deferred offering costs in accounts payable and accrued expenses and other current liabilities	\$ -	\$ 1,916
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 4,245	\$ 4,391
Right-of-use assets obtained in exchange for new finance lease liabilities	\$ 214	\$ -
Operating cash flows from financing leases (interest paid)	\$ 140	\$ 68

The accompanying notes are an integral part of these interim financial statements.

BILLIONTOONE, INC.
Notes to Unaudited Interim Financial Statements

(1) Description of Business

BillionToOne, Inc. (the “Company”, “we”, or “our”) was formed in 2016, and headquartered in Menlo Park, California. The Company is a precision diagnostics company that quantifies biology to create molecular diagnostics. The Company’s proprietary molecular counting platform is designed to detect and measure DNA molecules at the single-count level to help improve disease detection. The Company currently applies the proprietary technology to non-invasive prenatal screening (“Prenatal”) and liquid biopsy (“Oncology”).

(2) Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”). Prior to April 2024, the financial statements also included the Company’s wholly owned subsidiary SeqIndia Labs Private Limited which had immaterial activities and was not material to these financial statements and was divested in April 2024. Accordingly, during the six months ended June 30, 2024, the financial statements were consolidated while in 2025 they were not. All intercompany transactions and balances have been eliminated upon consolidation.

The Company’s significant accounting policies are discussed in “Note 2. Summary of Significant Accounting Policies” in the notes to the financial statements as of and for the year ended December 31, 2024. There have been no significant changes to these policies during the six months ended June 30, 2025.

Unaudited interim financial information

The unaudited financial statements do not include all disclosures, including certain notes required by GAAP on an annual reporting basis. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements. In management’s opinion, the unaudited financial statements reflect all normal recurring adjustments necessary to state fairly the balance sheets, statements of operations and comprehensive loss, of redeemable convertible preferred stock and stockholders’ deficit, and of cash flows for the interim periods, but are not necessarily indicative of the results of operations to be anticipated for the full fiscal year or any future period.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On a regular basis, management evaluates estimates, including, but not limited to: the fair value of common stock, stock-based compensation, deferred tax assets and liabilities, useful lives of long-lived assets, the incremental borrowing rate applied to operating and finance leases, determination of revenue recognition and accounts receivable, the valuation of warrants for common stock and warrants for redeemable convertible preferred stock, and valuation of debt and convertible notes. These estimates are inherently subject to judgment and actual results could differ from those estimates.

Risks and Uncertainties

Certain of the Company’s product candidates are in clinical development or in preclinical development. If the Company is unable to advance its product candidates through clinical development, obtain regulatory approval and ultimately commercialize its product candidates, or experiences significant delays in doing so, the

BILLIONTOONE, INC.
Notes to Unaudited Interim Financial Statements

Company's business will be materially harmed. Even if the Company completes the necessary preclinical studies and clinical trials, the regulatory approval process is expensive, time-consuming and uncertain and may prevent the Company from obtaining clinical trial and marketing approvals for the commercialization of some or all of its product candidates. As a result, the Company cannot predict when, or if, and in which territories, it will obtain marketing approval to commercialize a product candidate.

The Company is subject to certain risks and uncertainties that the Company believes could have a material adverse effect on its future financial position or results of operations. As of the date of issuance of the financial statements, the Company is not aware of any specific event or circumstance that would require it to update its estimates, judgments, or the carrying value of its assets or liabilities. These estimates may change as new events occur and additional information is obtained and are recognized in the financial statements as soon as they become known. Actual results could differ from those estimates, and any such differences may be material to the Company's financial statements.

The Company is subject to regulation and enforcement by the federal government and by authorities in state and foreign jurisdictions in which the Company conducts business. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security laws and regulations. If the Company's operations are found to be in violation of any such laws or government regulations that apply to use, the Company may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of operations and exclusion from participation in federal and state healthcare programs.

Revenue

The Company recognizes revenue upon transfer of control of promised goods and services in an amount that reflects the consideration it expects to be entitled to receive in exchange for those goods and services. Under ASC 606—Revenue from Contracts with Customers (ASC 606), the Company applies the following five-step approach:

- Identify the contract with a customer
- Identify the performance obligations in the contract
- Determine the transaction price
- Allocate the transaction price to the performance obligations in the contract
- Recognize revenue when, or as, a performance obligation is satisfied

The Company generates revenue primarily from prenatal and oncology testing services, which are referred to as testing services or test results. The Company considers the patient as its customer, that requests a test service through their physician. Test results are the single performance obligation being provided to customers. Testing service revenue is recognized at a point in time when test results are delivered to the ordering physician. The Company generally bills an insurance carrier, Medicaid, Medicare, or a patient or a combination of both upon delivery of test results.

The Company enters into contracts with third-party payors including insurance carriers and Medicaid to set the pricing for tests provided to patients. Due to the nature of these third-party payor contract arrangements, the total consideration the Company expects to collect for test results is variable as they are dependent on the terms negotiated with the third-party payor. The predominance of the Company's revenue is derived from payments by third-party insurance carriers.

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The Company uses the expected value method of estimating variable consideration. The total consideration the Company expects to collect in exchange for the Company's products is an estimate and is largely variable in nature. Consideration includes reimbursement from both patients and third-party payors. The Company establishes variable consideration by considering historical payment trends for tests delivered, test reimbursement disallowances, and contractual arrangements in place, among other factors, which is adjusted for current expectations. Current expectations of cash collections factor in changes in reimbursement rate trends, historical events not expected to recur, and future known changes such as anticipated contractual pricing changes or changes to insurance coverage. The Company also considers hindsight, where applicable, in estimates established for variable consideration and update those estimates when actual experience supports doing so. In establishing variable consideration, the Company considers payors with similar reimbursement characteristics together. The Company monitors the cash collections against the estimated variable consideration over the expected cash collection period and any difference is recognized as an adjustment to estimated revenues after such estimated cash collection period has closed.

In January 2023, the Company entered a partnership with Johnson & Johnson under which the Company is licensing the Company's proprietary knowledge, performing clinical trial support services including developing a clinical study assay, and other testing services to support a clinical trial for the counterparty. The Company concluded that the agreement with Johnson & Johnson was within the scope of ASC 606 because the counterparty in the agreement meets the definition of a customer. The Company evaluated the terms of the agreement for revenue recognition, including whether the services are capable of being distinct and considered distinct within the context of the contract. The Company concluded that the licensing of the know how is not distinct from the other promises within the agreement and, as a result, was treated as a single performance obligation. Under this contract the Company receives payments upon the achievement of milestones, including (i) receipt of approval of the trial, which was achieved in 2023, (ii) various patient enrollment milestones, and (iii) subsequent full trial completion, as well as reimbursement for testing services. In making assessment of whether variable consideration should be included in the transaction price, the Company considers the degree of complexity and uncertainty associated with each milestone and related testing services, and whether achievement of the milestones and testing services are dependent on parties other than the Company. The Company recognizes revenue for the single performance obligation over time as the related services are provided. The Company utilizes an input method to measure progress to depict the transfer of services as the Company believes it provides a faithful depiction of the transfer of services over the contract. In accordance with ASC 606, the Company applies the constraint on variable consideration and includes such amounts in the transaction price only to the extent that it is probable that a significant reversal of cumulative revenue will not occur when the associated uncertainty is resolved.

The Company applies the practical expedient not to disclose the value of unsatisfied performance obligations for contract with an original expected length of one year or less. As of June 30, 2025, the Company's remaining performance obligations beyond one year were approximately \$3.1 million.

Disaggregation of revenue

The following table presents disaggregation of revenue by Oncology, Prenatal and Clinical trial support services for the six months ended June 30, 2024 and 2025 (in thousands):

	2024	2025
Prenatal	\$ 66,079	\$ 116,928
Oncology	713	7,124
Clinical trial support services	2,294	1,484
Total revenues	<u>\$ 69,086</u>	<u>\$ 125,536</u>

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Substantially all revenues recognized for the six months ended June 30, 2024 and 2025 were generated in the United States.

Deferred revenue

Deferred revenue, which is a contract liability, consists of billings or cash received for services in advance of revenue recognition and is recognized as revenue when all the Company's revenue recognition criteria are met. As of December 31, 2024 and June 30, 2025, the deferred revenue balance was \$2.8 million and \$2.2 million, respectively, all of which is considered short-term. For the six months ended June 30, 2024 and 2025, revenue recognized from deferred revenue at the beginning of the period was \$2.3 million and \$1.5 million respectively. The decrease in deferred revenue balances as of December 31, 2024 as compared to June 30, 2025 is attributed to the timing of contractual payments for testing and consulting services and timing of delivery of the clinical test results and services.

Comprehensive Loss

During the six months ended June 30, 2024 and 2025, the Company did not have any other comprehensive income (loss) and, therefore, the net loss and comprehensive loss was the same.

Deferred Offering Costs

Deferred offering costs, consisting of legal, accounting, and other fees and costs relating to the Company's planned initial public offering (IPO) are capitalized within other non-current assets on the balance sheets. The deferred offering costs will be offset against the proceeds received by the Company upon the closing of the planned IPO. In the event the planned IPO is terminated, all of the deferred offering costs will be expensed within operating loss. As of December 31, 2024, the Company had no deferred offering costs. As of June 30, 2025, the Company had \$2.5 million of deferred offering costs.

Segment information

Operating segments are defined as components of an entity for which separate financial information is available and that is regularly reviewed by the Chief Operating Decision Maker ("CODM") in deciding how to allocate resources and assess performance. The Company's Chief Executive Officer is the Company's CODM. The CODM reviews financial information presented on a company-wide basis to make operating decisions, allocating resources, and evaluating financial performance. As such, the Company has determined that it is managed as one operating segment and one reportable segment.

Key areas of focus for the CODM when making decisions on the allocations of resources is cash used in operations as well as revenue, gross margin and net loss; this information is used by the CODM and compared to budgeted amounts in order for the CODM to make decisions on how resources should be allocated across the organization. The Company's segment measure of profitability is net loss.

Segment revenues are derived from prenatal and oncology testing results, leveraging the Company's diagnostic technology platform, which are delivered to patients, who are the Company's customer. The Company's customers are predominantly located in the United States. Substantially all of the Company's long-lived assets are located in the United States. The Company's technology platform is applied similarly in both the prenatal and oncology settings.

The financial statements provide the CODM with a view of the Company's financial condition as it pertains to the Company's assets, liabilities and expenses. Significant expense categories align with the expense categories and amounts presented on the statements of operations.

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Recently Issued Accounting Pronouncements not yet Adopted

In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures (“ASU 2023-09”), which expands income tax disclosure requirements to include additional information related to the rate reconciliation of effective tax rates to statutory rates, as well as additional disaggregation of taxes paid. This ASU also removed disclosure related to certain unrecognized tax benefits and deferred taxes. ASU 2023-09 is effective for fiscal years beginning after December 15, 2024. This ASU may be applied prospectively or retrospectively, and early adoption is permitted. The Company is currently evaluating the impact of the adoption of this standard on the Company’s financial statement disclosures.

In November 2024, the FASB issued ASU 2024-04, Debt – Debt with Conversion and Other Options (Subtopic 470-20): Induced Conversions of Convertible Debt Instruments. This ASU clarifies guidance on the requirements for determining whether certain settlements of convertible debt instruments should be accounted for as an induced conversion or extinguishment. This guidance is effective for the Company beginning on January 1, 2026, and early adoption is permitted, although the Company does not plan to early adopt. The Company is currently evaluating the impact of the adoption of this standard on the Company’s financial statement disclosures.

In November 2024 and January 2025, the FASB issued ASU 2024-03 and ASU 2025-01, respectively, Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses, which requires disclosure in the notes to the financial statements of specified information about an entity’s certain costs and expenses. The amendments to the standards are effective for the Company’s fiscal year beginning January 1, 2027 and interim periods beginning January 1, 2028. Early adoption is permitted. The amendments should be applied either prospectively to the financial statements issued for reporting periods after the effective date of this ASU or retrospectively to any or all prior periods presented in the financial statements. The Company is currently evaluating this ASU to determine the impact it may have on its financial statements and related disclosures.

In July 2025, the FASB issued ASU 2025-05, *Measurement of Credit Losses for Accounts Receivable and Contract Assets*, which provides for a practical expedient to estimate credit losses related to accounts receivable and contract assets from revenue contracts accounted for in accordance with ASC 606 using information as of the balance sheet date. This ASU is effective for the Company’s fiscal year beginning January 1, 2026 and early adoption is permitted. The Company is currently evaluating this ASU to determine the impact it may have on its financial statements and related disclosures.

(3) Fair Value Measurements

The fair value measurements of assets and liabilities that are measured at fair value on a recurring basis consisted of the following as of December 31, 2024 (in thousands):

	As of December 31, 2024			
	Level 1	Level 2	Level 3	Total
Current assets:				
Money market funds	\$ 7,538	\$ -	\$ -	\$ 7,538
Total assets	<u>\$ 7,538</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 7,538</u>
Liabilities:				
Redeemable convertible preferred stock warrants	\$ -	\$ -	\$ 230	\$ 230
Common stock warrants	-	-	2,533	2,533
Term loan	-	-	51,481	51,481
Total liabilities	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 54,244</u>	<u>\$ 54,244</u>

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The fair value measurements of assets and liabilities that are measured at fair value on a recurring basis consisted of the following as of June 30, 2025 (in thousands):

	As of June 30, 2025			
	Level 1	Level 2	Level 3	Total
Current assets:				
Money market funds	\$ 7,690	\$ -	\$ -	\$ 7,690
Total assets	<u>\$ 7,690</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 7,690</u>
Liabilities:				
Redeemable convertible preferred stock warrants	\$ -	\$ -	\$ 251	\$ 251
Common stock warrants	-	-	2,470	2,470
Term loan	-	-	52,072	52,072
Total liabilities	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 54,793</u>	<u>\$ 54,793</u>

Level 3 instruments consist of the Company's Series A-6 redeemable convertible preferred stock warrant liabilities, common stock warrant liabilities, a term loan and convertible notes.

The fair values of the Series A-6 redeemable convertible preferred stock warrant and common stock warrant are measured using a probability weighted option pricing model.

The significant assumptions used in preparing the option pricing model for valuing the common stock warrant liability as of December 31, 2024 and June 30, 2025, are as follows:

	December 31, 2024	June 30, 2025
Stock price	\$ 20.32	\$ 23.15
Exercise price	\$2.80 – \$10.92	\$2.80 – \$10.92
Volatility	84.0%	83.2%
Expected term (years)	2.3	1.8
Risk-free rate	4.14%	3.71%
Dividend yield	-%	-%

The significant assumptions used in preparing the option pricing model for valuing the redeemable convertible preferred stock warrant liability as of December 31, 2024 and June 30, 2025, are as follows:

	December 31, 2024	June 30, 2025
Stock price	\$ 25.83	\$ 27.94
Exercise price	\$ 2.59	\$ 2.59
Volatility	84.0%	83.2%
Expected term (years)	2.3	1.8
Risk-free rate	4.14%	3.71%
Dividend yield	-%	-%

The fair value of the convertible notes is measured based on the present value of the notes based on the fair market yield to maturity and an estimate of the probability of the notes' conversion features. The fair market yield was estimated based on publicly traded debt securities with similar maturities and risk. During the six months ended June 30, 2024, the Company settled the convertible notes through the issuance of Series C-1 redeemable convertible preferred stock to the noteholders (See Note 8).

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The significant assumptions used in preparing discounted cash flow for valuing the convertible notes as of right before the conversion date May 15, 2024, are as follows:

	May 15, 2024
Principal outstanding (in \$'000s)	30,000
Expected term (years)	-
Risk-free rate	5.46%
Interest rate	8.00%

In August 2024, the Company entered into a new term loan agreement for which the Company elected to account for using the fair value option. As such, the fair value of the debt is calculated by using the probability weighting of the present value of settlement scenarios (See Note 9).

The significant assumptions used in preparing the income approach model for valuing the new term loan as of December 31, 2024 and June 30, 2025, are as follows:

	December 31, 2024	June 30, 2025
Discount rate	9.37%	9.22%
Annual interest rate	8.00%	8.00%
Expected term (years) – Scenario 1	5.32	4.75
Expected term (years) – Scenario 2	6.69	6.10

The common stock warrants, redeemable convertible preferred stock warrants, convertible notes and term loan are all classified as Level 3 fair value measurements due to the lack of relevant observable market data for the respective fair value inputs for each instrument.

The following table presents a summary of the changes in the fair value of the Company's Level 3 financial instruments (in thousands):

	Common Stock Warrants	Redeemable Convertible Preferred Stock Warrants	Convertible Notes
Balance at December 31, 2023	\$ 1,653	\$ 146	\$ 47,686
Adjustments to fair value	356	33	835
Gain on extinguishment	-	-	(8,635)
Settlements	-	-	(39,886)
Balance at June 30, 2024	\$ 2,009	\$ 179	\$ -

	Common Stock Warrants	Redeemable Convertible Preferred Stock Warrants	Term Loan
Balance at December 31, 2024	\$ 2,533	\$ 230	\$ 51,481
Adjustments to fair value	(63)	21	591
Balance at June 30, 2025	\$ 2,470	\$ 251	\$ 52,072

For the six months ended June 30, 2024 and 2025, the Company recognized losses related to the change in the fair value of the common stock warrant liability and redeemable convertible preferred stock warrant liability in

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other expense, net in the statements of operations and comprehensive loss. The Company will continue to recognize changes in the fair value of the common stock warrant liability and redeemable convertible preferred stock warrant liability until the warrants are exercised, expire, or qualify for equity classification.

For the six months ended June 30, 2024, the Company recognized losses related to the change in the fair value of convertible notes in change in fair value of convertible notes in the statements of operations and comprehensive loss. During the six months ended June 30, 2024, the convertible notes were settled in Series C-1 Redeemable Convertible Preferred Stock which was accounted for as a debt extinguishment as the settlement was not pursuant to the original conversion terms. The Company recorded a gain on extinguishment in net gain on extinguishment of debt in the statements of operations and comprehensive loss upon the conversion date (See Note 8).

For the six months ended June 30, 2025, the Company recognized a loss related to the change in fair value of the term loan in change in fair value of term loan in the statements of operations and comprehensive loss.

The common stock warrant liability and redeemable convertible preferred stock warrant liabilities are recorded within other non-current liabilities on the balance sheets as of December 31, 2024 and June 30, 2025. The term loan is recorded within long-term debt on the balance sheet as of December 31, 2024, and June 30, 2025.

The Company recognizes transfers among Level 1, Level 2 and Level 3 classifications as of the actual date of the events or change in circumstances that caused the transfers. During the six months ended June 30, 2024 and 2025, the Company had no transfers of financial assets or liabilities between different levels of the fair value hierarchy.

(4) Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

	December 31, 2024	June 30, 2025
Machinery and equipment	\$ 14,585	\$ 21,072
Equipment under finance leases	11,210	9,260
Furniture and fixtures	3,391	3,720
Computer hardware	1,770	2,193
Construction in progress	2,747	2,685
Leasehold improvements	290	305
Computer software	227	518
Automobiles	40	40
Property and equipment, gross	\$ 34,260	\$ 39,793
Less: Accumulated depreciation and amortization	(17,149)	(20,687)
Property and equipment, net	<u>\$ 17,111</u>	<u>\$ 19,106</u>

Depreciation and amortization expense for the six months ended June 30, 2024 and 2025 was \$3.4 million and \$3.5 million, respectively. Amounts included in construction in progress consists of purchases of lab equipment that have not yet been placed into service.

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(5) Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	December 31, 2024	June 30, 2025
Accrued professional services	\$ 898	\$ 2,406
Accrued inventory purchases	443	846
Accrued fixed asset purchases	798	1,280
Insurance payor liability	-	1,176
Accrued property and other taxes	443	109
Accrued information technology purchases	250	309
Accrued legal expenses	191	1,107
Accrued phlebotomy expenses	171	204
Accrued insurance expenses	159	220
Accrued rent	160	70
Accrued clinical expenses	98	113
Other	271	430
Accrued expenses and other current liabilities	<u>\$ 3,882</u>	<u>\$ 8,270</u>

(6) Redeemable Convertible Preferred Stock

As of December 31, 2024 and June 30, 2025, redeemable convertible preferred stock consisted of the following (in thousands, except for share data):

	Shares Authorized	Shares Issued and Outstanding	Net Carrying Value	Aggregate Liquidation Preference
Series A-1	1,349,650	1,349,650	\$ 3,493	\$ 540
Series A-2	1,137,210	1,137,210	2,943	910
Series A-3	899,730	899,730	2,328	900
Series A-4	25,761	25,761	67	50
Series A-5	114,613	114,613	297	100
Series A-6	5,805,861	5,796,201	14,999	15,000
Series B-1	5,182,287	5,182,287	54,889	55,000
Series B-2	2,566,902	2,566,902	27,243	16,025
Series C	6,079,919	5,628,825	143,268	143,500
Series C-1	1,726,823	1,726,823	39,886	33,870
Series D	4,656,233	4,656,233	129,996	156,563
Total	<u>29,544,989</u>	<u>29,084,235</u>	<u>\$ 419,409</u>	<u>\$ 422,458</u>

The rights, preferences and privileges of the Company's redeemable convertible preferred stock are as follows: (i)

(i) *Dividends*

The holders of shares of redeemable convertible preferred stock shall be entitled to receive dividends prior and in preference to any declaration of dividends on common stock. Dividends are payable only when and if declared by the Company's Board of Directors and are not cumulative. After dividends paid on redeemable convertible preferred stock, any dividends or distribution should be distributed to the holders of common and redeemable convertible preferred stock on an as-converted basis. No dividends have been declared or paid through June 30, 2025.

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(ii) *Liquidation Preference*

In the event of liquidation as approved by the Board of Directors, dissolution, or winding up of the Company, the holders of Series D shall be entitled to receive out of the proceeds or assets of this corporation available for distribution to its stockholders, prior and in preference to any distribution of proceeds to the holders of common stock, an amount per share equal the sum of 1.2 times the original issue price of \$28.0204, plus declared but unpaid dividends on such shares and (ii) the holders of each other series of redeemable convertible preferred stock shall be entitled to receive the assets of the Company available for distribution, prior and in preference to any distribution of proceeds to the holders of common stock, an amount per share equal to the sum of the applicable original issue price for such series of redeemable convertible preferred stock, plus declared but unpaid dividends on such share. If, upon occurrence of such event, the proceeds distributed among the holders of redeemable convertible preferred stock shall be insufficient to permit the payment to such holders of the full preferential amounts, then the entire proceeds available for distribution shall be distributed ratably among the holders of the redeemable convertible preferred stock in proportion to the full preferential amount.

(iii) *Conversion*

Each share of redeemable convertible preferred stock is convertible into common stock at any time after the issuance of the shares at the option of the holder (each share of Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6, Series B-1, Series B-2, Series C, Series C-1 and Series D is convertible to Common Stock). The conversion rate is determined by dividing the original issue price (as adjusted for any recapitalization) by the conversion price. The original issue prices of Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6, Series B-1, Series B-2, Series C, Series C-1 and Series D are \$0.4001, \$0.8002, \$1.0003, \$1.9409, \$0.8725, \$2.5879, \$10.6130, \$6.2429, \$25.4937, \$19.6143, and \$28.0204, respectively. The initial conversion price per share for each series of redeemable convertible preferred stock shall be the original issue price applicable to such series (1:1 conversion ratio), however that conversion price shall be subject to adjustment. There have been no adjustments to the conversion price since original issuance.

Each share of redeemable convertible preferred stock shall automatically be converted into such shares of common stock at the conversion rate at the time in effect for such series redeemable convertible preferred stock at the closing of this corporation's sale of its common stock in public offering, that results in at least \$100,000,000 of gross proceeds; at this corporation's initial listing of common stock on national securities exchange; in a Special Purpose Acquisition Company transaction, or the date or occurrence of an event specified by vote of redeemable convertible preferred stock (voting together as a single class and not as separate series, and on an as-converted basis).

(iv) *Voting Rights*

The holder of each share of redeemable convertible preferred stock shall have the right to one vote for each share of common stock into which such redeemable convertible preferred stock could then be converted. Thus, the holders of redeemable convertible preferred stock shall have the same voting rights as the holders of common stock.

As long as at least 1,449,050 shares of Series A redeemable convertible preferred stock remain outstanding, the holders of such shares of Series A redeemable convertible preferred stock shall be entitled to elect two directors of the Company at any election of directors. As long as at least 1,225,790 shares of Series C redeemable convertible preferred stock remain outstanding, the holders of such shares of Series C redeemable convertible preferred stock shall be entitled to elect one director of the Company at any election of directors. As long as at least 1,164,058 shares of Series D redeemable convertible preferred stock remain outstanding, the holders of such shares of Series D redeemable convertible preferred stock shall be entitled

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to elect one director of the Company at any election of directors. The holders of outstanding common stock shall be entitled to elect four directors of this Corporation at any election of directors.

(v) *Redemption*

The holders of redeemable convertible preferred stock have no voluntary rights to redeem shares. A liquidation, dissolution or winding up of the Company, a greater than 50% change in control, or a sale of substantially all of its assets would constitute a redemption event. Although the redeemable convertible preferred stock is not mandatorily or currently redeemable, given the shares are redeemable upon an event outside the Company's control, all shares of redeemable convertible preferred stock have been presented outside of permanent equity on the balance sheets. The carrying values of redeemable convertible preferred stock have not been accreted to their redemption values as redemption events are not probable to occur.

(7) Commitments and Contingencies

Legal Proceedings

From time to time, the Company is party to certain claims in the ordinary course of business. The Company, in conjunction with its legal counsel, assesses the need to record a liability for litigation or contingencies. A liability is recorded when and if it is determined that such a liability for litigation or contingencies is both probable and the amount can be reasonably estimated. The Company believes that it is not presently a party to any litigation of which the outcome, if determined adversely, would individually or in the aggregate be expected to have a material and adverse effect on the business, operating results, cash flows, or financial position. Legal fees are expensed in the period in which they are incurred.

Indemnification Agreements

The Company has entered into indemnification agreements with its directors and officers against any liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct of the individual.

Additionally, in the ordinary course of business, the Company enters into agreements of varying scope and terms pursuant to which it agrees to indemnify customers, vendors, lessors, business partners, and other parties with respect to certain matters, including, but not limited to, losses arising out of the breach of such agreements, services to be provided by the Company, or from intellectual property infringement claims made by third parties. As of December 31, 2024 and June 30, 2025, no demands have been made upon the Company to provide indemnification under such agreements, and there are no claims that the Company is aware of that could have a material adverse effect on its financial position, results of operations, or cash flows. Accordingly, the Company has no liabilities recorded for these agreements as of December 31, 2024 and June 30, 2025.

(8) Convertible Notes

In September 2022, the Company entered into a Note Purchase Agreement for unsecured Convertible Promissory Notes (the "Notes") to several note holders (the "Note Holders") with a principal sum of \$30.0 million together with interest thereon from the date of the Notes. The Notes accrue interest at a rate of 8.0% per annum, simple interest. The Notes were scheduled to mature on September 20, 2024, and the Company may not make prepayments without written consent of the majority Note holders.

During May 2024, concurrent with the issuance of Series D redeemable convertible preferred stock, and pursuant to negotiation with the Note Holders, the Company and Note Holders agreed to settle the Notes through the

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issuance of Series C-1 redeemable convertible preferred stock to the Note Holders instead of Series D redeemable convertible preferred stock. The Notes converted into an aggregate of 1,726,823 shares of Series C-1 redeemable convertible preferred stock at a conversion price of approximately \$19.6143 per share. The change in terms of the Notes was accounted for as a debt extinguishment as the settlement was not pursuant to the original conversion terms. Immediately prior to the extinguishment, the Company recorded a mark-to-market adjustment for the Notes resulting in a loss of \$0.8 million for the six months ended June 30, 2024 which was recorded to change in fair value of convertible notes in the Company's statements of operations and comprehensive loss. Upon extinguishment, the Company derecognized the Notes on the balance sheets at their fair value immediately prior to the extinguishment of \$48.5 million. The difference of \$8.6 million between the fair market value of the Series C-1 redeemable convertible preferred shares received by the Note Holders of \$39.9 million and the fair value of the Notes immediately prior to the extinguishment was recorded as a gain on debt extinguishment in the Company's statements of operations and comprehensive loss for the six months ended June 30, 2024.

(9) Long-term Debt

Oberland Note Purchase Agreement

In August 2024, the Company entered into a note purchase agreement (the "2024 Notes") with BWCB SA LLC (an entity affiliated with Oberland Capital Management, LLC ("Oberland Capital")), which provided the Company with up to four tranches of capital advances totaling up to \$140.0 million. The advanced principal accrues interest at a rate of 8.0% per annum. The first tranche of \$50.0 million was advanced on August 5, 2024, with a Maturity Date on the seventh anniversary of the first purchase date (August 31, 2031). The first tranche requires interest-only payments through August 31, 2031 and a lump sum payment due on August 31, 2031.

The second tranche of up to \$35.0 million in principal is available at the Company's option at any time prior to September 30, 2025 provided that the trailing six-month worldwide net revenue of the Company is at least \$80.0 million. As of June 30, 2025, the Company has not elected the option to draw on the second tranche.

The Company is required to sell the third tranche of notes in the amount of \$30.0 million prior to March 31, 2026 as the Company has achieved the revenue and gross margin thresholds triggering this obligation during the first half of fiscal 2025. The thresholds triggering this tranche are trailing six-month revenue of at least \$112.5 million and a trailing six-month gross margin of at least 45%. The terms of this tranche are identical to those of the first \$50 million tranche.

Gross Margin is defined as (I) net revenue minus cost of goods sold divided by (II) net revenue, expressed as a percentage. The fourth tranche of up to \$25.0 million in principal will be made available to the Company at the mutual agreement of the parties at any time prior to March 31, 2026.

The Company has the option at any time to prepay all of the then-outstanding notes, and Oberland Capital has the option to redeem the notes upon (i) a change in control of the Company, (ii) an event of default, or (iii) the maturity date. The redemption price of the note shall equal to the following: (1) 130% of principal amounts of notes if the payment is made within 24 months of issuance; (2) 145% of principal amounts of notes if the payment is made within 36 months of issuance; (3) If the payment is made within 48 months, an amount that would generate an internal rate of return ("IRR") of 12.25%; (4) if the payment is made within 60 months of the issuance, an amount that would generate an IRR of 11.75%; (5) if the payment is made thereafter but before maturity, an amount that would generate an IRR of 11.25%; and (6) if the payment is made at maturity, an amount that would generate an IRR of 10.0%.

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The Company is required to maintain trailing six-month net revenue based on a schedule that gradually increases up to \$120.0 million after the year ending December 31, 2026.

Period	Minimum Trailing Six-Month Net Revenue Threshold (in millions)
Q1 2025	\$ 56.1
Q2 2025	\$ 65.6
Q3 2025	\$ 75.8
Q4 2025	\$ 82.8
Q1 2026	\$ 87.2
Q2 2026	\$ 101.8
Q3 2026	\$ 117.2
Q4 2026	\$ 120.0
Thereafter	\$ 120.0

In addition, the Company is required to maintain a trailing six-month Gross Margin of not less than 30%. The agreement also contains a revenue participation agreement, under which, for any fiscal quarter, 0.01% of net revenue for such fiscal quarter (up to \$100.0 million of net revenue for each fiscal year) per each \$1.0 million principal amount of the notes will be payable to Oberland Capital. Amounts paid under the revenue participation agreement during the six months ended June 30, 2025 were interest payments on the debt. The revenue participation payments are additional financing costs of the loan and are included in the computation of the internal rate of return measures described above and do not reduce principal on the debt. As of June 30, 2025, we have made revenue participation payments of \$0.5 million.

The Company elected to account for the 2024 Notes using the fair value option and changes in fair value related to the 2024 Notes are recorded in change in fair value of term loan on the Company's statements of operations and comprehensive loss. The Company also elected to present interest incurred on the 2024 Notes in the change in fair value of the term loan; interest expense under the Oberland Capital arrangement was \$2.0 million for the six months ended June 30, 2025. Total debt outstanding as of December 31, 2024 and June 30, 2025 was \$51.5 million and \$52.1 million, respectively, and included within long-term debt on the Company's balance sheets. Future principal payments of the Company's long-term debt as of December 31, 2024 and June 30, 2025 \$50.0 million, is due during the year ending December 31, 2031. The term loan advances are secured by a lien on the Company's assets.

Redeemable Convertible Preferred Stock Warrants

The Company has issued Comerica Bank a warrant to purchase 9,660 Series A-6 redeemable convertible preferred shares at an exercise price of \$2.59 per share in connection with a former loan and security agreement entered into in March 2020. The warrants are exercisable until March 15, 2030. The warrants are classified as liabilities on the Company's balance sheet.

Common Stock Warrants

In connection with the 2021 LSA, the Company issued to Western Alliance Bank ("WAB") warrants to purchase shares of the Company's common stock at an exercise price of \$2.80 per share. The number of underlying shares of the warrants was initially 53,571 and was increased to 80,357 upon the funding of the loans in January 2022. The warrants will expire if unexercised on October 12, 2031. Upon the occurrence of an acquisition of the Company, if the acquiror shall not have assumed the warrants, WAB shall have the right to put the warrants back to the Company for cash equal to the greater of (x) \$450,000 or (y) the value of the aggregate consideration payable to WAB had WAB exercised the warrants immediately prior to exercise such put right.

BILLIONTOONE, INC.
Notes to Unaudited Interim Financial Statements

In connection with the 2022 LSA Amendment, the Company issued up to 41,209 warrants for common stock at an exercise price of \$10.92 per share to WAB. 30,907 warrants were exercisable upon execution of the agreement; the remaining warrants become exercisable as the Company makes additional draws on the 2022 LSA Amendment. As of December 31, 2023 all of the warrants were exercisable. The warrants will expire if unexercised on July 22, 2032. Upon the occurrence of an acquisition of the Company, if the acquiror shall not have assumed the warrants, WAB shall have the right to put the warrants back to the Company for cash equal to the greater of (x) \$412,500 or (y) the value of the aggregate consideration payable to WAB had WAB exercised the warrants immediately prior to exercise such put right.

All the warrants issued to WAB are puttable warrants and thus are liability classified. The warrants were initially recognized at fair value with any subsequent changes in fair value to be recorded in other income (expense) in the statements of operations and comprehensive loss (See Note 3).

The fair value of the warrants as of their respective issuance dates were recorded as a debt discount that is being amortized to interest expense over the term of the loan.

(10) Common Stock

As of December 31, 2024 and June 30, 2025, the Company's Certificate of Incorporation, as amended, authorized the Company to issue 51,100,000 shares of common stock with a par value of \$0.00001. Total common stock outstanding as of December 31, 2024 and June 30, 2025 was 10,925,950 and 11,085,044, respectively. Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when and if declared by the Board of Directors, subject to the prior rights of holders of all series of stock outstanding. No dividends have been declared or paid by the Company since inception.

The Company is required to reserve and keep available out of its authorized but unissued shares of common stock such a number of shares sufficient to affect the conversion of all outstanding shares of redeemable convertible preferred stocks, preferred stock and common stock warrants, and options granted and available for grant under the Company's stock option plan.

The amount of such shares of the Company's common stock reserved for these purposes at June 30, 2025 is as follows:

Series A-1 Redeemable Convertible Preferred Stock	1,349,650
Series A-2 Redeemable Convertible Preferred Stock	1,137,210
Series A-3 Redeemable Convertible Preferred Stock	899,730
Series A-4 Redeemable Convertible Preferred Stock	25,761
Series A-5 Redeemable Convertible Preferred Stock	114,613
Series A-6 Redeemable Convertible Preferred Stock	5,796,201
Series B-1 Redeemable Convertible Preferred Stock	5,182,287
Series B-2 Redeemable Convertible Preferred Stock	2,566,902
Series C Redeemable Convertible Preferred Stock	5,628,825
Series C-1 Redeemable Convertible Preferred Stock	1,726,823
Series D Redeemable Convertible Preferred Stock	4,656,233
Redeemable Convertible Preferred stock warrants	9,660
Common stock warrants	121,566
Options to purchase common stock	8,933,419
Stock options available for future grants	921,186
Total common stock reserved	<u>39,070,066</u>

BILLIONTOONE, INC.
Notes to Unaudited Interim Financial Statements

Stock Plan

In December 2018, the Company adopted the 2018 Stock Plan (the “2018 Plan”). The 2018 Plan authorizes the granting of stock options upon the approval of the Company’s Board of Directors, to employees and consultants providing services to the Company. Stock options granted under the 2018 Plan generally expire within 10 years from the date of grant and are generally issued at the fair value of the underlying shares of common stock on the date of grant as determined by the Company’s Board of Directors. The shares subject to each option typically allow for 25% of the shares to vest and become exercisable on the first anniversary of the vesting commencement date and thereafter, the remaining 75% will vest and become exercisable in 36 equal monthly installments. The Company may include other vesting terms from time to time.

Incentive and non-statutory stock options may be granted with exercise prices not less than 100% of the estimated fair value of the common stock on the date of grant, as determined by the Board of Directors.

Subject to Board approval at the grant date, if an option includes an “early exercise” feature, then such option shall be exercisable at any time but any unvested option shares shall be subject to the Company’s right to repurchase them at the original exercise price in the event that the optionee’s service is terminated for any reason. If an option does not permit early exercise, then such option shall not be exercisable with respect to unvested shares. As of December 31, 2024 and June 30, 2025, the Company had authorized 10,904,372 and 12,409,025 shares of common stock reserved for issuance under the 2018 Plan, respectively.

Stock-based Compensation

The Company recognizes stock-based compensation expense for all stock-based payment awards based on the estimated fair value on the date of the grant. The Company recognizes the compensation cost on a straight-line basis over the requisite service period of the award. The fair value of stock options granted is estimated using the Black-Scholes Model utilizing the assumptions noted below:

- *Fair value of common stock.* The Board of Directors considers numerous objective and subjective factors to determine the fair value of the Company’s common stock options at each meeting in which awards are approved. The factors considered include, but are not limited to: (i) the results of contemporaneous independent third party valuations of the Company’s common stock; (ii) the prices, rights, preferences and privileges of the Company’s redeemable convertible preferred stock relative to those of its common stock; (iii) the lack of marketability of the Company’s common stock; (iv) actual operating and financial results; (v) current business conditions and projections; and (vi) the likelihood of achieving a liquidity event, such as an initial public offering or sale of the Company, given prevailing market conditions.
- *Expected volatility.* Expected volatility is a measure of the amount by which the stock price is expected to fluctuate. Since the Company does not have sufficient trading history of its common stock, it estimates the expected volatility of its stock options at their grant date by taking the weighted average historical volatility of a group of comparable publicly traded companies over a period equal to the expected life of the options.
- *Expected term.* Expected term represents the period over which the Company anticipates stock-based awards to be outstanding. The Company uses the simplified method to calculate the expected term estimate based on the options’ vesting term and contractual terms. Under the simplified method, the expected life is equal to the average of the stock-based award’s weighted average vesting period and its contractual term.
- *Risk-free interest rate.* The Company uses the average of the published interest rates of U.S. Treasury zero-coupon issues with terms consistent with the expected term of the awards for its risk-free interest rate.
- *Expected dividends.* The Company historically has not paid dividends on common stock and has no plans to issue dividends in the foreseeable future.

BILLIONTOONE, INC.
Notes to Unaudited Interim Financial Statements

The weighted average assumptions used to calculate the fair value of option grants issued under the 2018 Plan during the six months ended June 30, 2024 and 2025 were as follows:

	June 30, 2024	June 30, 2025
Fair value of common stock	\$ 15.43	\$ 22.21
Dividend yield	-	-
Risk-free interest rate	4.2%	4.2%
Expected volatility	68%	73%
Expected term (in years)	6.00	6.31

A summary of the Company's stock option activity and related information is as follows:

	Number of Options Outstanding	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2024	6,849,412	\$ 7.28	7.5	\$ 73,992
Granted	2,415,819	\$ 19.78		
Exercised	(159,094)	\$ 3.41		
Forfeited or expired	(172,718)	\$ 14.67		
Outstanding as of June 30, 2025	8,933,419	\$ 10.59	7.8	\$ 112,216
Vested and exercisable as of June 30, 2025	4,625,608	\$ 5.01	6.4	\$ 83,913
Vested and expected to vest as of June 30, 2025	8,933,419	\$ 10.59	7.8	\$ 112,216

The intrinsic value is calculated as the difference between the exercise price of the underlying stock option award and the estimated fair value of the Company's common stock. The total intrinsic values of options exercised during the six months ended June 30, 2024 and 2025 \$2.7 million and \$2.8 million, respectively.

During the six months ended June 30, 2024, the weighted average grant-date fair value of options granted was \$10.27 per share, and the fair value of options vested during the period was \$3.2 million. During the six months ended June 30, 2025, the weighted average grant-date fair value of options granted was \$15.65 per share, and the fair value of options vested during the period was \$4.7 million. The fair value is being expensed over the vesting period of the options, on a straight-line basis as the services are being provided.

As of June 30, 2025, there was approximately \$53.2 million of total unrecognized compensation cost related to unvested options, which is expected to be recognized over the weighted average period of 3.9 years. Also, in June 2025, the Board of Directors granted stock options of 1,003,102 shares to the Company's CEO and Co-Founder and 501,551 shares to the Chief Technology Officer and Co-Founder at an exercise price of \$20.04 per share. The vesting commencement date of the stock option is June 11, 2025 and the stock options vests monthly over six years.

BILLIONTOONE, INC.
Notes to Unaudited Interim Financial Statements

Stock-Based Compensation Expense

The table below shows stock-based compensation expense included in the statements of operations and comprehensive loss for the six months ended June 30, 2024 and 2025 (in thousands):

	June 30, 2024	June 30, 2025
Cost of revenue	\$ 564	\$ 738
Research and development	1,166	1,571
Selling, general and administrative	2,175	2,797
Total stock-based compensation	<u>\$ 3,905</u>	<u>\$ 5,106</u>

Secondary Sales of Common Stock

During June 2024, investors of the Company acquired 52,750 shares of common stock at a price per share equal to \$22.42 per share from employee stockholders. As a result, the Company recorded a total of \$0.3 million for the six months ended June 30, 2024 in stock-based compensation expense for the difference between the price paid by these investors and the estimated fair value of the acquired common stock from stockholders on the date of the transactions.

Repurchase of Common Stock

In February 2024, the Company's Board of Directors agreed to repurchase a total of 26,750 shares of common stock that were held by a former employee of the Company. The repurchase price paid by the Company was \$20.3950 per share, resulting in a total repurchase cost of \$0.5 million. As the repurchase price paid by the Company to the former employee represented an excess over the common stock's estimated fair market value at the time, the Company accounted for this premium as stock-based compensation expense of \$0.2 million during the six months ended June 30, 2024.

(11) Income Taxes

The Company has an effective tax rate of (0.03)% and (2.73)% for the six months ended June 30, 2024 and 2025, respectively. The Company has incurred U.S. operating losses and has minimal profits in its foreign jurisdictions.

The Company updates its estimate of the annual effective tax rate each quarter and makes a cumulative adjustment in such period. The Company recorded income tax expense of less than \$0.1 million and \$0.1 million for the six months ended June 30, 2024 and 2025, respectively. Income tax expense consists primarily of income taxes for U.S. federal and the states in which the Company conducts business. Due to the Company's history of losses in the United States, a full valuation allowance on substantially all of the Company's deferred tax assets, including net operating loss carryforwards, research and development tax credits, and other book versus tax differences, was maintained.

(12) Employee Benefit Plan

The Company sponsors a qualified 401(k) defined contribution plan covering eligible employees. Participants may contribute a portion of their annual compensation limited to a maximum annual amount set by the Internal Revenue Service. Employer contributions to the plan are discretionary. During the six months ended June 30, 2024 and 2025, the Company contributed \$1.1 million and \$1.7 million to this plan, respectively.

BILLIONTOONE, INC.
Notes to Unaudited Interim Financial Statements

(13) Related Party Transactions

During the year ended December 31, 2023, the Company's former CFO left the Company. Upon his departure, the Company's Board of Directors approved the extension of the exercise period to ten years from the date of grant for all of his common stock options that were fully vested at the time of his departure. The impact on the financial statements resulting from the extension of the exercise term was not material. In February 2024, the Company also repurchased 26,750 shares of common stock that were held by the former CFO. Please refer to Note 10 for additional information on this transaction. There were no other material related party transactions during the six months ended June 30, 2024 and 2025.

(14) Net Loss Per Share Attributable to Shareholders

The Company applies the two-class method when computing net loss per share attributable to common shareholders when shares meet the definition of participating securities. The two-class method determines net income (loss) per share of common stock and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires net income (loss) available to common stockholders for the period to be allocated between common stock and participating securities based upon their respective rights to receive dividends as if all income (loss) for the period had been distributed. The holders of the Company's redeemable convertible preferred stock would be entitled to dividends in preference to common stockholders, if declared. Such dividends are not cumulative. Any remaining earnings would be distributed among the holders of redeemable convertible preferred stock and common stock pro rata on an as-converted basis. The holders of the Company's redeemable convertible preferred stock are not contractually obligated to participate in the Company's losses.

Basic net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, less shares subject to repurchase. Diluted net loss per share is computed by including all potentially dilutive securities outstanding for the period using the treasury stock method or the if-converted method, as applicable. For periods in which the Company reports net losses, diluted net loss per common share is the same as basic net loss per common share as all potentially dilutive securities are anti-dilutive.

The following table sets forth the computation of basic and dilutive net loss per share attributable to common stockholders for the six months ended June 30, 2024 and 2025 (in thousands, except per share amounts):

	June 30, 2024	June 30, 2025
Numerator:		
Net loss	\$ (15,189)	\$ (4,234)
Denominator:		
Weighted-average shares used in calculating net loss per share, basic and diluted	10,020	10,349
Net loss per share, basic and diluted	<u>\$ (1.52)</u>	<u>\$ (0.41)</u>

Since the Company was in a loss position for the period presented, basic net loss per share is the same as diluted net loss per share as the inclusion of all potential common shares outstanding would have been anti-dilutive.

BILLIONTOONE, INC.
Notes to Unaudited Interim Financial Statements

Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows for the six months ended June 30, 2024 and 2025:

	June 30, 2024	June 30, 2025
Redeemable convertible preferred stock	29,084,235	29,084,235
Outstanding stock options	6,542,526	8,933,419
Restricted stock awards in exchange for non recourse note	700,000	700,000
Warrants to purchase common stock	121,566	121,566
Warrants to purchase redeemable convertible preferred stock	9,660	9,660
Unvested early-exercised options	2,188	-

(15) Subsequent Events

Management evaluates events occurring subsequent to the date of the financial statements in determining the accounting for and disclosure of transactions and events that affect the financial statements. For its interim financial statements as of June 30, 2025, the Company evaluated subsequent events through September 17, 2025, the date on which the interim financial statements were available to be issued.

shares



Class A common stock

Preliminary prospectus

**J.P. Morgan
Stifel**

**Piper Sandler
Wells Fargo Securities**

Jefferies

**William Blair
BTIG**

Part II**Information not required in prospectus****Item 13. Other expenses of issuance and distribution**

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, payable by us in connection with the sale of the Class A common stock being registered. All amounts shown are estimates except for the Securities and Exchange Commission (SEC) registration fee, the Financial Industry Regulatory Authority (FINRA) filing fee and the Nasdaq listing fee.

Item	Amount paid or to be paid
SEC registration fee	\$ 13,810
FINRA filing fee	15,500
Nasdaq listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Blue sky qualification fees and expenses	*
Transfer Agent fees and expenses	*
Miscellaneous expenses	*
Total	\$ *

* To be completed by amendment

Item 14. Indemnification of directors and officers

Section 145 of the DGCL authorizes a court to award, or a corporation's Board of Directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The terms of Section 145 of the DGCL are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

As permitted by the DGCL, our Post-IPO Certificate of Incorporation and Post-IPO Bylaws, as each will be in effect immediately prior to the completion of this offering, contain provisions relating to the limitation of liability and indemnification of our directors and officers. The Post-IPO Certificate of Incorporation will provide that our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- in respect of unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL;
- an officer in any action by or in the right of the Company; or
- for any transaction from which the director derives any improper personal benefit.

Our Post-IPO Certificate of Incorporation also will provide that if Delaware law is amended after the approval by our stockholders of the Post-IPO Certificate of Incorporation, to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law.

Our Post-IPO Bylaws will provide that we will indemnify our directors and officers to the fullest extent permitted by Delaware law, as it now exists or may in the future be amended, against all expenses and liabilities reasonably incurred in connection with their service for or on our behalf. Our Post-IPO Bylaws will provide that we shall advance the expenses incurred by a director or officer in advance of the final disposition of an action or proceeding, and permit us to secure insurance on behalf of any director, officer, employee, or other agent for any liability arising out of his or her action in that capacity, whether or not Delaware law would otherwise permit indemnification.

We have entered into indemnification agreements with each of our directors and executive officers and certain other key employees, a form of which is attached as Exhibit 10.1. The form of agreement provides that we will indemnify each of our directors, executive officers and such other key employees against any and all expenses incurred by that director, executive officer, or other key employee because of his or her status as one of our directors, executive officers, or other key employees, to the fullest extent permitted by Delaware law, our Post-IPO Certificate of Incorporation and our Post-IPO Bylaws. In addition, the form agreement provides that, to the fullest extent permitted by Delaware law, we will advance all expenses incurred by our directors, executive officers and other key employees in connection with a legal proceeding.

Reference is made to the underwriting agreement contained in Exhibit 1.1 to this registration statement, indemnifying our directors and officers against limited liabilities. In addition, Section 2.8 of our IRA contained in Exhibit 4.1 to this registration statement provides for indemnification of certain of our stockholders against liabilities described therein.

We currently carry and intend to continue to carry liability insurance for our directors and officers.

Item 15. Recent sales of unregistered securities

The following list sets forth information regarding all unregistered securities issued by us since January 1, 2022:

Convertible promissory notes

- In September 2022, we issued convertible promissory notes with an approximate principal value of \$30.0 million to seventeen accredited investors (the Convertible Promissory Notes). Each Convertible Promissory Note had an interest rate of 8% per annum. In May 2024, such Convertible Promissory Notes converted into an aggregate of 1,726,823 shares of Series C-1 redeemable convertible preferred stock at a conversion price of approximately \$19.6143 per share.

Note Purchase Agreement

We entered into a debt facility with availability of up to \$140.0 million, issuable in four separate tranches, pursuant a Note Purchase Agreement, dated as of August 2, 2024, by and among us, the purchasers party thereto, and BWCB SA LLC (an entity affiliated with Oberland Capital), as purchaser's agent (the Note Purchase Agreement). As of June 30, 2025, we have drawn \$50 million under the debt facility. The advanced principal accrues interest at a rate of 8.0% per annum. Under the Note Purchase Agreement, subject to the terms and conditions set forth in such Agreement, we have the option, but not the obligation, to issue and sell an additional two separate tranches of notes in the amounts of \$35.0 million and \$25.0 million, and an obligation to sell a tranche of notes in the amount of \$30.0 million prior to March 31, 2026 as we have crossed the thresholds triggering this obligation. The thresholds are trailing six-month revenue of at least \$112.5 million and a trailing six-month gross margin (as defined in the Note Purchase Agreement) of at least 45%.

Redeemable convertible preferred stock

- Between March 2022 and September 2022, we issued an aggregate of 5,628,825 shares of Series C redeemable convertible preferred stock at a cash purchase price of \$25.4937 per share to for an aggregate purchase price of approximately \$143.5 million to thirty-nine accredited investors.
- In May 2024, we issued an aggregate of 4,656,233 shares of Series D redeemable convertible preferred stock at a cash purchase price of \$28.0204 per share for an aggregate purchase price of approximately \$130.5 million to thirty-five accredited investors.

Options

- We have granted options to purchase 13,990,563 shares of common stock to employees, directors and other service providers pursuant to our 2018 Stock Plan, with per share exercise prices ranging from \$0.06 to \$30.78. Since January 1, 2022, 834,783 shares of common stock have been issued upon the exercise of stock options pursuant to the 2018 Stock Plan.

Warrants

- In July 2022, we issued a warrant to purchase up to 41,209 shares of common stock with an exercise price of \$10.92 per share to one accredited investor; 30,907 warrants were exercisable upon execution of the agreement; the remaining warrants became exercisable as we made additional draws on the Western Alliance Bank debt. As of December 31, 2023 all of the warrants were exercisable.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. We believe the offers, sales and issuances of the above securities were exempt from registration under the Securities Act (or Regulation D or Regulation S promulgated thereunder) by virtue of Section 4(a)(2) of the Securities Act because the issuance of securities to the recipients did not involve a public offering, or in reliance on Rule 701 because the transactions were pursuant to compensatory benefit plans or contracts relating to compensation as provided under such rule. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 16. Exhibits and financial statement schedules

(a) Exhibits

Exhibit No.	Description
1.1**	Form of Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect.
3.2**	Form of Post-IPO Certificate of Incorporation of the Registrant, to be effective upon completion of this offering.
3.3	Amended and Restated Bylaws of Registrant, as currently in effect.
3.4	Form of Post-IPO Bylaws of Registrant, to be effective upon completion of this offering.

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Exhibit No.	Description
4.1	Amended and Restated Investors' Rights Agreement, dated May 14, 2024, by and among the Registrant and the investors listed on schedule A thereto.
4.2	Warrant to Purchase Stock, issued to Comerica Bank, dated March 16, 2020.
4.3	Warrant to Purchase Stock, issued to Western Alliance Bank, dated October 12, 2021.
4.4	Warrant to Purchase Stock, issued to Western Alliance Bank, dated July 22, 2022.
5.1**	Opinion of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP.
10.1	Note Purchase Agreement, dated as of August 2, 2024, by and among the Registrant, the purchasers party thereto, and BWCB SA LLC (an entity affiliated with Oberland Capital Management, LLC), as purchaser's agent.
10.2	Amendment No. 1 to the Note Purchase Agreement, dated as September 4, 2025, by and among by and among the Registrant, the purchasers party thereto, and BWCB SA LLC (an entity affiliated with Oberland Capital Management, LLC), as purchaser's agent.
10.3	Lease Agreement for Union City facility, dated April 10, 2022.
10.4	Amendment No. 1 to Lease Agreement for Union City facility, dated October 11, 2023.
10.5	Lease Agreement for Menlo Park facility, dated May 21, 2020.
10.6	Amendment No. 1 to Lease Agreement for Menlo Park facility, dated August 7, 2021.
10.7†	Collaboration Agreement, by and between the Registrant and Janssen Research & Development, dated January 6, 2023.
10.8†	Amendment No. 1 to Collaboration Agreement with Janssen Research & Development, dated July 14, 2023.
10.9†	Amendment No. 2 to Collaboration Agreement with Janssen Research & Development, dated August 11, 2023.
10.10†	Development and Commercialization Agreement with Janssen Biotech, Inc., dated July 11, 2025.
10.11+	Form of Indemnification Agreement by and between the Registrant and each of its directors and executive officers.
10.12+**	2018 Stock Plan, as amended, and forms of agreements thereunder.
10.13+**	2025 Equity Incentive Plan, and forms of agreements thereunder.
10.14+**	2025 Employee Stock Purchase Plan.
10.15+**	Executive Severance Plan
10.16+	Offer Letter, by and between the Registrant and Oguzhan Atay.
10.17+	Offer Letter, by and between the Registrant and David Tsao.
10.18+	Offer Letter, by and between the Registrant and Ross Taylor.
10.19+	Offer Letter, by and between the Registrant and Nancy Johnson.
23.1	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.
23.2**	Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP (contained in Exhibit 5.1).
24.1	Power of Attorney (included on signature page of the original filing of this registration statement).
107	Filing Fee Table.

** To be filed by amendment.

+ Indicates management contract or compensatory plan.

† The Registrant has omitted portions of the exhibit (indicated by "[*]") as permitted under Item 601(b)(10) of Regulation S-K because such information is both (i) not material and (ii) information that the Registrant treats as private or confidential. The Registrant hereby undertakes to furnish supplemental copies of the unredacted exhibit upon request by the SEC.

(b) Financial statement schedules

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or related notes, which are incorporated herein by reference.

Item 17. Undertakings

Insofar as indemnification by the registrant for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

BillionToOne, Inc.

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Oguzhan Atay and Ross Taylor, and each of them, his or her true and lawful agent, proxy, and attorney-in-fact, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to (1) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (2) act on, sign, and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (3) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (4) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he or she might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Signature	Title	Date
/s/ Oguzhan Atay Oguzhan Atay	Chief Executive Officer and Director (Principal Executive Officer)	October 7, 2025
/s/ Ross Taylor Ross Taylor	Chief Financial Officer (Principal Financial and Accounting Officer)	October 7, 2025
/s/ David Tsao David Tsao	Chief Technology Officer and Director	October 7, 2025
/s/ Thomas Bremner Thomas Bremner	Director	October 7, 2025
/s/ Firat Ileri Firat Ileri	Director	October 7, 2025
/s/ Krishna Swaroop Kolluri Krishna Swaroop Kolluri	Director	October 7, 2025
/s/ Akshay Rai Akshay Rai	Director	October 7, 2025

**RESTATED CERTIFICATE OF INCORPORATION
OF
BILLIONTOONE, INC.**

**(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)**

BillionToOne, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "General Corporation Law"),

DOES HEREBY CERTIFY:

FIRST: That the name of this corporation is **BillionToOne, Inc.** and that this corporation was originally incorporated pursuant to the General Corporation Law on January 11, 2016 under the name **BillionToOne, Inc.**

SECOND: That the Board of Directors of this corporation duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended and restated in its entirety as follows:

ARTICLE I

The name of this corporation is BillionToOne, Inc.

ARTICLE II

The address of the registered office of this corporation in the State of Delaware is 3500 South DuPont Highway, in the City of Dover, County of Kent, zip code 19901. The name of its registered agent at such address is Incorporating Services, Ltd.

ARTICLE III

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

ARTICLE IV

A. Authorization of Stock. This corporation is authorized to issue two classes of stock to be designated, respectively, common stock and preferred stock. The total number of shares that this corporation is authorized to issue is 80,644,989. The total number of shares of common stock authorized to be issued is 51,100,000, par value \$0.00001 per share (the "Common Stock"). The

total number of shares of preferred stock authorized to be issued is 29,544,989, par value \$0.00001 per share (the "Preferred Stock"). The Preferred Stock is divided into eleven series: 1,349,650 shares of Preferred Stock are designated as "Series A-1 Preferred Stock," 1,137,210 shares of Preferred Stock are designated as "Series A-2 Preferred Stock," 899,730 shares of Preferred Stock are designated as "Series A-3 Preferred Stock," 25,761 shares of Preferred Stock are designated as "Series A-4 Preferred Stock," 114,613 shares of Preferred Stock are designated as "Series A-5 Preferred Stock," 5,805,861 shares of Preferred Stock are designated as "Series A-6 Preferred Stock," 5,182,287 shares of Preferred Stock are designated as "Series B-1 Preferred Stock," 2,566,902 shares of Preferred Stock are designated as "Series B-2 Preferred Stock," 6,079,919 shares of Preferred Stock are designated as "Series C Preferred Stock," 1,726,823 shares of Preferred Stock are designated as "Series C-1 Preferred Stock" and 4,656,233 shares of Preferred Stock are designated as "Series D Preferred Stock." The Series C Preferred Stock and the Series C-1 Preferred Stock shall be referred to herein together as the "Series C Stock."

B. Rights, Preferences and Restrictions of Preferred Stock. The rights, preferences, privileges and restrictions granted to and imposed on the Preferred Stock are as set forth below in this Article IV(B).

1. Dividend Provisions.

(a) The holders of shares of Preferred Stock shall be entitled to receive dividends, out of any assets legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock or other securities and rights convertible into or entitling the holder thereof to receive, directly or indirectly, additional shares of Common Stock of this corporation) on the Common Stock of this corporation payable when, as and if declared by this corporation's board of directors (the "Board of Directors"). Such dividends shall not be cumulative. The holders of the outstanding Preferred Stock can waive any dividend preference that such holders shall be entitled to receive under this Section 1 upon the affirmative vote or written consent of the holders of a majority of the shares of Preferred Stock then outstanding (voting together as a single class and not as separate series, and on an as-converted basis).

(b) After payment of such dividends, any additional dividends or distributions shall be distributed among all holders of Common Stock and Preferred Stock in proportion to the number of shares of Common Stock that would be held by each such holder if all shares of Preferred Stock were converted to Common Stock at the then effective Conversion Rate (as defined below).

2. Liquidation Preference.

(a) In the event of any Liquidation Event (as defined below), either voluntary or involuntary, (i) the holders of Series D Preferred Stock shall be entitled to receive out of the proceeds or assets of this corporation available for distribution to its stockholders (the "Proceeds"), prior and in preference to any distribution of the Proceeds of such Liquidation Event to the holders of Common Stock by reason of their ownership thereof and *pari passu* with any distributions to the holders of the other series of Preferred Stock, an amount per share equal the sum of 1.2 times the Original Issue Price (as defined below) for Series D Preferred Stock plus

declared but unpaid dividends on such shares and (ii) the holders of each series of Preferred Stock (other than the Series D Preferred Stock) shall be entitled to receive out of the Proceeds, prior and in preference to any distribution of the Proceeds of such Liquidation Event to the holders of Common Stock by reason of their ownership thereof and *pari passu* with any distributions to the holders of Series D Preferred Stock, an amount per share equal to the sum of the applicable Original Issue Price for such series of Preferred Stock, plus declared but unpaid dividends on such share. If, upon the occurrence of such event, the Proceeds thus distributed among the holders of the Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire Proceeds legally available for distribution shall be distributed ratably among the holders of the Preferred Stock in proportion to the full preferential amount that each such holder is otherwise entitled to receive under this subsection (a) of this Section 2. For purposes of this Restated Certificate of Incorporation, "Original Issue Price" shall mean \$0.4001 per share for each share of the Series A-1 Preferred Stock, \$0.8002 per share for each share of the Series A-2 Preferred Stock, \$1.0003 per share for each share of the Series A-3 Preferred Stock, \$1.9409 per share for each share of the Series A-4 Preferred Stock, \$0.8725 per share for each share of the Series A-5 Preferred Stock, \$2.5879 per share for each share of the Series A-6 Preferred Stock, \$10.6130 per share for each share of the Series B-1 Preferred Stock, \$6.2429 per share for each share of the Series B-2 Preferred Stock, \$25.4937 per share for each share of the Series C Preferred Stock, \$19.6143 per share for each share of the Series C-1 Preferred Stock and \$28.0204 per share for each share of the Series D Preferred Stock (each as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like with respect to such series of Preferred Stock).

(b) Upon completion of the distribution required by subsection (a) of this Section 2, all of the remaining Proceeds available for distribution to stockholders shall be distributed among the holders of Common Stock pro rata based on the number of shares of Common Stock held by each.

(c) Notwithstanding the above, for purposes of determining the amount each holder of shares of Preferred Stock is entitled to receive with respect to a Liquidation Event, each such holder of shares of a series of Preferred Stock shall be deemed to have converted (regardless of whether such holder actually converted) such holder's shares of such series into shares of Common Stock immediately prior to the Liquidation Event if, as a result of an actual conversion, such holder would receive, in the aggregate, an amount greater than the amount that would be distributed to such holder if such holder did not convert such series of Preferred Stock into shares of Common Stock. If any such holder shall be deemed to have converted shares of Preferred Stock into Common Stock pursuant to this paragraph, then such holder shall not be entitled to receive any distribution that would otherwise be made to holders of Preferred Stock that have not converted (or have not been deemed to have converted) into shares of Common Stock.

(d) (i) For the purposes of this Restated Certificate of Incorporation, a "Liquidation Event" shall mean (A) the closing of the sale, lease, transfer, exclusive license or other disposition of all or substantially all of this corporation's assets, (B) the consummation of the merger, consolidation or statutory conversion, transfer, domestication, or continuance of this corporation with or into another entity (except a merger, consolidation or statutory conversion, transfer, domestication, or continuance in which the holders of capital stock of this corporation immediately prior to such merger, consolidation or statutory conversion,

transfer, domestication, or continuance continue to hold at least fifty percent (50%) of the voting power of the capital stock of this corporation or the surviving or acquiring entity immediately following such merger or consolidation in substantially the same proportions, and with substantially the same terms, as held immediately prior to such merger or consolidation), (C) the closing of the transfer (whether by merger, consolidation, statutory conversion, transfer, domestication, or continuance or otherwise), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an underwriter of this corporation's securities), of this corporation's securities if, after such closing, such person or group of affiliated persons would hold fifty percent (50%) or more of the then outstanding voting stock of this corporation (or the surviving or acquiring entity) or (D) a liquidation, dissolution or winding up of this corporation; provided, however, that a transaction shall not constitute a Liquidation Event if its sole purpose is to change the state of this corporation's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held this corporation's securities immediately prior to such transaction. Notwithstanding the prior sentence, the sale by this corporation of its equity securities in a bona fide financing transaction conducted in accordance with Section 6 of this Article IV(B) shall not be deemed a "Liquidation Event." The treatment of any particular transaction or series of related transactions as a Liquidation Event may be waived by the vote or written consent of the holders of (A) a majority of the then outstanding shares of Preferred Stock (voting together as a single class and not as separate series, and on an as-converted basis), (B) solely with respect to the shares of Series C Stock, a majority of the then outstanding shares of Series C Stock (voting together as a single class and not as a separate series, on an as-converted basis), and (C) solely with respect to the shares of Series D Preferred Stock, at least sixty percent (60%) of the then outstanding shares of Series D Preferred Stock (voting together as a single class and not as separate series, on an as-converted basis).

(ii) In any Liquidation Event, if Proceeds received by this corporation or its stockholders is other than cash, its value will be deemed its fair market value. Any securities shall be valued as follows:

(A) Securities not subject to investment letter or other similar restrictions on free marketability covered by (B) below:

(1) If traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Liquidation Event;

(2) If actively traded over-the-counter, the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Liquidation Event; and

(3) If there is no active public market, the value shall be the fair market value thereof, as determined by the Board of Directors, including the affirmative approval of at least one Preferred Director.

(B) The method of valuation of securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall be to make an appropriate discount from the market value determined as above in (A) (1), (2) or (3) to reflect the approximate fair market value thereof, as determined by the Board of Directors, including the affirmative approval of at least one Preferred Director.

(C) The foregoing methods for valuing non-cash consideration to be distributed in connection with a Liquidation Event shall, with the appropriate approval of the definitive agreements governing such Liquidation Event by the stockholders under the General Corporation Law and Section 6 of this Article IV(B), be superseded by the determination of such value set forth in the definitive agreements governing such Liquidation Event.

(iii) In the event the requirements of this Section 2 are not complied with, this corporation shall forthwith either:

(A) cause the closing of such Liquidation Event to be postponed until such time as the requirements of this Section 2 have been complied with; or

(B) cancel such transaction, in which event the rights, preferences and privileges of the holders of the Preferred Stock shall revert to and be the same as such rights, preferences and privileges existing immediately prior to the date of the first notice referred to in subsection 2(d)(iv) hereof.

(iv) This corporation shall give each holder of record of Preferred Stock written notice of such impending Liquidation Event not later than twenty (20) days prior to the stockholders' meeting called to approve such transaction, or twenty (20) days prior to the closing of such transaction, whichever is earlier, and shall also notify such holders in writing of the final approval of such transaction. The first of such notices shall describe the material terms and conditions of the impending transaction and the provisions of this Section 2, and this corporation shall thereafter give such holders prompt notice of any material changes. The transaction shall in no event take place sooner than twenty (20) days after this corporation has given the first notice provided for herein or sooner than ten (10) days after this corporation has given notice of any material changes provided for herein; provided, however, that subject to compliance with the General Corporation Law such periods may be shortened or waived upon the written consent of the holders of Preferred Stock that represent a majority of the then outstanding shares of such Preferred Stock (voting together as a single class and not as separate series, and on an as-converted basis).

3. Redemption. The Preferred Stock is not redeemable at the option of the holder thereof.

4. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the “Conversion Rights”):

(a) Right to Convert. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share, and without the payment of additional consideration by the holder thereof, at the office of this corporation or any transfer agent for such stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (i) the applicable Original Issue Price for such series by (ii) the applicable Conversion Price (as defined below) for such series (the conversion rate for a series of Preferred Stock into Common Stock is referred to herein as the “Conversion Rate” for such series), determined as hereafter provided, in effect on the date the certificate is surrendered for conversion; provided that, in the event of an adjustment to the Conversion Price for the Series D Preferred Stock pursuant to subsection 4(h), then for purposes of determining the Conversion Rate for such series, preceding clause (i) of this subsection 4(a) shall be deemed to equal 1.2 times the Original Issue Price for the Series D Preferred Stock (calculated to the nearest one-thousandth of a cent) and preceding clause (ii) of this subsection 4(a) shall be as determined pursuant to subsection 4(h). The initial “Conversion Price” per share for each series of Preferred Stock shall be the Original Issue Price applicable to such series; provided, however, that the Conversion Price for the Preferred Stock shall be subject to adjustment as set forth in subsection 4(d) and, solely with respect to the Series D Preferred Stock, as set forth in subsection 4(h).

(b) Automatic Conversion. Subject to subsection 4(h), each share of Preferred Stock shall automatically be converted into shares of Common Stock at the Conversion Rate at the time in effect (which, for the avoidance of doubt, shall take into account any adjustments made pursuant to Section 4 of this Article IV(B)) for such series of Preferred Stock immediately upon the earliest to occur of (i) the closing of this corporation’s sale of its Common Stock in a firm commitment underwritten public offering pursuant to a registration statement on Form S-1 under the Securities Act of 1933, as amended, that results in at least \$100,000,000 of gross proceeds to this corporation (a “Qualified Public Offering”), (ii) this corporation’s direct listing of its Common Stock on the New York Stock Exchange or the Nasdaq Stock Market by means of an effective registration statement under the Securities Act of 1933, as amended, that registers at least \$100 million worth of shares of existing Common Stock for resale not pursuant to an underwritten offering where either (A) the midpoint between the low and high sales price per share of private sales of Common Stock in the most recently reported period set forth on the cover page of the prospectus shall be equal to or greater than the Original Issue Price of the Series D Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like), or (B) if no such private sales occurred in the most recently reported period, the Board of Directors must reasonably determine that the reference price in the effective registration statement filed by the Corporation with the Securities and Exchange Commission will exceed the Original Issue Price of the Series D Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) at any time on the first day of trading (a “Qualified Direct Listing”), or (iii) the date, or the occurrence of an event, specified by vote or written consent or agreement of the holders of (A) a majority of the then outstanding shares of Preferred Stock (voting together as a single class and not as separate series, and on an as-converted basis), (B) solely with respect to the shares of Series C Stock, a majority of the then outstanding shares of Series C Stock (voting together as a single class and not as a separate series, on an as-converted basis), and (C) solely with respect to the Series D Preferred Stock, at least sixty percent (60%) of the then outstanding shares of Series D Preferred Stock (voting together as a single class and not as separate series, on an as-converted basis).

(c) Mechanics of Conversion. Before any holder of Preferred Stock shall be entitled to voluntarily convert the same into shares of Common Stock, if such holder's shares are certificated, such holder shall surrender the certificate or certificates therefor, duly endorsed, at the office of this corporation or of any transfer agent for the Preferred Stock, and shall give written notice to this corporation at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the shares of Common Stock are to be issued. This corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Preferred Stock, or to the nominee or nominees of such holder, a certificate, certificates or a notice of issuance of uncertificated shares for the number of shares of Common Stock to which such holder shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date set forth for conversion in the written notice of the election to convert irrespective of the surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock as of such date. If the conversion is in connection with an underwritten offering of securities registered pursuant to the Securities Act of 1933, as amended, the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering, in which event the persons entitled to receive the Common Stock upon conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such sale of securities. If the conversion is in connection with Automatic Conversion provisions of subsection 4(b)(iv) above, such conversion shall be deemed to have been made on the conversion date described in the stockholder consent approving such conversion, and the persons entitled to receive shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holders of such shares of Common Stock as of such date.

(d) Conversion Price Adjustments of Preferred Stock for Certain Dilutive Issuances, Splits and Combinations. The Conversion Price of each series of Preferred Stock shall be subject to adjustment from time to time as follows:

(i) (A) If this corporation shall issue, on or after the date upon which this Restated Certificate of Incorporation is accepted for filing by the Secretary of State of the State of Delaware (the "Filing Date"), any Additional Stock (as defined below) without consideration or for a consideration per share that is less than the Conversion Price applicable to a series of Preferred Stock in effect immediately prior to the issuance of such Additional Stock, the Conversion Price for such series in effect immediately prior to each such issuance shall forthwith (except as otherwise provided in this clause (i)) be adjusted to a price (calculated to the nearest one-thousandth of a cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock Outstanding (as defined below) immediately prior to such issuance plus the number of shares of Common Stock that the aggregate consideration received by this corporation for such issuance would purchase at such Conversion Price; and the denominator of which shall be the number of shares of Common Stock Outstanding immediately prior to such issuance plus the number of shares of such Additional Stock. For purposes of this subsection 4(d)(i)(A), the term "Common Stock Outstanding" shall mean and include the following: (1) outstanding Common Stock, (2) Common Stock issuable upon conversion of outstanding Preferred Stock, (3) Common Stock issuable upon exercise of outstanding stock options and (4) Common Stock issuable upon exercise (and, in the case of warrants to purchase Preferred Stock, conversion) of outstanding warrants. Shares described in (1) through (4) above shall be included whether vested or unvested, whether contingent or non-contingent and whether exercisable or not yet exercisable.

(B) No adjustment of the Conversion Price for the Preferred Stock shall be made in an amount less than one-tenth (1/10th) of one cent per share (\$0.001). Except to the limited extent provided for in subsections (E)(3) and (E)(4), no adjustment of such Conversion Price pursuant to this subsection 4(d)(i) shall have the effect of increasing the Conversion Price above the Conversion Price in effect immediately prior to such adjustment.

(C) In the case of the issuance of Additional Stock for cash, the consideration shall be deemed to be the amount of cash paid therefor before deducting any reasonable discounts, commissions or other expenses allowed, paid or incurred by this corporation for any underwriting or otherwise in connection with the issuance and sale thereof.

(D) In the case of the issuance of the Additional Stock for a consideration in whole or in part other than cash, the consideration other than cash shall be deemed to be the fair market value thereof as determined by the Board of Directors irrespective of any accounting treatment.

(E) In the case of the issuance of options to purchase or rights to subscribe for Common Stock, securities by their terms convertible into or exchangeable for Common Stock or options to purchase or rights to subscribe for such convertible or exchangeable securities, the following provisions shall apply for purposes of determining the number of shares of Additional Stock issued and the consideration paid therefor:

(1) The aggregate maximum number of shares of Common Stock deliverable upon exercise (assuming the satisfaction of any conditions to exercisability, including without limitation, the passage of time, but without taking into account potential antidilution adjustments) of such options to purchase or rights to subscribe for Common Stock shall be deemed to have been issued at the time such options or rights were issued and for a consideration equal to the consideration (determined in the manner provided in subsections 4(d)(i)(C) and (d)(i)(D)), if any, received by this corporation upon the issuance of such options or rights plus the minimum exercise price provided for in such options or rights (without taking into account potential antidilution adjustments) for the Common Stock covered thereby.

(2) The aggregate maximum number of shares of Common Stock deliverable upon conversion of, or in exchange (assuming the satisfaction of any conditions to convertibility or exchangeability, including, without limitation, the passage of time, but without taking into account potential antidilution adjustments) for, any such convertible or exchangeable securities or upon the exercise of options to purchase or rights to subscribe for such convertible or exchangeable securities and subsequent conversion or exchange thereof shall be deemed to have been issued at the time such securities were issued or such options or rights were issued and for a consideration equal to the consideration, if any, received by this corporation for any such securities and related options or rights (excluding any cash received on account of accrued interest or accrued dividends), plus the minimum additional consideration, if any, to be received by this corporation (without taking into account potential antidilution adjustments) upon the conversion or exchange of such securities or the exercise of any related options or rights (the consideration in each case to be determined in the manner provided in subsections 4(d)(i)(C) and (d)(i)(D)).

(3) In the event of any change in the number of shares of Common Stock deliverable or in the consideration payable to this corporation upon exercise of such options or rights or upon conversion of or in exchange for such convertible or exchangeable securities, the Conversion Price of each applicable series of Preferred Stock, to the extent in any way affected by or computed using such options, rights or securities, shall be recomputed to reflect such change, but no further adjustment shall be made for the actual issuance of Common Stock or any payment of such consideration upon the exercise of any such options or rights or the conversion or exchange of such securities.

(4) Upon the expiration of any such options or rights, the termination of any such rights to convert or exchange or the expiration of any options or rights related to such convertible or exchangeable securities, the Conversion Price of each applicable series of Preferred Stock, to the extent in any way affected by or computed using such options, rights or securities or options or rights related to such securities, shall be recomputed to reflect the issuance of only the number of shares of Common Stock (and convertible or exchangeable securities that remain in effect) actually issued upon the exercise of such options or rights, upon the conversion or exchange of such securities or upon the exercise of the options or rights related to such securities.

(5) The number of shares of Additional Stock deemed issued and the consideration deemed paid therefor pursuant to subsections 4(d)(i)(E)(1) and (2) shall be appropriately adjusted to reflect any change, termination or expiration of the type described in either subsection 4(d)(i)(E)(3) or (4).

(ii) “Additional Stock” shall mean any shares of Common Stock issued (or deemed to have been issued pursuant to subsection 4(d)(i)(E)) by this corporation on or after the Filing Date other than:

(A) Common Stock issued pursuant to a transaction described in subsection 4(d)(iii) hereof;

(B) Common Stock issued to employees, directors, consultants and other service providers for the primary purpose of soliciting or retaining their services pursuant to plans or agreements approved by the Board of Directors, including, in the case of plans approved after the date of the filing of this Restated Certificate of Incorporation, the affirmative approval of at least one Preferred Director;

(C) Common Stock issued pursuant to an underwritten public offering;

(D) Common Stock issued pursuant to the conversion or exercise of convertible or exercisable securities outstanding on the Filing Date;

(E) Common Stock issued pursuant to a Direct Listing;

(F) Common Stock issued in connection with a bona fide business acquisition by this corporation, whether by merger, consolidation, sale of assets, sale or exchange of stock or otherwise provided that such issuances are approved by the Board of Directors, including the affirmative approval of at least one Preferred Director;

(G) Common Stock issued or deemed issued pursuant to subsection 4(d)(i)(E) as a result of a decrease in the Conversion Price of any series of Preferred Stock resulting from the operation of Section 4(d);

(H) Common Stock issued upon conversion of the Preferred Stock;

(I) Common Stock issued pursuant to any equipment leasing arrangement or debt financing arrangement, which arrangement is approved by the Board of Directors, including the affirmative approval of at least one Preferred Director, and is primarily for non-equity financing purposes;

(J) Common Stock issued to persons or entities with which this corporation has business relationships, provided such issuances are approved by the Board of Directors, including the affirmative approval of at least one Preferred Director;

(K) Common Stock that is issued with the unanimous approval of the Board of Directors and the Board of Directors specifically states in such approval that it shall not be Additional Stock; provided that, (i) solely with respect to issuances (or deemed issuances) of Common Stock that would otherwise cause an adjustment to the Conversion Price of the Series C Preferred Stock or Series C-1 Preferred Stock, such issuances (or deemed issuances) of Common Stock are specifically excluded from the definition of Additional Stock by the holders of a majority of the Series C Stock (voting together as a single class and not as a separate series, on an as-converted basis); and (ii) solely with respect to issuances (or deemed issuances) of Common Stock that would otherwise cause an adjustment to the Conversion Price of the Series D Preferred Stock, such issuances (or deemed issuances) of Common Stock are specifically excluded from the definition of Additional Stock by the holders of at least sixty percent (60%) of the then outstanding shares of Series D Preferred Stock (voting together as a single class and not as separate series, on an as-converted basis); or

(L) Common Stock issued or deemed issued pursuant to subsection 4(h).

(iii) In the event this corporation should at any time or from time to time after the Filing Date fix a record date for the effectuation of a split or subdivision of the outstanding shares of Common Stock or the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in additional shares of Common Stock or other securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly, additional shares of Common Stock (hereinafter referred to as "Common Stock Equivalents") without payment of any consideration by such holder for the additional shares of Common Stock or the Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then, as of such record date (or the date of such dividend

distribution, split or subdivision if no record date is fixed), the Conversion Price of the Preferred Stock shall be appropriately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase of the aggregate of shares of Common Stock outstanding and those issuable with respect to such Common Stock Equivalents with the number of shares issuable with respect to Common Stock Equivalents determined from time to time in the manner provided for deemed issuances in subsection 4(d)(i)(E).

(iv) If the number of shares of Common Stock outstanding at any time after the Filing Date is decreased by a combination of the outstanding shares of Common Stock, then, following the record date of such combination, the Conversion Price for the Preferred Stock shall be appropriately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in outstanding shares.

(e) Other Distributions. In the event this corporation shall declare a distribution payable in securities of other persons, evidences of indebtedness issued by this corporation or other persons, assets (excluding cash dividends) or options or rights not referred to in subsection 4(d)(iii), then, in each such case for the purpose of this subsection 4(e), the holders of the Preferred Stock shall be entitled to a proportionate share of any such distribution as though they were the holders of the number of shares of Common Stock of this corporation into which their shares of Preferred Stock are convertible as of the record date fixed for the determination of the holders of Common Stock of this corporation entitled to receive such distribution.

(f) Recapitalizations. If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision, combination or merger or sale of assets transaction provided for elsewhere in this Section 4 or in Section 2) provision shall be made so that the holders of the Preferred Stock shall thereafter be entitled to receive, upon conversion of the Preferred Stock, the number of shares of stock or other securities or property of this corporation or otherwise, to which a holder of Common Stock deliverable upon conversion would have been entitled on such recapitalization. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 4 with respect to the rights of the holders of the Preferred Stock after the recapitalization to the end that the provisions of this Section 4 (including adjustment of the Conversion Price then in effect and the number of shares purchasable upon conversion of the Preferred Stock) shall be applicable after that event as nearly equivalently as may be practicable.

(g) No Fractional Shares and Certificate as to Adjustments.

(i) No fractional shares shall be issued upon the conversion of any share or shares of the Preferred Stock and the aggregate number of shares of Common Stock to be issued to particular stockholders, shall be rounded down to the nearest whole share and this corporation shall pay in cash the fair market value of any fractional shares as of the time when entitlement to receive such fractional shares is determined. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the number of shares of Common Stock issuable upon such conversion.

(ii) Upon the occurrence of each adjustment or readjustment of the Conversion Price of Preferred Stock pursuant to this Section 4, this corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. This corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (A) such adjustment and readjustment, (B) the Conversion Price for such series of Preferred Stock at the time in effect, and (C) the number of shares of Common Stock and the amount, if any, of other property that at the time would be received upon the conversion of a share of Preferred Stock.

(h) Special Conversion Price Adjustment of Series D Preferred Stock in the event of a Public Offering. If (i) in connection with an IPO prior to a Cancellation Event, the price per share of Common Stock sold to the public as set forth on the cover of the corporation's final Form S-1 registration statement is less than 1.2 times the Original Issue Price of the Series D Preferred Stock, or (ii) in connection with a SPAC Transaction prior to a Cancellation Event, the price per share of the SPAC's common stock issued to the corporation's stockholders in exchange for the corporation's outstanding capital stock as set forth on the final registration statement or applicable final offering document is less than 1.2 times the Original Issue Price of the Series D Preferred Stock, then the Conversion Price for the Series D Preferred Stock shall, immediately prior to the automatic conversion of the Series D Preferred Stock into Common Stock pursuant to Article IV(B)4(b), be adjusted (calculated to the nearest one-thousandth of a cent) as determined by the following formula:

$$AP = OP * (\text{Series D Outstanding} + (\text{Public Offering Proceeds} / OP)) / (\text{Series D Outstanding} + \text{Public Offering Shares})$$

For purposes of the foregoing formula and this subsection 4(h), the following definitions shall apply:

(i) "AP" shall mean the Conversion Price in effect immediately after the Conversion Price adjustment of the Series D Preferred Stock.

(ii) "Available Closing SPAC Cash" means the amount of cash at the closing of the SPAC Transaction equal to the sum of (i) all cash amounts in the SPAC's trust account (after reduction for the aggregate amount of payments required to be made in connection with SPAC stockholder redemptions, any excise tax payable by SPAC, any payment of any SPAC transaction expenses or corporation transaction expenses in connection with the SPAC Transaction), plus (ii) the net proceeds of any incremental equity or convertible security financing raised by the SPAC in connection with the SPAC Transaction and the aggregate exercise price of any in-the-money warrants or other rights or securities convertible for equity of the SPAC.

(iii) "Cancellation Event" shall mean the date that the corporation's trailing 12 month revenues, calculated in accordance with generally accepted accounting principles, exceed \$220,000,000 in any twelve month period.

(iv) "Direct Listing" shall mean the corporation's initial listing of its Common Stock on a national securities exchange by means of an effective registration statement on Form S-1 filed by this corporation with the Securities and Exchange Commission.

(v) "IPO" shall mean any sale by the corporation of its Common Stock to the public, including, but not limited to, a firm commitment underwritten public offering pursuant to a registration statement on Form S-1 under the Securities Act of 1933, as amended.

(vi) "OP" shall mean the product of 1.2 multiplied by the then applicable Conversion Price of the Series D Preferred Stock.

(vii) "Public Offering Proceeds" shall mean (i) in the case of an IPO, the aggregate dollar amount of the securities issued and sold by the corporation in the IPO, or (ii) in the case of a SPAC Transaction, the Available Closing SPAC Cash.

(viii) "Public Offering Shares" shall mean (i) in the case of an IPO, the number of shares issued and sold in the IPO, and (ii) in the case of a SPAC Transaction, the number of shares outstanding at the closing of the SPAC Transaction (including SPAC shares that have not been redeemed and any shares issued in connection with the private placement of public equities in connection with such SPAC Transaction and any in-the-money warrants or other rights or securities convertible for equity of the SPAC) minus the number of shares issued to the stockholders of the corporation in the SPAC Transaction.

(ix) "Series D Outstanding" shall mean the number of shares of Series D Preferred Stock outstanding immediately prior to the Public Offering

(x) "SPAC" shall mean a publicly traded "special purpose acquisition company" or its subsidiary.

(xi) "SPAC Transaction" shall mean the closing by this corporation of a transaction or series of related transactions by merger, consolidation, share exchange or otherwise with a SPAC in which the common stock or share capital of such entity or its successor entity is listed on the a nationally recognized securities exchange or marketplace.

If a Cancellation Event occurs, then the Special Conversion Price Adjustment of Series D Preferred Stock set forth in this subsection 4(h) shall not apply and the Conversion Price of the Series D Preferred Stock shall not be adjusted pursuant to this subsection 4(h).

(i) Notices of Record Date. In the event of any taking by this corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, this corporation shall mail to each holder of Preferred Stock, at least ten (10) days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend or distribution, and the amount and character of such dividend or distribution; provided, however, that subject to compliance with the General Corporation Law such notice period may be shortened or waived upon the written consent of the holders of Preferred Stock that represent a majority of the then outstanding shares of such Preferred Stock (voting together as a single class and not as separate series, and on an as-converted basis).

(j) Reservation of Stock Issuable Upon Conversion. This corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, in addition to such other remedies as shall be available to the holder of such Preferred Stock, this corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Restated Certificate of Incorporation.

(k) Waiver of Adjustment to Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock pursuant to this Section 4 may be waived, either prospectively or retroactively and either generally or in a particular instance, by (i) with respect to each series of Preferred Stock other than the Series D Preferred Stock, the consent or vote of the holders of a majority of the then outstanding shares of such series of Preferred Stock and (ii) solely with respect to the Series D Preferred Stock, the consent or vote of the holders of at least sixty percent (60%) of the then outstanding shares of Series D Preferred Stock (voting together as a single class and not as separate series, on an as-converted basis).

5. Voting Rights.

(a) General Voting Rights. The holder of each share of Preferred Stock shall have the right to one vote for each share of Common Stock into which such Preferred Stock could then be converted, and with respect to such vote, such holder shall have full voting rights and powers equal to the voting rights and powers of the holders of Common Stock, and shall be entitled, notwithstanding any provision hereof, to notice of any stockholders' meeting in accordance with the Bylaws of this corporation, and except as provided by law or in subsection 5(b) below with respect to the election of directors by the separate class vote of the holders of Common Stock, shall be entitled to vote, together with holders of Common Stock, with respect to any question upon which holders of Common Stock have the right to vote. Fractional votes shall not, however, be permitted and any fractional voting rights available on an as-converted basis (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half (1/2) being rounded upward).

(b) Voting for the Election of Directors. As long as at least 1,449,050 shares of Series A Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) remain outstanding, the holders of a majority of the Series A Preferred Stock (voting together as a single class and not as a separate series, on an as-converted basis) shall be entitled to elect two (2) directors of this corporation at any election of directors (the "Series A Directors"). As long as at least 1,225,790 shares of Series C Preferred

Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) remain outstanding, the holders of a majority of the Series C Preferred Stock (voting together as a single class and not as a separate series, on an as-converted basis) shall be entitled to elect one (1) director of this corporation at any election of directors (the "Series C Director"). As long as at least 1,164,058 shares of Series D Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) remain outstanding, the holders of a majority of the Series D Preferred Stock (voting together as a single class and not as a separate series, on an as-converted basis) shall be entitled to elect one (1) director of this corporation at any election of directors (the "Series D Director") and together with the Series A Directors and the Series C Director, the "Preferred Directors"). The holders of outstanding Common Stock shall be entitled to elect four (4) directors of this corporation at any election of directors (the "Common Directors"). The holders of Preferred Stock and Common Stock (voting together as a single class and not as separate series, and on an as-converted basis) shall be entitled to elect any remaining directors of this corporation.

Notwithstanding the provisions of Section 223(a)(1) and 223(a)(2) of the General Corporation Law, any vacancy, including newly created directorships resulting from any increase in the authorized number of directors or amendment of this Restated Certificate of Incorporation, and vacancies created by removal or resignation of a director, may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced; provided, however, that where such vacancy occurs among the directors elected by the holders of a class or series of stock, the holders of shares of such class or series may override the Board's action to fill such vacancy by (i) voting for their own designee to fill such vacancy at a meeting of this corporation's stockholders or (ii) written consent, if the consenting stockholders hold a sufficient number of shares to elect their designee at a meeting of the stockholders. Any director may be removed during his or her term of office, either with or without cause, by, and only by, the affirmative vote of the holders of the shares of the class or series of stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders, and any vacancy thereby created may be filled by the holders of that class or series of stock represented at the meeting or pursuant to written consent.

(c) Director Voting.

(i) Each director who is serving on the Board shall be entitled to cast on all matters one (1) vote; provided, however, that for so long as Oguzhan Atay is serving as this corporation's CEO and a Common Director, if there are any vacancies in the authorized Common Director seats, then Oguzhan Atay shall have an additional number of votes on all matters submitted to a vote of the Board in an amount equal to the aggregate number of vacant Common Director seats then existing.

(ii) For so long as Oguzhan Atay is entitled to more than one (1) vote in accordance with Section 5(c)(i) above on any matter submitted to a vote of the Board of Directors, any reference in this Restated Certificate of Incorporation, the Bylaws of this corporation or the General Corporation Law to a majority or other proportion of the Board of Directors or of any committee thereof (including with respect to quorum) shall refer to a majority or other proportion of the votes of the Board of Directors.

6. Protective Provisions. So long as at least 9,848,330 shares of Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) remain outstanding, this corporation shall not (by amendment, merger, consolidation, statutory conversion, transfer, domestication, or continuance or otherwise) without (in addition to any other vote required by law or the Certificate of Incorporation) first obtaining the approval by vote or written consent, as provided by law, of the holders of a majority of the then outstanding shares of Preferred Stock (voting together as a single class and not as separate series, and on an as-converted basis):

(a) consummate a Liquidation Event, Direct Listing, SPAC Transaction or effect any other merger, consolidation, statutory conversion, transfer, domestication, or continuance;

(b) amend, alter or repeal any provision of this corporation's Certificate of Incorporation or Bylaws so as to adversely alter or change the rights, preferences, privileges and restrictions of the shares of Preferred Stock, or otherwise adversely change, alter, modify or repeal the rights, preferences, privileges and restrictions of the shares of Preferred Stock;

(c) increase or decrease (other than by redemption or conversion) the total number of authorized shares of Common Stock or Preferred Stock or designated shares of any series of Preferred Stock;

(d) authorize, create or issue any equity security (including, without limitation, (i) any other security convertible into or exercisable for any such equity security or (ii) any unit of debt and equity securities) having a preference over, or being on a parity with, any series of Preferred Stock with respect to dividends, liquidation or redemption;

(e) (i) reclassify, alter or amend any existing security of this corporation that is pari passu with the Preferred Stock with respect to dividends, liquidation or redemption, if such reclassification, alteration or amendment would render such other security senior to any series of Preferred Stock in respect of any such right, preference or privilege or (ii) reclassify, alter or amend any existing security of this corporation that is junior to any series of Preferred Stock with respect to dividends, liquidation or redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with any series of Preferred Stock in respect of any such right, preference or privilege;

(f) redeem, purchase or otherwise acquire (or pay into or set aside for a sinking fund for such purpose) any share or shares of Preferred Stock or Common Stock; provided, however, that this restriction shall not apply to the repurchase of shares of Common Stock from employees, officers, directors, consultants or other persons performing services for this corporation or any subsidiary pursuant to agreements under which this corporation has the option to repurchase such shares at cost upon the occurrence of certain events, such as the termination of employment or service, or pursuant to a right of first refusal;

(g) change the authorized number of directors of this corporation;

(h) pay or declare any dividend on any shares of capital stock of this corporation other than dividends payable on the Common Stock solely in the form of additional shares of Common Stock;

(i) enter into any transaction with any person who is an officer, director or employee of this corporation or any “associate” (as defined in Rule 12b-2 promulgated under the Securities Exchange Act of 1934, as amended) of any such person other than in the ordinary course of business and on arms’ length terms, unless approved by the Board, including (i) the affirmative approval of at least two Preferred Directors and (ii) a majority of the Board who are disinterested with respect thereto;

(j) other than equipment leases, create, or authorize the creation of, or issue, or authorize the issuance of any debt security or create any lien or security interest (except for purchase money liens or statutory liens of landlords, mechanics, materialmen, workmen, warehousemen and other similar persons arising or incurred in the ordinary course of business) or incur other indebtedness for borrowed money, including but not limited to obligations and contingent obligations under guarantees, or permit any subsidiary to take any such action with respect to any debt security lien, security interest or other indebtedness for borrowed money, if the aggregate indebtedness of this corporation and its subsidiaries for borrowed money following such action would exceed \$10,000,000, other than amounts borrowed in connection with equipment leases, unless approved by the Board, including the affirmative approval of at least two Preferred Directors and a majority of the Board who are disinterested with respect thereto;

(k) increase the number of shares available for issuance under this corporation’s equity incentive plans or adopt or create any new equity incentive plan;

(l) create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by this corporation, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of this corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary;

(m) take any action with respect to any direct or indirect subsidiary of this corporation that, if taken by this corporation, would require approval pursuant to this Section 6, unless approved by the Board, including the affirmative approval of at least one Preferred Director; or

(n) cause or permit this corporation or any of its subsidiaries to, without approval of the Board of Directors, including at least one Preferred Director, sell, issue, sponsor, create or distribute any digital tokens, cryptocurrency or other blockchain-based assets (collectively, “Tokens”), including through a pre-sale, initial coin offering, token distribution event or crowdfunding, or through the issuance of any instrument convertible into or exchangeable for Tokens.

7. Series C Protective Provisions. So long as at least 1,634,386 shares of Series C Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) remain outstanding, this corporation shall not (by amendment, merger, consolidation or otherwise) without (in addition to any other vote required by law or the Certificate of Incorporation) first obtaining the approval by vote or written consent, as provided by law, of the holders of a majority of the then outstanding shares of Series C Stock (voting together as a separate series, on an as-converted basis):

(a) increase or decrease the total number of authorized shares of Series C Preferred Stock; or

(b) amend, alter or repeal any provision of this corporation's Certificate of Incorporation or Bylaws in a manner that adversely affects the rights granted to the holders of Series C Stock in a manner different than other series of Preferred Stock.

8. Series D Protective Provisions. So long as at least 1,552,078 shares of Series D Preferred Stock (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalizations or the like) remain outstanding, this corporation shall not (by amendment, merger, consolidation or otherwise) without (in addition to any other vote required by law or the Certificate of Incorporation) first obtaining the approval by vote or written consent, as provided by law, of the holders of at least sixty percent (60%) of the then outstanding shares of Series D Preferred Stock (voting together as a single class and not as separate series, on an as-converted basis):

(a) increase or decrease the total number of authorized shares of Series D Preferred Stock; or

(b) amend, alter or repeal any provision of this corporation's Certificate of Incorporation or Bylaws in a manner that adversely affects the rights granted to the holders of Series D Preferred Stock in a manner different than other series of Preferred Stock.

9. Status of Converted Stock. In the event any shares of Preferred Stock shall be converted pursuant to Section 4 hereof, the shares so converted shall be cancelled and shall not be issuable by this corporation. The Restated Certificate of Incorporation of this corporation shall be appropriately amended to effect the corresponding reduction in this corporation's authorized capital stock.

10. Notices. Any notice required by the provisions of this Article IV(B) to be given to the holders of shares of Preferred Stock shall be deemed given (a) five (5) days following its deposit in the United States mail, postage prepaid, and addressed to each holder of record at his, her or its address appearing on the books of this corporation, (b) upon such notice being provided by electronic transmission in a manner permitted by the General Corporation Law or (c) five (5) days following such notice being provided in another manner then permitted by the General Corporation Law.

C. Common Stock. The rights, preferences, privileges and restrictions granted to and imposed on the Common Stock are as set forth below in this Article IV(C).

1. Dividend Rights. Subject to the prior rights of holders of all classes of stock at the time outstanding having prior rights as to dividends, the holders of the Common Stock shall be entitled to receive, when, as and if declared by the Board of Directors, out of any assets of this corporation legally available therefor, any dividends as may be declared from time to time by the Board of Directors.

2. Liquidation Rights. Upon the liquidation, dissolution or winding up of this corporation, the assets of this corporation shall be distributed as provided in Section 2 of Article IV(B) hereof.

3. Redemption. The Common Stock is not redeemable at the option of the holder.

4. Voting Rights. The holder of each share of Common Stock shall have the right to one vote for each such share, and shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of this corporation, and shall be entitled to vote upon such matters and in such manner as may be provided by law; provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of this corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

ARTICLE V

Except as otherwise provided in this Restated Certificate of Incorporation, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of this corporation.

ARTICLE VI

Subject to the requirements of Section 6 of Article IV(B) hereof, the number of directors of this corporation shall be determined in the manner set forth in the Bylaws of this corporation; provided that, so long as the holders of Preferred Stock are entitled to elect a Preferred Director, the affirmative vote of the requisite Preferred Directors shall be required for the authorization by the Board of Directors of any of the matters set forth in the Investors' Rights Agreement, dated on or around hereof, by and among the corporation and the other parties thereto, as such agreement may be amended from time to time, to the extent required by such provision and if a Preferred Director is then serving.

ARTICLE VII

Elections of directors need not be by written ballot unless the Bylaws of this corporation shall so provide.

ARTICLE VIII

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of this corporation may provide. The books of this corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of this corporation.

ARTICLE IX

To the fullest extent permitted by law, a director or officer of this corporation shall not be personally liable to this corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the state of Delaware is amended after approval by the stockholders of this Article IX to authorize corporate action further eliminating or limiting the personal liability of directors or officers, then the liability of a director or officer of this corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended. Solely for purposes of this Article Ninth, "officer" shall have the meaning provided in Section 102(b)(7) of the General Corporation Law as amended from time to time.

Any amendment, repeal, elimination or modification of the foregoing provisions of this Article IX by the stockholders of this corporation shall not adversely affect any right or protection of a director or officer of this corporation existing at the time of, or increase the liability of any director or officer of this corporation with respect to any acts or omissions of such director or officer occurring prior to, such amendment, repeal, elimination or modification.

ARTICLE X

This corporation reserves the right to amend, alter, change or repeal any provision contained in this Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and, subject to the requirements of Section 6 of Article IV(B) hereof, all rights conferred upon stockholders herein are granted subject to this reservation.

ARTICLE XI

To the fullest extent permitted by applicable law, this corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers, employees and agents of this corporation (and any other persons to which General Corporation Law permits this corporation to provide indemnification) through Bylaw provisions, agreements with such persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal, elimination or modification of the foregoing provisions of this Article XI shall not adversely affect any right or protection of a director, officer, employee, agent or other person existing at the time of, or increase the liability of any such person with respect to any acts or omissions of such person occurring prior to, such amendment, repeal or modification.

ARTICLE XII

This corporation renounces any interest or expectancy of this corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An “Excluded Opportunity” is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of, (i) any director of this corporation who is not an employee of this corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of this corporation or any of its subsidiaries (collectively, “Covered Persons”), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person’s capacity as a director of this corporation while such Covered Person is performing services in such capacity.

ARTICLE XIII

In connection with repurchases by this corporation of its Common Stock (i) from employees, officers, directors, advisors, consultants or other persons performing services for this corporation or any subsidiary pursuant to agreements under which this corporation has the option to repurchase such shares at cost upon the occurrence of certain events, such as the termination of employment, (ii) issued to or held by employees, officers, directors or consultants of the corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such right or (iii) which are approved by the holders of a majority of the then outstanding shares of Preferred Stock, Section 500 of the California Corporations Code shall not apply in all or in part with respect to such repurchases. In the case of any such repurchases, distributions by the corporation may be made without regard to the “preferential dividends arrear amount” or any “preferential rights amount,” as such terms are defined in Section 500(b) of the California Corporations Code.

ARTICLE XIV

A. Forum Selection. Unless this corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of this corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of this corporation to this corporation or this corporation’s stockholders, (iii) any action arising pursuant to any provision of the General Corporation Law or this Restated Certificate of Incorporation or the Bylaws (as either may be amended from time to time), or (iv) any action asserting a claim governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten (10) days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of this corporation shall be deemed to have notice of and consented to the provisions of this Article XIV.

B. Personal Jurisdiction. If any action the subject matter of which is within the scope of Article XIV(A) is filed in a court other than a court located within the State of Delaware (a "Foreign Action") in the name of any stockholder, such stockholder shall be deemed to have consented to (i) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce Article XIV(A) (an "FSC Enforcement Action") and (ii) having service of process made upon such stockholder in any such FSC Enforcement Action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder.

C. Savings. If any provision or provisions of this Article XIV shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article XIV (including, without limitation, each portion of any sentence of this Article XIV containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

* * *

THIRD: The foregoing amendment and restatement was approved by the holders of the requisite number of shares of said corporation in accordance with Section 228 of the General Corporation Law.

FOURTH: That said Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 13th day of May, 2024.

/s/ Oguzhan Atay

Name: Oguzhan Atay

Title: Chief Executive Officer

BYLAWS
OF
BILLIONTOONE, INC.

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**BYLAWS
OF
BILLIONTOONE, INC.**

**ARTICLE I
MEETINGS OF STOCKHOLDERS**

1.1 Place Of Meetings

Meetings of stockholders shall be held at any place, within or outside the state of Delaware, designated by the Board of Directors. In the absence of any such designation, stockholders' meetings shall be held at the registered office of the corporation.

1.2 Annual Meeting

The annual meeting of stockholders shall be held on such date, time and place, either within or without the state of Delaware, as may be designated by resolution of the Board of Directors each year. At the meeting, directors shall be elected and any other proper business may be transacted.

1.3 Special Meeting

A special meeting of the stockholders may be called at any time by the Board of Directors, the chairman of the board, the chief executive officer, the president or by one or more stockholders holding shares in the aggregate entitled to cast not less than ten percent of the votes at that meeting.

If a special meeting is called by any person or persons other than the Board of Directors, the chairman of the board, the chief executive officer or the president, the request shall be in writing, specifying the time of such meeting and the general nature of the business proposed to be transacted, and shall be delivered personally or sent by registered mail or by telegraphic or other facsimile or electronic transmission to the chairman of the board, the chief executive officer, the president, or the secretary of the corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The officer receiving the request shall cause notice to be promptly given to the stockholders entitled to vote, in accordance with the provisions of Sections 1.4 and 1.5 of this Article I, that a meeting will be held at the time requested by the person or persons calling the meeting, not less than thirty-five (35) nor more than sixty (60) days after the receipt of the request. If the notice is not given within twenty (20) days after the receipt of the request, the person or persons requesting the meeting may give the notice. Nothing contained in this paragraph of this Section 1.3 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

1.4 **Notice Of Stockholders' Meetings**

All notices of meetings with stockholders shall be in writing and shall be sent or otherwise given in accordance with Section 1.5 of these Bylaws not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting. The notice shall specify the place (if any), date and hour of the meeting, and in the case of a special meeting, the purpose or purposes for which the meeting is called.

1.5 **Manner Of Giving Notice; Affidavit Of Notice**

Written notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at his address as it appears on the records of the corporation. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders may be given by electronic mail or other electronic transmission, in the manner provided in Section 232 of the Delaware General Corporation Law. An affidavit of the secretary or an assistant secretary or of the transfer agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

1.6 **Quorum**

The holders of a majority of the shares of stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum is not present or represented at any meeting of the stockholders, then either (a) the chairman of the meeting or (b) holders of a majority of the shares of stock entitled to vote who are present, in person or by proxy, shall have power to adjourn the meeting to another place (if any), date or time.

1.7 **Adjourned Meeting; Notice**

When a meeting is adjourned to another place (if any), date or time, unless these Bylaws otherwise require, notice need not be given of the adjourned meeting if the time and place (if any), thereof and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present and vote at such adjourned meeting, are announced at the meeting at which the adjournment is taken. At the adjourned meeting the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than 30 days, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the place (if any), date and time of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

1.8 **Organization; Conduct of Business**

(a) Such person as the Board of Directors may have designated or, in the absence of such a person, the chief executive officer, or in his or her absence, the president or, in his or her absence, such person as may be chosen by the holders of a majority of the shares entitled to vote who are present, in person or by proxy, shall call to order any meeting of the stockholders and act as chairman of the meeting. In the absence of the secretary of the corporation, the secretary of the meeting shall be such person as the chairman of the meeting appoints.

(b) The chairman of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including the manner of voting and the conduct of business. The date and time of opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting.

1.9 **Voting**

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 1.12 of these Bylaws, subject to the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries, pledgors and joint owners of stock and to voting trusts and other voting agreements).

Except as may be otherwise provided in the certificate of incorporation, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder. All elections shall be determined by a plurality of the votes cast, and except as otherwise required by law, all other matters shall be determined by a majority of the votes cast affirmatively or negatively.

1.10 **Waiver Of Notice**

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these Bylaws, a written waiver thereof, signed by the person entitled to notice, or waiver by electronic mail or other electronic transmission by such person, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice, or any waiver of notice by electronic transmission, unless so required by the certificate of incorporation or these Bylaws.

1.11 **Stockholder Action By Written Consent Without A Meeting**

Unless otherwise provided in the certificate of incorporation, any action required to be taken at any annual or special meeting of stockholders of the corporation, or any action that may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice, and without a vote if a consent in writing, setting forth the action so taken, is (i) signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted, and (ii) delivered to the corporation in accordance with Section 228(a) of the Delaware General Corporation Law.

Every written consent shall bear the date of signature of each stockholder who signs the consent and no written consent shall be effective to take the corporate action referred to therein unless, within 60 days of the date the earliest dated consent is delivered to the corporation, a written consent or consents signed by a sufficient number of holders to take action are delivered to the corporation in the manner prescribed in this Section. A telegram, cablegram, electronic mail or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, or by a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for purposes of this Section to the extent permitted by law. Any such consent shall be delivered in accordance with Section 228(d)(1) of the Delaware General Corporation Law.

Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing (including by electronic mail or other electronic transmission as permitted by law). If the action which is consented to is such as would have required the filing of a certificate under any section of the General Corporation Law of Delaware if such action had been voted on by stockholders at a meeting thereof, then the certificate filed under such section shall state, in lieu of any statement required by such section concerning any vote of stockholders, that written notice and written consent have been given as provided in Section 228 of the General Corporation Law of Delaware.

1.12 Record Date For Stockholder Notice; Voting; Giving Consents

In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not be more than 60 nor less than 10 days before the date of such meeting, nor more than 60 days prior to any other action.

If the Board of Directors does not so fix a record date:

(a) The record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(b) The record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is necessary, shall be the day on which the first written consent (including consent by electronic mail or other electronic transmission as permitted by law) is delivered to the corporation.

(c) The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting, if such adjournment is for thirty (30) days or less; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

1.13 Proxies

Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for such stockholder by an instrument in writing or by an electronic transmission permitted by law filed with the secretary of the corporation, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A proxy shall be deemed signed if the stockholder's name is placed on the proxy (whether by manual signature, typewriting, facsimile, electronic or telegraphic transmission or otherwise) by the stockholder or the stockholder's attorney-in-fact. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the General Corporation Law of Delaware.

ARTICLE II

DIRECTORS

2.1 Powers

Subject to the provisions of the General Corporation Law of Delaware and any limitations in the certificate of incorporation or these Bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the Board of Directors.

2.2 Number Of Directors

The Board of Directors shall consist of one or more members. This number may be set or changed by a resolution of the Incorporator, of the Board of Directors or of the stockholders, subject to Section 2.4 of these Bylaws. No reduction of the authorized number of directors shall have the effect of removing any director before such director's term of office expires.

2.3 Election, Qualification And Term Of Office Of Directors

Except as provided in Section 2.4 of these Bylaws, and unless otherwise provided in the certificate of incorporation, directors shall be elected at each annual meeting of stockholders to hold office until the next annual meeting. Directors need not be stockholders unless so required by the certificate of incorporation or these Bylaws, wherein other qualifications for directors may be prescribed. Each director, including a director elected to fill a vacancy, shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal.

2.4 Resignation And Vacancies

Any director may resign at any time upon written notice to the attention of the Secretary of the corporation. When one or more directors so resigns and the resignation is effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in this section in the filling of other vacancies.

Unless otherwise provided in the certificate of incorporation or these Bylaws:

(a) Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director.

(b) Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected, or if no such director is in office, by a majority of all directors then in office, although less than a quorum, or by a sole remaining director.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these Bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the General Corporation Law of Delaware.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the General Corporation Law of Delaware as far as applicable.

2.5 **Place Of Meetings: Meetings By Telephone**

The Board of Directors of the corporation may hold meetings, both regular and special, either within or outside the state of Delaware.

Unless otherwise restricted by the certificate of incorporation or these Bylaws, members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

2.6 **Regular Meetings**

Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the board.

2.7 **Special Meetings: Notice**

Special meetings of the Board of Directors for any purpose or purposes may be called at any time by the chairman of the board, the chief executive officer, the president, the secretary or any two directors.

Notice of the time and place of special meetings shall be delivered personally or by telephone to each director or sent by first-class mail, facsimile, electronic transmission, or telegram, charges prepaid, addressed to each director at that director's address as it is shown on the records of the corporation. If the notice is mailed, it shall be deposited in the United States mail at least four days before the time of the holding of the meeting. If the notice is delivered personally or by facsimile, electronic transmission, telephone or telegram, it shall be delivered at least 24 hours before the time of the holding of the meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose of the meeting. The notice need not specify the place of the meeting, if the meeting is to be held at the principal executive office of the corporation. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

2.8 **Quorum**

At all meetings of the Board of Directors, a majority of the total number of directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation. If a quorum is not present at any meeting of the Board of Directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

2.9 Waiver Of Notice

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these Bylaws, a written waiver thereof, signed by the person entitled to notice, or waiver by electronic mail or other electronic transmission by such person, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the directors, or members of a committee of directors, need be specified in any written waiver of notice unless so required by the certificate of incorporation or these Bylaws.

2.10 Board Action By Written Consent Without A Meeting

Unless otherwise restricted by the certificate of incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the board or committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

2.11 Fees And Compensation Of Directors

Unless otherwise restricted by the certificate of incorporation or these Bylaws, the Board of Directors shall have the authority to fix the compensation of directors. No such compensation shall preclude any director from serving the corporation in any other capacity and receiving compensation therefor.

2.12 Approval Of Loans To Officers

The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiary, including any officer or employee who is a director of the corporation or its subsidiary, whenever, in the judgment of the directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in this section shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

2.13 **Removal Of Directors**

Unless otherwise restricted by statute, by the certificate of incorporation or by these Bylaws, any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors; provided, however, that if the stockholders of the corporation are entitled to cumulative voting, if less than the entire Board of Directors is to be removed, no director may be removed without cause if the votes cast against his removal would be sufficient to elect him if then cumulatively voted at an election of the entire Board of Directors.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

2.14 **Chairman Of The Board Of Directors**

The corporation may also have, at the discretion of the Board of Directors, a chairman of the Board of Directors who shall not be considered an officer of the corporation.

ARTICLE III
COMMITTEES

3.1 **Committees Of Directors**

The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The Board may designate 1 or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors, or in these Bylaws, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the General Corporate Law of Delaware to be submitted to stockholders for approval or (ii) adopting, amending or repealing any Bylaw of the corporation.

3.2 **Committee Minutes**

Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors when required.

3.3 **Meetings And Action Of Committees**

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of Section 2.5 (place of meetings and meetings by telephone), Section 2.6 (regular meetings), Section 2.7 (special meetings and notice), Section 2.8 (quorum), Section 2.9 (waiver of notice), and Section 2.10 (action without a meeting) of these Bylaws, with such changes in the context of such provisions as are necessary to substitute the committee and its members for the Board of Directors and its members; provided, however, that the time of regular meetings of committees may be determined either by resolution of the Board of Directors or by resolution of the committee, that special meetings of committees may also be called by resolution of the Board of Directors and that notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The Board of Directors may adopt rules for the government of any committee not inconsistent with the provisions of these Bylaws.

ARTICLE IV

OFFICERS

4.1 **Officers**

The officers of the corporation shall be a president and a secretary. The corporation may also have, at the discretion of the Board of Directors, a chief executive officer, a chief financial officer, a treasurer, one or more vice presidents, one or more assistant secretaries, one or more assistant treasurers, and any such other officers as may be appointed in accordance with the provisions of Section 4.3 of these Bylaws. Any number of offices may be held by the same person.

4.2 **Appointment Of Officers**

The officers of the corporation, except such officers as may be appointed in accordance with the provisions of Sections 4.3 or 4.5 of these Bylaws, shall be appointed by the Board of Directors, subject to the rights, if any, of an officer under any contract of employment.

4.3 **Subordinate Officers**

The Board of Directors may appoint, or empower the chief executive officer or the president to appoint, such other officers and agents as the business of the corporation may require, each of whom shall hold office for such period, have such authority, and perform such duties as are provided in these Bylaws or as the Board of Directors may from time to time determine.

4.4 **Removal And Resignation Of Officers**

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board of Directors at any regular or special meeting of the board or, except in the case of an officer chosen by the Board of Directors, by any officer upon whom the power of removal is conferred by the Board of Directors.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

4.5 Vacancies In Offices

Any vacancy occurring in any office of the corporation shall be filled by the Board of Directors.

4.6 Chief Executive Officer

Subject to such supervisory powers, if any, as may be given by the Board of Directors to the chairman of the board, if any, the chief executive officer of the corporation (if such an officer is appointed) shall, subject to the control of the Board of Directors, have general supervision, direction, and control of the business and the officers of the corporation and shall have the general powers and duties of management usually vested in the office of chief executive officer of a corporation and shall have such other powers and duties as may be prescribed by the Board of Directors or these Bylaws.

The person serving as chief executive officer shall also be the acting President of the corporation whenever no other person is then serving in such capacity.

4.7 President

Subject to such supervisory powers, if any, as may be given by the Board of Directors to the chairman of the board (if any) or the chief executive officer, the president shall have general supervision, direction, and control of the business and other officers of the corporation. He or she shall have the general powers and duties of management usually vested in the office of president of a corporation and such other powers and duties as may be prescribed by the Board of Directors or these Bylaws.

The person serving as president shall also be the acting chief executive officer, secretary or treasurer of the corporation, as applicable, whenever no other person is then serving in such capacity.

4.8 Vice Presidents

In the absence or disability of the chief executive officer and president, the vice presidents, if any, in order of their rank as fixed by the Board of Directors or, if not ranked, a vice president designated by the Board of Directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to time may be prescribed for them respectively by the Board of Directors, these Bylaws, the president or the chairman of the board.

4.9 **Secretary**

The secretary shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the Board of Directors may direct, a book of minutes of all meetings and actions of directors, committees of directors, and stockholders. The minutes shall show the time and place of each meeting, the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings, and the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the Board of Directors, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates, if any, evidencing such shares, and the number and date of cancellation of every certificate, if any, surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the Board of Directors required to be given by law or by these Bylaws. He or she shall have such other powers and perform such other duties as may be prescribed by the Board of Directors or by these Bylaws.

4.10 **Chief Financial Officer**

The chief financial officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital, retained earnings and shares. The books of account shall at all reasonable times be open to inspection by any member of the Board of Directors.

The chief financial officer shall render to the chief executive officer, the president, or the Board of Directors, upon request, an account of all his or her transactions as chief financial officer and of the financial condition of the corporation. He or she shall have the general powers and duties usually vested in the office of chief financial officer of a corporation and shall have such other powers and perform such other duties as may be prescribed by the Board of Directors or these Bylaws.

The person serving as the chief financial officer shall also be the acting treasurer of the corporation whenever no other person is then serving in such capacity. Subject to such supervisory powers, if any, as may be given by the Board of Directors to another officer of the corporation, the chief financial officer shall supervise and direct the responsibilities of the treasurer whenever someone other than the chief financial officer is serving as treasurer of the corporation.

4.11 **Treasurer**

The treasurer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records with respect to all bank accounts, deposit accounts, cash management accounts and other investment accounts of the corporation. The books of account shall at all reasonable times be open to inspection by any member of the Board of Directors.

The treasurer shall deposit, or cause to be deposited, all moneys and other valuables in the name and to the credit of the corporation with such depositories as may be designated by the Board of Directors. He or she shall disburse the funds of the corporation as may be ordered by the Board of Directors and shall render to the chief financial officer, the chief executive officer, the president or the Board of Directors, upon request, an account of all his or her transactions as treasurer. He or she shall have the general powers and duties usually vested in the office of treasurer of a corporation and shall have such other powers and perform such other duties as may be prescribed by the Board of Directors or these Bylaws.

The person serving as the treasurer shall also be the acting chief financial officer of the corporation whenever no other person is then serving in such capacity.

4.12 Representation Of Shares Of Other Corporations

The chairman of the board, the chief executive officer, the president, any vice president, the chief financial officer, the secretary or assistant secretary of this corporation, or any other person authorized by the Board of Directors or the chief executive officer or the president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by the person having such authority.

4.13 Authority And Duties Of Officers

In addition to the foregoing authority and duties, all officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the Board of Directors or the stockholders.

ARTICLE V

INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES, AND OTHER AGENTS

5.1 Indemnification Of Directors And Officers

The corporation shall, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware, indemnify each of its directors and officers against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 5.1, a "director" or "officer" of the corporation includes any person (a) who is or was a director or officer of the corporation, (b) who is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, or (c) who was a director or officer of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

5.2 Indemnification Of Others

The corporation shall have the power, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware, to indemnify each of its employees and agents (other than directors and officers) against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 5.2, an "employee" or "agent" of the corporation (other than a director or officer) includes any person (a) who is or was an employee or agent of the corporation, (b) who is or was serving at the request of the corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or (c) who was an employee or agent of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

5.3 Payment Of Expenses In Advance

Expenses incurred in defending any action or proceeding for which indemnification is required pursuant to Section 5.1 or for which indemnification is permitted pursuant to Section 5.2 following authorization thereof by the Board of Directors shall be paid by the corporation in advance of the final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of the indemnified party to repay such amount if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that the indemnified party is not entitled to be indemnified as authorized in this Article V.

5.4 Indemnity Not Exclusive

The indemnification provided by this Article V shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any Bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office, to the extent that such additional rights to indemnification are authorized in the certificate of incorporation

5.5 Insurance

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of the General Corporation Law of Delaware.

5.6 **Conflicts**

No indemnification or advance shall be made under this Article V, except where such indemnification or advance is mandated by law or the order, judgment or decree of any court of competent jurisdiction, in any circumstance where it appears:

(a) That it would be inconsistent with a provision of the certificate of incorporation, these Bylaws, a resolution of the stockholders or an agreement in effect at the time of the accrual of the alleged cause of the action asserted in the proceeding in which the expenses were incurred or other amounts were paid, which prohibits or otherwise limits indemnification; or

(b) That it would be inconsistent with any condition expressly imposed by a court in approving a settlement.

ARTICLE VI

RECORDS AND REPORTS

6.1 **Maintenance And Inspection Of Records**

The corporation shall, either at its principal executive offices or at such place or places as designated by the Board of Directors, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these Bylaws as amended to date, accounting books, and other records.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal place of business.

A complete list of stockholders entitled to vote at any meeting of stockholders, arranged in alphabetical order for each class of stock and showing the address of each such stockholder and the number of shares registered in each such stockholder's name, shall be open to the examination of any such stockholder for a period of at least ten (10) days prior to the meeting in the manner provided by law. The stock list shall also be open to the examination of any stockholder during the whole time of the meeting as provided by law. This list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

6.2 **Inspection By Directors**

Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders, and its other books and records for a purpose reasonably related to his or her position as a director. The Court of Chancery is hereby vested with the exclusive jurisdiction to determine whether a director is entitled to the inspection sought. The Court may summarily order the corporation to permit the director to inspect any and all books and records, the stock ledger, and the stock list and to make copies or extracts therefrom. The Court may, in its discretion, prescribe any limitations or conditions with reference to the inspection, or award such other and further relief as the Court may deem just and proper.

ARTICLE VII
GENERAL MATTERS

7.1 Checks

From time to time, the Board of Directors shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

7.2 Execution Of Corporate Contracts And Instruments

The Board of Directors, except as otherwise provided in these Bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

7.3 Stock Certificates and Notices; Uncertificated Stock; Partly Paid Shares

The shares of the corporation may be certificated or uncertificated, as provided under Delaware law, and shall be entered in the books of the corporation and recorded as they are issued. Any or all of the signatures on any certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

Within a reasonable time after the issuance or transfer of uncertificated stock, the corporation shall send to the record owner thereof a written notice that shall set forth the name of the corporation, that the corporation is organized under the laws of the State of Delaware, the name of the stockholder, the number and class (and the designation of the series, if any) of the shares represented, and any restrictions on the transfer or registration of such shares of stock imposed by the corporation's certificate of incorporation, these Bylaws, any agreement among stockholders or any agreement between stockholders and the corporation.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate, if any, issued to represent any such partly paid shares, or upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

7.4 **Special Designation On Certificates and Notices of Uncertificated Stock**

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock or the notice to the record owner of uncertificated stock; provided, however, that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock or the notice to the record owner of uncertificated stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

7.5 **Lost Certificates**

Except as provided in this Section 7.5, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or notice of uncertificated shares in the place of any certificate previously issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or the owner's legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

7.6 **Construction; Definitions**

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the Delaware General Corporation Law shall govern the construction of these Bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term "person" includes both a corporation and a natural person.

7.7 **Dividends**

The directors of the corporation, subject to any restrictions contained in (a) the General Corporation Law of Delaware or (b) the certificate of incorporation, may declare and pay dividends upon the shares of its capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock.

The directors of the corporation may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.

7.8 **Fiscal Year**

The fiscal year of the corporation shall be fixed by resolution of the Board of Directors and may be changed by the Board of Directors.

7.9 **Transfer Of Stock**

Upon receipt by the corporation or the transfer agent of the corporation of proper transfer instructions from the record holder of uncertificated shares or upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate or uncertificated shares to the person entitled thereto, cancel the old certificate, if any, and record the transaction in its books.

7.10 **Stock Transfer Agreements**

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the General Corporation Law of Delaware.

7.11 **Stockholders of Record**

The corporation shall be entitled to recognize the exclusive right of a person recorded on its books as the owner of shares to receive dividends and to vote as such owner, shall be entitled to hold liable for calls and assessments the person recorded on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

7.12 **Facsimile Signature**

In addition to the provisions for use of facsimile signatures elsewhere specifically authorized in these Bylaws, facsimile signatures of any officer or officers of the corporation may be used whenever and as authorized by the Board of Directors or a committee thereof.

ARTICLE VIII

AMENDMENTS

The Bylaws of the corporation may be adopted, amended or repealed by the stockholders entitled to vote; provided, however, that the corporation may, in its certificate of incorporation, confer the power to adopt, amend or repeal Bylaws upon the directors. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal Bylaws.

**CERTIFICATE OF ADOPTION OF BYLAWS
OF
BILLIONTOONE, INC.**

ADOPTION BY INCORPORATOR

The undersigned person appointed in the certificate of incorporation to act as the Incorporator of BillionToOne, Inc., a Delaware corporation, hereby adopts the foregoing Bylaws as the Bylaws of the corporation.

Executed on February 12, 2016.

INCORPORATOR:
Oguzhan Atay

/s/ Oguzhan Atay _____

CERTIFICATE BY SECRETARY OF ADOPTION BY INCORPORATOR

The undersigned hereby certifies that the undersigned is the duly elected, qualified, and acting Secretary of BillionToOne, Inc., a Delaware corporation, and that the foregoing Bylaws were adopted as the Bylaws of the corporation on February 12, 2016. by the person appointed in the certificate of incorporation to act as the Incorporator of the corporation.

Executed on February 12, 2016

SECRETARY:
David Tsao

/s/ David Tsao _____

BILLIONTOONE, INC.
(a Delaware corporation)

AMENDED AND RESTATED BYLAWS

As Adopted , 2025 and
As Effective , 2025

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BILLIONTOONE, INC.
(a Delaware corporation)

AMENDED AND RESTATED BYLAWS

As Adopted _____, 2025 and
As Effective _____, 2025

ARTICLE I
STOCKHOLDERS

Section 1.1 Annual Meetings. If required by applicable law or as otherwise determined by the Board of Directors (the “**Board**”) of BillionToOne, Inc. (the “**Corporation**”), an annual meeting of stockholders shall be held for the election of directors at such date and time as the Board shall each year fix. The meeting may be held either at a place, within or without the State of Delaware as permitted by the Delaware General Corporation Law (the “**DGCL**”), or by means of remote communication as the Board in its sole discretion may determine. Any other proper business may be transacted at the annual meeting. The Corporation may postpone, reschedule or cancel any annual meeting of stockholders previously scheduled by the Board.

Section 1.2 Special Meetings. Special meetings of stockholders for any purpose or purposes shall be called in the manner set forth in the Amended and Restated Certificate of Incorporation of the Corporation (as the same may be amended and/or restated from time to time, the “**Certificate of Incorporation**”). The special meeting may be held either at a place, within or without the State of Delaware, or by means of remote communication as the Board in its sole discretion may determine. Business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of the meeting. The Corporation may postpone, reschedule or cancel any special meeting of stockholders previously scheduled by the Board.

Section 1.3 Notice of Meetings. Notice of all meetings of stockholders shall be given in writing or by electronic transmission in the manner provided by applicable law (including, without limitation, as set forth in Section 7.1.1 of these Bylaws) stating the date, time and place, if any, of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and the record date for determining the stockholders entitled to vote at the meeting (if such date is different from the record date for stockholders entitled to notice of the meeting). In the case of a special meeting, such notice shall also set forth the purpose or purposes for which the meeting is called. Unless otherwise required by applicable law or the Certificate of Incorporation, notice of any meeting of stockholders shall be given not less than ten (10), nor more than sixty (60), days before the date of the meeting to each stockholder of record entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of the meeting.

Section 1.4 Adjournments. Notwithstanding Section 1.5 of these Bylaws, the chairperson of the meeting shall have the power to recess or adjourn any meeting of stockholders, annual or special, to another time, date and place (if any) regardless of whether a quorum is present, at any time and for any reason. Any meeting of stockholders, annual or special, may be adjourned from time to time, and notice need not be given of any such adjourned meeting if the time, date and place (if any) thereof and the means of remote communication (if any) by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are (i) announced at the meeting at which the adjournment is taken, (ii) displayed, during the time scheduled for the meeting, on the same electronic network used to enable stockholders and proxyholders to participate in the meeting by means of remote communication, (iii) set forth in the notice of meeting, or (iv) provided in any other manner permitted by the DGCL; *provided, however*, that if (x) the adjournment is for more than thirty (30) days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting or (y) after the adjournment, a new record date for determination of stockholders entitled to vote is fixed for the adjourned meeting, the Board shall fix as the record date for determining stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote at the adjourned meeting, and shall give notice of the adjourned meeting to each stockholder of record as of the record date so fixed for notice of such adjourned meeting. At the adjourned meeting, the Corporation may transact any business that might have been transacted at the original meeting.

Section 1.5 Quorum. Except as otherwise provided by applicable law, the Certificate of Incorporation or these Bylaws, at each meeting of stockholders the holders of a majority of the voting power of the shares of stock issued and outstanding and entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum for the transaction of business; *provided, however*, that where a separate vote by a class or classes or series of stock is required by applicable law or the Certificate of Incorporation, the holders of a majority of the voting power of the shares of such class or classes or series of the stock issued and outstanding and entitled to vote on such matter, present in person or represented by proxy at the meeting, shall constitute a quorum entitled to take action with respect to the vote on such matter. If a quorum shall fail to attend any meeting, the chairperson of the meeting or, if directed to be voted on by the chairperson of the meeting, the holders of a majority of the voting power of the shares entitled to vote who are present in person or represented by proxy at the meeting may adjourn the meeting. A quorum, once established at a meeting, shall not be broken by the withdrawal of enough votes to leave less than a quorum.

Section 1.6 Organization. Meetings of stockholders shall be presided over by (a) a director or officer of the Corporation as the Board may designate, or (b) in the absence of such a person, the Chairperson of the Board, or (c) in the absence of such person, the Chief Executive Officer of the Corporation, or (d) in the absence of such person, the Chief Legal Officer or General Counsel of the Corporation, or (e) in the absence of such person, the Lead Independent Director, or (f) in the absence of such person, by a Vice President. The Secretary of the Corporation or such other person as may be designated by the Board shall act as secretary of the meeting; provided that, in the absence of the Secretary or such other person, the chairperson of the meeting may appoint any other person to act as secretary of the meeting.

Section 1.7 Voting; Proxies. Each stockholder of record entitled to vote at a meeting of stockholders, or to take corporate action by consent without a meeting, may authorize another person or persons to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. Such a proxy may be prepared, transmitted and delivered in any manner permitted by applicable law. Except as may be required in the Certificate of Incorporation, at all meetings of stockholders for the election of directors at which a quorum is present, directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. At all meetings of stockholders at which a quorum is present, unless a different or minimum vote is required by applicable law, rule or regulation applicable to the Corporation or its securities, the rules or regulations of any stock exchange applicable to the Corporation, the Certificate of Incorporation or these Bylaws, in which case such different or minimum vote shall be the applicable vote on the matter, every matter other than the election of directors shall be decided by the affirmative vote of the holders of a majority of the voting power of the shares of stock entitled to vote on such matter that are present in person or represented by proxy at the meeting and are voted for or against the matter.

Section 1.8 Fixing Date for Determination of Stockholders of Record.

1.8.1 Meetings. In order that the Corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board, and which record date shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If the Board so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders is fixed by the Board, the record date for determining stockholders entitled to notice of or to vote at the meeting shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance herewith at the adjourned meeting.

1.8.2 Stockholder Action by Consent in Lieu of a Meeting. If stockholders are not prohibited from acting by consent in lieu of a meeting pursuant to the Certificate of Incorporation, in order that the Corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board, and which date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board. If no record date has been fixed by the Board pursuant to the first sentence of this Section 1.8.2, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting (if stockholders are not prohibited from acting by consent in lieu of a meeting pursuant to the Certificate of Incorporation), when no prior action by the Board is required by applicable law, shall be the first date on which a signed consent setting forth the action taken or proposed to be taken is delivered to the Corporation in accordance with Section

228 of the DGCL. If no record date has been fixed by the Board pursuant to the first sentence of this Section 1.8.2, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting if prior action by the Board is required by applicable law shall be at the close of business on the date on which the Board adopts the resolution taking such prior action.

1.8.3 Dividends, Distributions, or Rights. In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the Board and which shall not be more than sixty (60) days prior to such action. If no such record date is fixed by the Board, then the record date for determining stockholders for any such purpose shall be at 5:00 p.m. Pacific Time on the day on which the Board adopts the resolution relating thereto.

Section 1.9 List of Stockholders Entitled to Vote. The Corporation shall prepare, no later than the tenth (10th) day before every meeting of stockholders, a complete list of stockholders entitled to vote at the meeting (*provided, however*, if the record date for determining the stockholders entitled to vote is less than ten (10) days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the tenth (10th) day before the meeting date), arranged in alphabetical order and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, for a period of ten (10) days ending on the day before the meeting date, (a) on a reasonably accessible electronic network as permitted by applicable law (*provided* that the information required to gain access to the list is provided with the notice of the meeting), or (b) during ordinary business hours, at the principal place of business of the Corporation. Except as otherwise provided by law, the stock ledger shall be the only evidence as to who are the stockholders entitled to examine the list of stockholders required by this Section 1.9 or to vote in person or by proxy at any meeting of stockholders.

Section 1.10 Inspectors of Elections

1.10.1 Applicability. Unless otherwise required by the Certificate of Incorporation or by applicable law, the following provisions of this Section 1.10 shall apply only if and when the Corporation has a class of voting stock that is: (a) listed on a national securities exchange; (b) authorized for quotation on an interdealer quotation system of a registered national securities association; or (c) held of record by more than two thousand (2,000) stockholders. In all other cases, observance of the provisions of this Section 1.10 shall be optional, and at the discretion of the Board.

1.10.2 Appointment. The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors of election to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting.

1.10.3 Inspector's Oath. Each inspector of election, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of such inspector's ability.

1.10.4 Duties of Inspectors. At a meeting of stockholders, the inspectors of election shall (a) ascertain the number of shares outstanding and the voting power of each share, (b) determine the shares represented at a meeting and the validity of proxies and ballots, (c) count all votes and ballots, (d) determine and retain for a reasonable period of time a record of the disposition of any challenges made to any determination by the inspectors, and (e) certify their determination of the number of shares represented at the meeting, and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors.

1.10.5 Opening and Closing of Polls. The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced by the chairperson of the meeting at the meeting. No ballot, proxies or votes, nor any revocations thereof or changes thereto, shall be accepted by the inspectors after the closing of the polls unless the Court of Chancery upon application by a stockholder shall determine otherwise.

1.10.6 Determinations. In determining the validity and counting of proxies and ballots, the inspectors shall be limited to an examination of the proxies, any envelopes submitted with those proxies, any information provided in connection with proxies pursuant to Section 211(a)(2)b.(i) of the DGCL, or in accordance with Sections 211(e) or 212(c)(2) of the DGCL, ballots and the regular books and records of the Corporation, except that the inspectors may consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes than the stockholder holds of record. If the inspectors consider other reliable information for the limited purpose permitted herein, the inspectors at the time they make their certification of their determinations pursuant to this Section 1.10 shall specify the precise information considered by them, including the person or persons from whom they obtained the information, when the information was obtained, the means by which the information was obtained and the basis for the inspectors' belief that such information is accurate and reliable.

Section 1.11 Conduct of Meetings. The Board may adopt by resolution such rules and regulations for the conduct of the meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the Board, the person presiding over any meeting of stockholders shall have the right and authority to convene and (for any or no reason) to recess and/or adjourn the meeting, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such presiding person, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board or prescribed by the presiding person of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders entitled to vote at the meeting, their duly authorized and constituted proxies or such other persons as the presiding person of the meeting shall determine; (iv) restrictions on entry to the meeting after the time fixed for the

commencement thereof; (v) limitations on the time allotted to questions or comments by participants; (vi) restricting the use of audio/video recording devices and cell phones; and (vii) complying with any state and local laws and regulations concerning safety and security. The presiding person at any meeting of stockholders, in addition to making any other determinations that may be appropriate to the conduct of the meeting consistent with the provisions of these Bylaws, applicable laws and regulations or other requirements provided to the stockholders in accordance with applicable law, shall, if the facts warrant, determine and declare to the meeting that a matter or business was not properly brought before the meeting and if such presiding person should so determine, such presiding person shall so declare to the meeting and any such matter or business not properly brought before the meeting shall not be transacted or considered. Unless and to the extent determined by the Board or the person presiding over the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

Section 1.12 Notice of Stockholder Business; Nominations.

1.12.1 Annual Meeting of Stockholders.

(a) Nominations of persons for election to the Board and the proposal of other business to be considered by the stockholders may be made at an annual meeting of stockholders only: (i) pursuant to the Corporation's notice of such meeting (or any supplement thereto), (ii) by or at the direction of the Board or any committee thereof or (iii) by any stockholder of the Corporation who was a stockholder of record at the time of giving of the notice provided for in this Section 1.12 (the "***Record Stockholder***"), who is entitled to vote at such meeting and who complies with the notice and other procedures set forth in this Section 1.12 in all applicable respects. For the avoidance of doubt, the foregoing clause (iii) shall be the exclusive means for a stockholder to make nominations or propose business (other than business included in the Corporation's proxy materials pursuant to Rule 14a-8 under the Securities Exchange Act of 1934, as amended (such act, and the rules and regulations promulgated thereunder, the "***Exchange Act***")), at an annual meeting of stockholders, and such stockholder must fully comply with the notice and other procedures set forth in this Section 1.12 to make such nominations or propose business before an annual meeting.

(b) For nominations or other business to be properly brought before an annual meeting by a Record Stockholder pursuant to Section 1.12.1(a) of these Bylaws:

(i) the Record Stockholder must have given timely notice thereof in writing to the Secretary of the Corporation and provide any updates or supplements to such notice at the times and in the forms required by this Section 1.12;

(ii) such other business (other than the nomination of persons for election to the Board) must otherwise be a proper matter for stockholder action;

(iii) if the Proposing Person (as defined below) has provided the Corporation with a Solicitation Notice (as defined below), such Proposing Person must, in the case of a proposal other than the nomination of persons for election to the Board, have delivered a proxy statement and form of proxy to holders of at least the percentage of the Corporation's voting shares

required under the Certificate of Incorporation and applicable law to carry any such proposal, or, in the case of a nomination or nominations, have delivered a proxy statement and form of proxy to holders of a percentage of the Corporation's voting shares reasonably believed by such Proposing Person to be sufficient to elect the nominee or nominees proposed to be nominated by such Record Stockholder, and must, in either case, have included in such materials the Solicitation Notice; and

(iv) if no Solicitation Notice relating thereto has been timely provided pursuant to this Section 1.12, the Proposing Person proposing such business or nomination must not have solicited a number of proxies sufficient to have required the delivery of such a Solicitation Notice under this Section 1.12. To be timely, a Record Stockholder's notice must be delivered to the Secretary at the principal executive offices of the Corporation not later than 5:00 p.m. Pacific Time on the ninetieth (90th) day nor earlier than 5:00 p.m. Pacific Time on the one hundred and twentieth (120th) day prior to the first anniversary of the preceding year's annual meeting (which date shall, for purposes of the Corporation's first annual meeting of stockholders after its shares of Common Stock (as defined in the Certificate of Incorporation) are first publicly traded, be deemed to have occurred on May 1, 2025); provided, however, that in the event that the date of the annual meeting is more than thirty (30) days before or more than seventy (70) days after such anniversary date, notice by the Record Stockholder to be timely must be so delivered (A) no earlier than 5:00 p.m. Pacific Time on the one hundred and twentieth (120th) day prior to such annual meeting and (B) no later than 5:00 p.m. Pacific Time on the later of the ninetieth (90th) day prior to such annual meeting or 5:00 p.m. Pacific Time on the tenth (10th) day following the day on which Public Announcement (as defined below) of the date of such meeting is first made by the Corporation. In no event shall an adjournment or postponement of an annual meeting commence a new time period (or extend any time period) for providing the Record Stockholder's notice.

(c) As to each person whom the Record Stockholder proposes to nominate for election or reelection as a director, in addition to the matters set forth in paragraph (e) below, such Record Stockholder's notice shall set forth:

(i) the name, age, business address and residence address of such person;

(ii) the principal occupation or employment of such nominee;

(iii) the class, series and number of any shares of stock of the Corporation that are beneficially owned or owned of record by such person or any Associated Person (as defined below);

(iv) the date or dates such shares were acquired and the investment intent of such acquisition;

(v) all other information relating to such person that would be required to be disclosed in solicitations of proxies for election of directors in an election contest (even if an election contest is not involved), or would be otherwise required, in each case pursuant to and in accordance with Section 14(a) (or any successor provision) under the Exchange Act and the rules and regulations thereunder;

(vi) such person's written consent to being named in the Corporation's proxy statement as a nominee, to the public disclosure of information regarding or related to such person provided to the Corporation by such person or otherwise pursuant to this Section 1.12 and to serving as a director if elected;

(vii) whether such person meets the independence requirements of the stock exchange upon which any class of the Corporation's Common Stock is primarily traded;

(viii) a description of all direct and indirect compensation and other material monetary agreements, arrangements and understandings during the past three (3) years, and any other material relationships, between or among such Proposing Person or any of its respective affiliates and associates, on the one hand, and each proposed nominee, and his or her respective affiliates and associates, on the other hand, including all information that would be required to be disclosed pursuant to Rule 404 promulgated under Regulation S-K if the Proposing Person or any of its respective affiliates and associates were the "registrant" for purposes of such rule and the nominee were a director or executive officer of such registrant; and

(ix) a completed and signed questionnaire, representation and agreement required by Section 1.12.2 of these Bylaws.

(d) As to any business other than the nomination of a director or directors that the Record Stockholder proposes to bring before the meeting, in addition to the matters set forth in paragraph (e) below, such Record Stockholder's notice shall set forth:

(i) a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and, in the event that such business includes a proposal to amend the Bylaws, the text of the proposed amendment), the reasons for conducting such business at the meeting and any material interest in such business of such Proposing Person, including any anticipated benefit to any Proposing Person therefrom; and

(ii) a description of all agreements, arrangements and understandings between or among any such Proposing Person and any of its respective affiliates or associates, on the one hand, and any other person or persons, on the other hand, (including their names) in connection with the proposal of such business by such Proposing Person;

(e) As to each Proposing Person giving the notice, such Record Stockholder's notice shall set forth:

(i) the current name and address of such Proposing Person, including, if applicable, the name and address of the Proposing Person as they appear on the Corporation's stock ledger, if different;

(ii) the class or series and number of shares of stock of the Corporation that are directly or indirectly owned of record or beneficially owned by such Proposing Person, including any shares of any class or series of stock of the Corporation as to which such Proposing Person has a right to acquire beneficial ownership at any time in the future;

(iii) whether and the extent to which any derivative interest in the Corporation's equity securities (including without limitation any option, warrant, convertible security, stock appreciation right, or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class or series of shares of stock of the Corporation or with a value derived in whole or in part from the value of any class or series of shares of stock of the Corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of shares of the Corporation or otherwise, and any cash-settled equity swap, total return swap, synthetic equity position or similar derivative arrangement (any of the foregoing, a "**Derivative Instrument**"), as well as any rights to dividends on the shares of any class or series of shares of stock of the Corporation that are separated or separable from the underlying shares of the Corporation) or any short interest in any security of the Corporation (it being understood that, for purposes of this Bylaw, a person shall be deemed to have a short interest in a security if such person directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has the opportunity to profit or share in any profit derived from any increase or decrease in the value of the subject security, including through performance-related fees) is held directly or indirectly by or for the benefit of such Proposing Person, including without limitation, whether and the extent to which any ongoing hedging or other transaction or series of transactions has been entered into by or on behalf of, or any other agreement, arrangement or understanding (including without limitation any short position or any borrowing or lending of shares) has been made, the effect or intent of which is to mitigate loss to or manage risk or benefit of share price changes for, or to increase or decrease the voting power of, such Proposing Person with respect to any share of stock of the Corporation (any of the foregoing, a "**Short Interest**");

(iv) any proportionate interest in shares of stock of the Corporation or Derivative Instruments held, directly or indirectly, by a general or limited partnership in which such Proposing Person or any of its respective affiliates or associates is a general partner or, directly or indirectly, beneficially owns an interest in a general partner of such general or limited partnership;

(v) any direct or indirect material interest in any material contract or agreement with the Corporation, any affiliate of the Corporation or any Competitor (as defined below) (including, in any such case, any employment agreement, collective bargaining agreement or consulting agreement);

(vi) any significant equity interests or any Derivative Instruments or Short Interests in any Competitor held by such Proposing Person and/or any of its respective affiliates or associates;

(vii) any other material business or financial relationship between such Proposing Person, on the one hand, and the Corporation, any affiliate of the Corporation or any Competitor, on the other hand;

(viii) all information that would be required to be set forth in a Schedule 13D filed pursuant to Rule 13d-1(a) or an amendment pursuant to Rule 13d-2(a) if such a statement were required to be filed under the Exchange Act and the rules and regulations promulgated thereunder by such Proposing Person and/or any of its respective affiliates or associates;

(ix) any other information relating to such Proposing Person that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies or consents by such Proposing Person in support of the business proposed to be brought before the meeting pursuant to Section 14(a) (or any successor provision) under the Exchange Act and the rules and regulations thereunder;

(x) such Proposing Person's written consent to the public disclosure of information provided to the Corporation pursuant to this Section 1.12;

(xi) a representation that the Record Stockholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business or nomination;

(xii) a representation whether such Proposing Person will or is part of a group that will (x) deliver, in the case of a proposal of business other than nominations, through means satisfying each of the conditions that would be applicable to the Corporation under either Exchange Act Rule 14a-16(a) or Exchange Act Rule 14a-16(n), a proxy statement and/or form of proxy to holders (including any beneficial owners pursuant to Rule 14b-1 and Rule 14b-2 of the Exchange Act) of at least the percentage of the voting power of the Corporation's outstanding capital stock required to approve or adopt the proposal or in the case of any non-exempt solicitation made with respect to any director nomination, confirming that such person or group will deliver, through means satisfying each of the conditions that would be applicable to the Corporation under either Rule 14a-16(a) under the Exchange Act or Rule 14a-16(n) under the Exchange Act, a proxy statement and form of proxy to holders (including any beneficial owners pursuant to Rule 14b-1 and Rule 14b-2 of the Exchange Act) of at least sixty-seven percent (67%) of the voting power of the Corporation's stock entitled to vote generally in the election of directors, and/or (y) otherwise solicit proxies or votes from stockholders in support of such proposal or nomination; and

(xiii) any proxy, contract, arrangement, or relationship pursuant to which the Proposing Person has a right to vote, directly or indirectly, any shares of any security of the Corporation.

The disclosures to be made pursuant to the foregoing clauses (ii), (iii), (iv) and (vi) shall not include any information with respect to the ordinary course business activities of any broker, dealer, commercial bank, trust company or other nominee who is a Proposing Person solely as a result of being the stockholder directed to prepare and submit the notice required by these Bylaws on behalf of a beneficial owner.

(f) A stockholder providing written notice required by this Section 1.12 shall update such notice in writing, if necessary, so that the information provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for determining the stockholders entitled to notice of the meeting and (ii) 5:00 p.m. Pacific Time on the tenth (10th) business day prior to the meeting or any adjournment or postponement thereof. In

the case of an update pursuant to clause (i) of the foregoing sentence, such update shall be received by the Secretary of the Corporation at the principal executive office of the Corporation not later than five (5) business days after the record date for determining the stockholders entitled to notice of the meeting, and in the case of an update and supplement pursuant to clause (ii) of the foregoing sentence, such update and supplement shall be received by the Secretary of the Corporation at the principal executive office of the Corporation not later than eight (8) business days prior to the date for the meeting, and, if practicable, any adjournment or postponement thereof (and, if not practicable, on the first practicable date prior to the date to which the meeting has been adjourned or postponed). For the avoidance of doubt, the obligation to update as set forth in this paragraph shall not limit the Corporation's rights with respect to any deficiencies in any notice provided by a stockholder, extend any applicable deadlines hereunder or enable or be deemed to permit a stockholder who has previously submitted notice hereunder to amend or update any proposal or nomination or to submit any new proposal, including by changing or adding nominees, matters, business and/or resolutions proposed to be brought before a meeting of the stockholders.

1.12.2 Submission of Questionnaire, Representation and Agreement. To be eligible to be a nominee of any stockholder for election or reelection as a director of the Corporation, the person proposed to be nominated must deliver (in accordance with the time periods prescribed for delivery of notice under Section 1.12 of these Bylaws) to the Secretary at the principal executive offices of the Corporation a completed and signed questionnaire in the form required by the Corporation (which form the stockholder shall request in writing from the Secretary of the Corporation and which the Secretary shall provide to such stockholder within ten (10) days of receiving such request) with respect to the background and qualification of such person to serve as a director of the Corporation and the background of any other person or entity on whose behalf, directly or indirectly, the nomination is being made and a signed representation and agreement (in the form available from the Secretary upon written request) that such person: (a) is not and will not become a party to (i) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such person, if elected as a director of the Corporation, will act or vote on any issue or question (a "**Voting Commitment**") that has not been disclosed to the Corporation or (ii) any Voting Commitment that could reasonably be expected to limit or interfere with such person's ability to comply, if elected as a director of the Corporation, with such person's fiduciary duties under applicable law, (b) is not and will not become a party to any Compensation Arrangement (as defined below) that has not been disclosed to the Corporation, (c) if elected as a director of the Corporation, subject to fiduciary duties as a director, will comply with all informational and similar requirements of applicable insurance policies and laws and regulations in connection with service or action as a director of the Corporation, (d) if elected as a director of the Corporation, subject to fiduciary duties as a director, will comply with all corporate governance, conflict of interest, stock ownership requirements, confidentiality and trading policies and guidelines of the Corporation publicly disclosed from time to time, (e) consents to being named as a nominee in the Corporation's proxy statement pursuant to Rule 14a-4(d) under the Exchange Act and any associated proxy card of the Corporation and agrees to serve if elected as a director and (f) intends to serve as a director for the full term for which such individual is to stand for election.

1.12.3 Special Meetings of Stockholders. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of such meeting. Nominations of persons for election to the Board may be made at a special meeting of stockholders at which directors are to be elected pursuant to the Corporation's notice of such meeting (a) by or at the direction of the Board or any committee thereof or (b) provided that the Board has determined that directors shall be elected at such meeting, by any stockholder of the Corporation who is a stockholder of record at the time of giving of notice of the special meeting, who shall be entitled to vote at the meeting and who complies with the notice and other procedures set forth in this Section 1.12 in all applicable respects. In the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board, any such stockholder may nominate a person or persons (as the case may be), for election to such position(s) as specified in the Corporation's notice of meeting, if the stockholder's notice required by Section 1.12.1(b) of these Bylaws shall be delivered to the Secretary of the Corporation at the principal executive offices of the Corporation (i) no earlier than the one hundred and twentieth (120th) day prior to such special meeting and (ii) no later than 5:00 p.m. Pacific Time on the later of the ninetieth (90th) day prior to such special meeting or the tenth (10th) day following the day on which Public Announcement is first made of the date of the special meeting and of the nominees proposed by the Board to be elected at such meeting. In no event shall an adjournment or postponement of a special meeting commence a new time period (or extend any time period) for providing such notice.

1.12.4 General.

(a) Except as otherwise expressly provided in any applicable rule or regulation promulgated under the Exchange Act, only such persons who are nominated in accordance with the procedures set forth in this Section 1.12 shall be eligible to be elected at a meeting of stockholders and serve as directors and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 1.12. Except as otherwise provided by law or these Bylaws, the chairperson of the meeting shall have the power and duty to determine whether a nomination or any other business proposed to be brought before the meeting was made or proposed, as the case may be, in accordance with the procedures set forth in this Section 1.12 (including whether each Proposing Person solicited (or is part of a group which solicited) or did not so solicit, as the case may be, proxies or votes in support of such Proposing Person's nominee or proposal in compliance with the representation required by Section 1.12.1(e)(vii)) and, if any proposed nomination or business is not in compliance herewith, to declare that such defective proposal or nomination shall be disregarded. Notwithstanding the foregoing provisions of this Section 1.12, unless otherwise required by law, if the stockholder (or a Qualified Representative of the stockholder (as defined below)) does not appear at the annual or special meeting of stockholders of the Corporation to present a nomination or proposed business, such nomination shall be disregarded and such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation. Notwithstanding anything to the contrary in these Bylaws, unless otherwise required by law, if any Proposing Person (i) provides notice pursuant to Rule 14a-19(b) promulgated under the Exchange Act with respect to any proposed nominee and (ii) subsequently fails to comply with the requirements of Rule 14a-19 promulgated under the Exchange Act (or fails to timely provide reasonable evidence sufficient to satisfy the Corporation that such Proposing Person has met the requirements of Rule 14a-19(a)(3) promulgated under the Exchange Act in accordance with the following sentence), then the nomination of each such proposed nominee shall be disregarded, notwithstanding that the nominee is included as a nominee in the Corporation's proxy statement, notice of meeting or other proxy

materials for any annual meeting (or any supplement thereto) and notwithstanding that proxies or votes in respect of the election of such proposed nominees may have been received by the Corporation (which proxies and votes shall be disregarded). If any Proposing Person provides notice pursuant to Rule 14a-19(b) promulgated under the Exchange Act, such stockholder shall deliver to the Corporation, no later than five (5) business days prior to the date of the meeting and any adjournment or postponement thereof, reasonable evidence that it or such Proposing Person has met the requirements of Rule 14a-19(a)(3) promulgated under the Exchange Act.

(b) Notwithstanding the foregoing provisions of this Section 1.12, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth herein. Nothing in this Section 1.12 shall be deemed to affect any rights of (a) stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act or (b) the holders of any series of Preferred Stock to elect directors pursuant to any applicable provisions of the Certificate of Incorporation.

1.12.5 For purposes of these Bylaws the following definitions shall apply:

(A) "**affiliate**" and "**associate**" shall have the meanings ascribed thereto in Rule 405 under the Securities Act of 1933, as amended (the "**Securities Act**"); provided, however, that the term "partner" as used in the definition of "associate" shall not include any limited partner that is not involved in the management of the relevant partnership;

(B) "**Associated Person**" shall mean, with respect to any subject stockholder or other person (including any proposed nominee), (1) any person directly or indirectly controlling, controlled by or under common control with such stockholder or other person, (2) any beneficial owner of shares of stock of the Corporation owned of record or beneficially by such stockholder or other person, (3) any associate of such stockholder or other person, and (4) any person directly or indirectly controlling, controlled by or under common control with any such Associated Person;

(C) "**Compensation Arrangement**" shall mean any direct or indirect compensatory payment or other financial agreement, arrangement or understanding with any person or entity other than the Corporation, including any agreement, arrangement or understanding with respect to any direct or indirect compensation, reimbursement or indemnification in connection with candidacy, nomination, service or action as a nominee or as a director of the Corporation;

(D) "**Competitor**" shall mean any entity that provides products or services that would reasonably be understood as products or services that compete with or are alternatives to the principal products produced or services provided by the Corporation or its affiliates;

(E) "**Proposing Person**" shall mean (1) the Record Stockholder providing the notice of business proposed to be brought before an annual meeting or nomination of persons for election to the Board at a stockholder meeting, (2) the beneficial owner or beneficial owners, if different, on whose behalf the notice of business proposed to be brought before the annual meeting or nomination of persons for election to the Board at a stockholder meeting is made, and (3) any Associated Person on whose behalf the notice of business proposed to be brought before the annual meeting or nomination of persons for election to the Board at a stockholder meeting is made;

(F) “**Public Announcement**” shall mean disclosure in a press release reported by a national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act; and

(G) to be considered a “**Qualified Representative**” of a stockholder, a person must be a duly authorized officer, manager, trustee or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as a proxy at the meeting of stockholders and such person must produce such writing or electronic transmission, or a reliable reproduction thereof, at the meeting. The Secretary of the Corporation, or any other person who shall be appointed to serve as secretary of the meeting, may require, on behalf of the Corporation, reasonable and appropriate documentation to verify the status of a person purporting to be a “Qualified Representative” for purposes hereof.

Section 1.13 Delivery to the Corporation. Whenever this Article I, Section 1.12 requires one or more persons (including a record or beneficial owner of stock) to deliver a document or information to the Corporation or any officer, employee or agent thereof (including any notice, request, questionnaire, revocation, representation or other document or agreement), unless the Corporation elects otherwise, such document or information shall be in writing exclusively (and not in an electronic transmission) and shall be delivered exclusively by hand (including, without limitation, overnight courier service) or by certified or registered mail, return receipt requested, and the Corporation shall not be required to accept delivery of any document not in such written form or so delivered.

ARTICLE II BOARD OF DIRECTORS

Section 2.1 Number; Qualifications. The total number of directors constituting the Whole Board shall be fixed from time to time in the manner set forth in the Certificate of Incorporation and the term “Whole Board” shall have the meaning specified in the Certificate of Incorporation. No decrease in the authorized number of directors constituting the Whole Board shall shorten the term of any incumbent director. Directors need not be stockholders of the Corporation.

Section 2.2 Election; Resignation; Removal; Vacancies. Election of directors need not be by written ballot. Unless otherwise provided by the Certificate of Incorporation and subject to the special rights of holders of any outstanding series of Preferred Stock to elect directors, the Board shall be divided into three classes, designated as Class I, Class II and Class III. Each director shall hold office until the annual meeting at which such director’s term expires and until such director’s successor is elected and qualified or until such director’s earlier death, resignation, disqualification or removal. Any director may resign by delivering a resignation in writing or by electronic transmission to the Corporation at its principal office or to the Chairperson of the Board, the Chief Executive Officer, or the Secretary. Such resignation shall be effective upon delivery unless it is specified to be effective at a later time or upon the happening of an event. Subject to the special rights of holders of any outstanding series of Preferred Stock to elect directors, directors may be removed as provided by the Certificate of Incorporation and applicable law. All vacancies occurring in the Board and any newly created directorships resulting from any increase in the authorized number of directors shall be filled in the manner set forth in the Certificate of Incorporation.

Section 2.3 Regular Meetings. Regular meetings of the Board may be held at such places, if any, within or without the State of Delaware, and at such times as the Board may from time to time determine. Notice of regular meetings need not be given if the date, times and places, if any, thereof are fixed by resolution of the Board.

Section 2.4 Special Meetings. Special meetings of the Board may be called by the Chairperson of the Board, the Chief Executive Officer, the Lead Independent Director or a majority of the members of the Board then in office and may be held at any time, date or place, if any, within or without the State of Delaware, as the person or persons calling the meeting shall fix. Notice of the time, date and place, if any, of such meeting shall be given, orally, in writing or by electronic transmission (including electronic mail), by the person or persons calling the meeting to all directors at least four (4) days before the meeting if the notice is mailed, or at least twenty-four (24) hours before the meeting if such notice is given by telephone, hand delivery, facsimile, electronic mail or other means of electronic transmission; *provided, however*, that if, under the circumstances, the Chairperson of the Board, the Lead Independent Director or the Chief Executive Officer calling a special meeting deems that more immediate action is necessary or appropriate, notice may be delivered on the day of such special meeting. Unless otherwise indicated in the notice, any and all business may be transacted at a special meeting.

Section 2.5 Remote Meetings Permitted. Members of the Board, or any committee of the Board, may participate in a meeting of the Board or such committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to conference telephone or other communications equipment shall constitute presence in person at such meeting.

Section 2.6 Quorum; Vote Required for Action. At all meetings of the Board, directors representing a majority of the Whole Board shall constitute a quorum for the transaction of business. If a quorum shall fail to attend any meeting, a majority of those present may adjourn the meeting to another place, date or time. Except as otherwise provided herein or in the Certificate of Incorporation, or required by law, the vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board.

Section 2.7 Organization. Meetings of the Board shall be presided over by (a) the Chairperson of the Board, or (b) in the absence of such person, the Lead Independent Director, or (c) in such person's absence, by the Chief Executive Officer (if also a director), or (d) in such person's absence, by a chairperson chosen by the Board at the meeting. Unless otherwise determined by the Board, the Secretary shall act as secretary of the meeting, but in such person's absence the chairperson of the meeting may appoint any person to act as secretary of the meeting.

Section 2.8 Unanimous Action by Directors in Lieu of a Meeting. Any action required or permitted to be taken at any meeting of the Board, or of any committee thereof, may be taken without a meeting if all members of the Board or such committee, as the case may be, consent thereto in writing or by electronic transmission, and any consent may be documented, signed and delivered in any manner permitted by Section 116 of the DGCL. After an action is taken, the consent or consents relating thereto shall be filed with the minutes of proceedings of the Board or committee, as applicable. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 2.9 Powers. Except as otherwise provided by the Certificate of Incorporation or the DGCL, the business and affairs of the Corporation shall be managed by or under the direction of the Board.

Section 2.10 Compensation of Directors. Members of the Board, as such, may receive, pursuant to a duly approved director compensation policy or other resolution of the Board or duly authorized committee of the Board, fees and other compensation for their services as directors, including without limitation their services as members of committees of the Board.

ARTICLE III COMMITTEES

Section 3.1 Committees. The Board may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of the committee, the member or members thereof present at any meeting of such committee who are not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in place of any such absent or disqualified member. Any such committee, to the extent provided in a resolution of the Board, shall have and may exercise all the powers and authority of the Board in the management of the business and affairs of the Corporation and may authorize the seal of the Corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority in reference to the following matters: (a) approving, adopting, or recommending to the stockholders any action or matter (other than the election or removal of members of the Board) expressly required by the DGCL to be submitted to stockholders for approval or (b) adopting, amending or repealing any bylaw of the Corporation.

Section 3.2 Committee Rules. Each committee shall keep records of its proceedings and make such reports as the Board may from time to time request. Unless the Board otherwise provides, each committee designated by the Board may make, alter and repeal rules for the conduct of its business. In the absence of such rules, each committee shall conduct its business in the same manner as the Board conducts its business pursuant to Article II of these Bylaws. Except as otherwise provided in the Certificate of Incorporation, these Bylaws or the resolution of the Board designating the committee, any committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and may delegate to any such subcommittee any or all of the powers and authority of the committee.

**ARTICLE IV
OFFICERS; CHAIRPERSON; LEAD INDEPENDENT DIRECTOR**

Section 4.1 Generally. The officers of the Corporation shall consist of a Chief Executive Officer, a Chief Financial Officer, a Secretary and a Treasurer and may consist of such other officers as may from time to time be appointed by the Board. All officers shall be elected by the Board; provided, however, that the Board may empower the Chief Executive Officer of the Corporation to appoint any officer other than the Chief Executive Officer, the Chief Financial Officer, the Secretary or the Treasurer. Except as otherwise provided by law, by the Certificate of Incorporation or these Bylaws, each officer shall hold office until such officer's successor is duly elected and qualified or until such officer's earlier resignation, death, disqualification or removal. Any number of offices may be held by the same person. Any officer may resign by delivering a resignation in writing or by electronic transmission to the Corporation at its principal office or to the Chairperson of the Board, the Chief Executive Officer, or the Secretary. Such resignation shall be effective upon delivery unless it is specified to be effective at some later time or upon the happening of some later event. Any vacancy occurring in any office of the Corporation by death, resignation, removal or otherwise may be filled by the Board and the Board may, in its discretion, leave unfilled, for such period as it may determine, any offices. Each such successor shall hold office for the unexpired term of such officer's predecessor and until a successor is duly elected and qualified or until such officer's earlier resignation, death, disqualification or removal.

Section 4.2 Chief Executive Officer. Except as may be otherwise determined by the Board from time to time and subject to the provisions of these Bylaws, the powers and duties of the Chief Executive Officer of the Corporation are:

- (a) to act as the general manager and, subject to the control of the Board, to have general supervision, direction and control of the business and affairs of the Corporation;
- (b) subject to Section 1.6 of these Bylaws, to preside at all meetings of the stockholders;
- (c) subject to Section 1.2 of these Bylaws, to call special meetings of the stockholders to be held at such times and, subject to the limitations prescribed by law or by these Bylaws, at such places as he or she shall deem proper;
- (d) to affix the signature of the Corporation to all deeds, conveyances, mortgages, guarantees, leases, obligations, bonds, certificates and other papers and instruments in writing which have been authorized by the Board or which, in the judgment of the Chief Executive Officer, should be executed on behalf of the Corporation; to sign certificates for shares of stock of the Corporation (if any); and, subject to the direction of the Board, to have general charge of the property of the Corporation and to supervise and control all officers, agents and employees of the Corporation; and
- (e) all other duties and powers that are commonly incident to the office of the Chief Executive Officer.

Section 4.3 Chairperson of the Board. Subject to the provisions of Section 2.7 of these Bylaws, the Chairperson of the Board shall have the power to preside at all meetings of the Board and shall have such other powers and duties as provided in these Bylaws and as the Board may from time to time prescribe. The Chairperson of the Board may or may not be an officer of the Corporation.

Section 4.4 Lead Independent Director. The Board may, in its discretion, elect a lead independent director from among its members that are Independent Directors (as defined below) (such director, the “***Lead Independent Director***”). The Lead Independent Director shall preside at all meetings at which the Chairperson of the Board is not present and shall exercise such other powers and duties as may from time to time be assigned to him or her by the Board or as prescribed by these Bylaws. For purposes of these Bylaws, “***Independent Director***” has the meaning ascribed to such term under the rules of the exchange upon which the Corporation’s Class A Common Stock is primarily traded.

Section 4.5 President. Unless otherwise determined by the Board, the person holding the office of Chief Executive Officer shall be the President of the Corporation to the extent such position is deemed necessary or advisable with respect to any corporate requirements or similar governance matters. Subject to the provisions of these Bylaws and as otherwise may be determined by the Board, the President shall perform all duties and have all powers that are commonly incident to the office of President or that are delegated to the President by the Board.

Section 4.6 Chief Financial Officer. Subject to the direction of the Board and the Chief Executive Officer, the Chief Financial Officer shall perform all duties and have all powers that are commonly incident to the office of Chief Financial Officer, or as the Board or the Chief Executive Officer may from time to time prescribe.

Section 4.7 Treasurer. The person holding the office of Chief Financial Officer shall be the Treasurer of the Corporation unless the Board shall have designated another person as the Treasurer of the Corporation. The person holding the office of Treasurer shall have custody of all monies and securities of the Corporation. The Treasurer shall make such disbursements of the funds of the Corporation as are authorized and shall render from time to time an account of all such transactions. The Treasurer shall also perform such other duties and have such other powers as are commonly incident to the office of Treasurer, or as the Board, the Chief Executive Officer or the Chief Financial Officer may from time to time prescribe.

Section 4.8 Vice President. Each Vice President shall have all such powers and duties as are commonly incident to the office of Vice President or that are delegated to him or her by the Board or the Chief Executive Officer.

Section 4.9 Secretary. The Secretary shall issue or cause to be issued all authorized notices for, and shall keep, or cause to be kept, minutes of all meetings of the stockholders and the Board. The Secretary shall have charge of the corporate minute books and similar records and shall perform such other duties and have such other powers as are commonly incident to the office of Secretary, or as the Board or the Chief Executive Officer may from time to time prescribe.

Section 4.10 Delegation of Authority. The Board may from time to time delegate the powers or duties of any officer of the Corporation to any other officers or agents of the Corporation, notwithstanding any provision hereof.

Section 4.11 Removal. Any officer of the Corporation shall serve at the pleasure of the Board and may be removed at any time, with or without cause, by the Board; provided that if the Board has empowered the Chief Executive Officer to appoint any officer of the Corporation, then such officer may also be removed by the Chief Executive Officer. Such removal shall be without prejudice to the contractual rights of such officer, if any, with the Corporation.

Section 4.12 Voting Shares in Other Business Entities. The Chairperson, the Chief Executive Officer, the Chief Financial Officer, the Secretary, or any other person authorized by the Board may vote, and otherwise exercise on behalf of the Corporation any and all rights and powers incident to the ownership of, any and all shares of stock or other equity interests held by the Corporation in any other corporation or other business entity. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by the person having such authority.

Section 4.13 Execution of Corporate Contracts and Instruments. Except as otherwise determined by the Board or otherwise provided in these Bylaws, the Chief Executive Officer, Chief Financial Officer, Secretary and General Counsel, and any other officers, employees or agents of the Corporation designated by the Board or Chief Executive Officer, or other officers, employees or agents of the Corporation specifically delegated authority by the foregoing authorized persons, shall have power to enter into any contract or execute any instrument in the name of and on behalf of the Corporation. Such delegation may be by resolution or otherwise and the authority granted shall be general or confined to specific matters. In the absence of such designation referred to above, the officers of the Corporation shall have such power to the extent incident to the normal performance of their duties.

ARTICLE V STOCK

Section 5.1 Certificates; Uncertificated Shares. The shares of capital stock of the Corporation shall be uncertificated shares (and the Board's adoption of these Bylaws shall constitute a resolution of the Board that the shares of capital stock of the Corporation shall be uncertificated shares); provided, however, that the resolution of the Board that the shares of capital stock of the Corporation shall be uncertificated shares shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation (or the transfer agent or registrar, as the case may be). Notwithstanding the foregoing, the Board may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be certificated shares. Every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of the Corporation by, any two authorized officers of the Corporation (it being understood that each of the Chairperson of the Board, the Vice-Chairperson of the Board, the Chief Executive Officer, the President, any Vice President, the Treasurer, any Assistant Treasurer, the Secretary, and any Assistant Secretary shall be an authorized officer for such purpose), representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were an officer, transfer agent or registrar at the date of issue.

Section 5.2 Lost, Stolen or Destroyed Stock Certificates; Issuance of New Certificates or Uncertificated Shares. The Corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate previously issued by it, alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed, and the Corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to agree to indemnify the Corporation and/or to give the Corporation a bond sufficient to indemnify it, against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

Section 5.3 Other Regulations. Subject to applicable law, the Certificate of Incorporation and these Bylaws, the issue, transfer, conversion and registration of shares represented by certificates and of uncertificated shares shall be governed by such other regulations as the Board may establish.

ARTICLE VI INDEMNIFICATION

Section 6.1 Indemnification of Officers and Directors. Each person who was or is made a party to, or is threatened to be made a party to, or is involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, legislative or any other type whatsoever (a "***Proceeding***"), by reason of the fact that such person (or a person of whom such person is the legal representative), is or was a director or officer of the Corporation or, while serving as a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee, agent or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans (for purposes of this Article VI, an "***Indemnitee***"), shall be indemnified and held harmless by the Corporation to the fullest extent permitted by the DGCL as the same exists or may hereafter be amended, against all expenses, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes and penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such Indemnitee in connection therewith, provided such Indemnitee acted in good faith and in a manner that the Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal Proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful; provided that to the extent a present or former director or officer has been successful on the merits or otherwise in defense of any Proceeding or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorney's fees) actually and reasonably incurred by such person in connection therewith without regard to whether such Indemnitee met the standard of conduct otherwise necessary to demonstrate an entitlement to indemnification. Such indemnification shall continue as to an Indemnitee who has ceased to be a director or officer of the Corporation and shall inure to the benefit of such Indemnitees' heirs, executors and administrators. Notwithstanding the foregoing, subject to Section 6.5 of these Bylaws, the Corporation shall indemnify any such Indemnitee seeking indemnity in connection with a Proceeding (or part thereof) initiated by such Indemnitee only if such Proceeding (or part thereof) was authorized by the Board or such indemnification is authorized by an agreement approved by the Board.

Section 6.2 Advance of Expenses. The Corporation shall to the fullest extent permitted by applicable law pay all expenses (including attorneys' fees) incurred by an Indemnitee in defending any Proceeding in advance of its final disposition; *provided, however,* that the advancement of such expenses shall be made only upon delivery to the Corporation of an undertaking, by or on behalf of such Indemnitee, to repay such amounts if it shall ultimately be determined that such Indemnitee is not entitled to be indemnified under this Article VI or otherwise.

Section 6.3 Non-Exclusivity of Rights. The rights conferred on any person in this Article VI shall not be exclusive of any other right that such person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, agreement, vote or consent of stockholders or disinterested directors, or otherwise. Additionally, nothing in this Article VI shall limit the ability of the Corporation, in its discretion, to indemnify or advance expenses to persons whom the Corporation is not obligated to indemnify or advance expenses pursuant to this Article VI.

Section 6.4 Indemnification Contracts. The Board is authorized to cause the Corporation to enter into indemnification contracts with any director, officer, employee or agent of the Corporation, or any person serving at the request of the Corporation as a director, officer, employee, agent or trustee of another corporation, partnership, joint venture, trust or other enterprise, including employee benefit plans, providing indemnification or advancement rights to such person. Such rights may be greater than those provided in this Article VI.

Section 6.5 Right of Indemnitee to Bring Suit. The following shall apply to the extent not in conflict with any indemnification contract provided for in Section 6.4 of these Bylaws.

6.5.1 Right to Bring Suit. If a claim under Section 6.1 or 6.2 of these Bylaws is not paid in full by the Corporation within sixty (60) days after a written claim has been received by the Corporation, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the Indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Indemnitee shall be entitled to be paid, to the fullest extent permitted by law, the expense of prosecuting or defending such suit. In any suit brought by the Indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the Indemnitee to enforce a right to an advancement of expenses) it shall be a defense that the Indemnitee has not met any applicable standard of conduct which makes it permissible under the DGCL (or other applicable law) for the Corporation to indemnify the Indemnitee for the amount claimed.

6.5.2 Effect of Determination. The absence of a determination prior to the commencement of such suit that indemnification of the Indemnitee is proper in the circumstances because the Indemnitee has met the applicable standard of conduct set forth in applicable law shall not create a presumption that the Indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the Indemnitee, be a defense to such suit.

6.5.3 **Burden of Proof.** In any suit brought by the Indemnitee to enforce a right to indemnification or to an advancement of expenses hereunder, or brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the Indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Article VI, or otherwise, shall be on the Corporation.

Section 6.6 Nature of Rights. The rights conferred upon Indemnitees in this Article VI shall be contract rights and such rights shall continue as to an Indemnitee who has ceased to be a director or officer and shall inure to the benefit of the Indemnitee's heirs, executors and administrators. Any amendment, repeal or modification of any provision of this Article VI that adversely affects any right of an Indemnitee or an Indemnitee's successors shall be prospective only, and shall not adversely affect any right or protection conferred on a person pursuant to this Article VI with respect to any Proceeding involving any occurrence or alleged occurrence of any action or omission to act that took place prior to such amendment, repeal or modification. Any reference to an officer of the Corporation in this Article VI shall be deemed to refer exclusively to the Chief Executive Officer, President, Treasurer, Chief Financial Officer, and Secretary of the Corporation appointed pursuant to Article IV of these Bylaws, and to any Vice President, Assistant Secretary, Assistant Treasurer or other officer of the Corporation appointed by the Board of Directors or by the Chief Executive Officer pursuant to Article IV of these Bylaws, and any reference to an officer of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be deemed to refer exclusively to an officer appointed by the board of directors or equivalent governing body of such other entity pursuant to the certificate of incorporation and bylaws or equivalent organizational documents of such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise. The fact that any person who is or was an employee of the Corporation or an employee of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, but not an officer thereof as described in the preceding sentence, has been given or has used the title of "Vice President" or any other title that could be construed to suggest or imply that such person is or may be such an officer of the Corporation or of such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall not result in such person being constituted as, or being deemed to be, such an officer of the Corporation or of such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise for purposes of this Article VI.

Section 6.7 Insurance. The Corporation may purchase and maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

ARTICLE VII NOTICES

Section 7.1 Notice.

7.1.1 **Form and Delivery.** Except as otherwise specifically required in these Bylaws (including, without limitation, Section 7.1.2 of these Bylaws) or by applicable law, all notices required to be given pursuant to these Bylaws may (a) in every instance in connection with

any delivery to a member of the Board, be effectively given by hand delivery (including use of a delivery service), by depositing such notice in the mail, postage prepaid, or by sending such notice by overnight express courier, facsimile, electronic mail or other form of electronic transmission and (b) be effectively delivered to a stockholder when given by hand delivery, by depositing such notice in the mail, postage prepaid, or by courier service or electronic mail in the manner provided in Section 232 of the DGCL or, if specifically consented to by the stockholder as described in Section 7.1.2 of these Bylaws, by sending such notice by a form of electronic transmission other than electronic mail in the manner prescribed by Section 232 of the DGCL. Any such notice shall be addressed to the person to whom notice is to be given at such person's address as it appears on the records of the Corporation. The notice shall be deemed given (a) in the case of hand delivery, when received by the person to whom notice is to be given or by any person accepting such notice on behalf of such person, (b) in the case of delivery by mail, upon deposit in the mail, postage prepaid, (c) in (i) the case of delivery by overnight express courier to a director, when dispatched or (ii) the case of delivery by courier service to a stockholder, the earlier of when the notice is received or left at such stockholder's address, and (d) in (i) the case of delivery by electronic mail, when directed to the director's or stockholder's electronic mail address unless, in the case of a stockholder, the stockholder has notified the corporation in writing or by electronic transmission of an objection to receiving notice by electronic mail or such notice is prohibited by the last sentence of Section 7.1.2 of these Bylaws or (ii) the case of delivery via facsimile or other form of electronic transmission (other than electronic mail) at the time provided in Section 7.1.2 of these Bylaws.

7.1.2 Electronic Transmission. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the Corporation under any provision of the DGCL, the Certificate of Incorporation, or these Bylaws shall be effective if given by a form of electronic transmission (other than electronic mail) consented to by the stockholder to whom the notice is given in accordance with Section 232 of the DGCL. Notice given pursuant to this Section 7.1.2 shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of such posting and the giving of such separate notice; and (iii) if by any other form of electronic transmission (other than electronic mail), when directed to the stockholder. Notwithstanding the foregoing, a notice may not be given to stockholders by an electronic transmission from and after the time that (a) the Corporation is unable to deliver by such electronic transmission two (2) consecutive notices given by the Corporation, (b) such inability becomes known to the Secretary or an Assistant Secretary or to the transfer agent, or other person responsible for the giving of notice; provided, however, the inadvertent failure to discover such inability shall not invalidate any meeting or other action.

7.1.3 Affidavit of Giving Notice. An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the Corporation that the notice has been given in writing or by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

Section 7.2 Waiver of Notice. Whenever notice is required to be given under any provision of the DGCL, the Certificate of Incorporation or these Bylaws, a written waiver of notice, signed by the person entitled to notice, or waiver by electronic transmission by such person, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any waiver of notice.

ARTICLE VIII MISCELLANEOUS

Section 8.1 Fiscal Year. The fiscal year of the Corporation shall be the calendar year, unless otherwise determined by resolution of the Board.

Section 8.2 Seal. The Board may provide for a corporate seal, which may have the name of the Corporation inscribed thereon and shall otherwise be in such form as may be approved from time to time by the Board.

Section 8.3 Form of Records. Any records administered by or on behalf of the Corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be kept on or by means of, or be in the form of any other information storage device, method or one or more electronic networks or databases (including one or more distributed electronic networks or databases), electronic or otherwise, provided that the records so kept can be converted into clearly legible paper form within a reasonable time and otherwise comply with the DGCL. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to any provision of the DGCL.

Section 8.4 Certificate of Incorporation Governs. In the event of any conflict between the provisions of the Certificate of Incorporation and these Bylaws, the provisions of the Certificate of Incorporation shall govern.

Section 8.5 Severability. If any provision of these Bylaws shall be held to be invalid, illegal, unenforceable or in conflict with the provisions of the Certificate of Incorporation, then such provision shall nonetheless be enforced to the maximum extent possible consistent with such holding and the remaining provisions of these Bylaws (including without limitation, all portions of any section of these Bylaws containing any such provision held to be invalid, illegal, unenforceable or in conflict with the Certificate of Incorporation, that are not themselves invalid, illegal, unenforceable or in conflict with the Certificate of Incorporation) shall remain in full force and effect.

Section 8.6 Time Periods. In applying any provision of these Bylaws which requires that an act be done or not be done a specified number of days prior to an event or that an act be done during a period of a specified number of days prior to an event, unless otherwise specifically provided, calendar days shall be used, the day of the doing of the act shall be excluded, and the day of the event shall be included.

**ARTICLE IX
AMENDMENT**

Subject to the terms of the Certificate of Incorporation and applicable law, these Bylaws may be altered, amended or repealed, and new bylaws may be adopted, by the Board or the stockholders.

**CERTIFICATION OF AMENDED AND RESTATED BYLAWS
OF
BILLIONTOONE, INC.**

(a Delaware corporation)

I, _____ certify that I am Secretary of BillionToOne, Inc., a Delaware corporation (the “*Corporation*”), that I am duly authorized to make and deliver this certification, that the attached Bylaws are a true and complete copy of the Amended and Restated Bylaws of the Corporation in effect as of the date of this certificate.

Dated: _____, 2025

Secretary

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

This AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (the "Agreement") is made and entered into as of May 14, 2024, by and among **BILLIONTOONE, INC.**, a Delaware corporation (the "Company"), and the investors listed on Schedule A hereto, each of which is herein referred to as an "Investor" and collectively as the "Investors."

RECITALS

WHEREAS, certain of the Investors (the "Existing Investors") hold shares of the Company's Series A-1 Preferred Stock, par value \$0.00001 per share, Series A-2 Preferred Stock, par value \$0.00001 per share, Series A-3 Preferred Stock, par value \$0.0001 per share, Series A-4 Preferred Stock, par value \$0.00001 per share, Series A-5 Preferred Stock, par value \$0.00001 per share, and Series A-6 Preferred Stock, par value \$0.00001 per share (collectively, the "Series A Preferred Stock"), Series B-1 Preferred Stock, par value \$0.00001 per share, and Series B-2 Preferred Stock, par value \$0.00001 per share (collectively, the "Series B Preferred Stock"), Series C Preferred Stock, par value \$0.00001 per share (the "Series C Preferred Stock") and/or shares of Common Stock issued upon conversion thereof and possess registration rights, information rights, rights of first offer and other rights pursuant to that certain Amended and Restated Investors' Rights Agreement dated as of March 16, 2022 by and among the Company, certain holders of Common Stock, par value \$0.00001 per share (the "Common Stock"), and such Existing Investors (the "Prior Agreement");

WHEREAS, the Prior Agreement may be amended, and any provision therein waived, with the consent of the Company, and the holders of at least a majority of the outstanding Registrable Securities (as such term is defined in the Prior Agreement);

WHEREAS, certain of the Existing Investors as holders of at least a majority of the outstanding Registrable Securities (as such term is defined in the Prior Agreement) of the Company desire to amend and restate the Prior Agreement and to accept the rights created pursuant hereto in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain Investors are parties to that certain Preferred Stock Purchase Agreement of even date herewith by and among the Company and certain of the Investors (the "Purchase Agreement"), which provides that as a condition to the closing of the sale of the Series D Preferred Stock, par value \$0.00001 per share (the "Series D Preferred Stock") and Series C-1 Preferred Stock, par value \$0.00001 per share (the "Series C-1 Preferred Stock") and, together with the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and the Series D Preferred Stock, the "Preferred Stock"), this Agreement must be executed and delivered by such Investors, Existing Investors holding at a majority of the outstanding Registrable Securities (as such term is defined in the Prior Agreement) of the Company and the Company.

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth herein, the Company and the Existing Investors hereby agree that the Prior Agreement shall be amended and replaced in its entirety by this Agreement, and the parties hereto further agree as follows:

1. Definitions. For purposes of this Agreement:

- (a) The term “Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.
- (b) The term “Affiliate” means, with respect to any Person, any other Person who or which, directly or indirectly, controls, is controlled by, or is under common control with such specified Person, including, without limitation, any general partner, officer, director or manager of such Person and any venture capital, private equity or other investment fund now or hereafter existing that is controlled by one or more general partners or managing members of, or is under common investment management with, or shares the same investment manager with, such Person.
- (c) The term “Board” means the Company’s Board of Directors, as constituted from time to time.
- (d) The term “CFIUS” means the Committee on Foreign Investment in the United States.
- (e) The term “CFIUS Filing” means a Mandatory Declaration or CFIUS Notice.
- (f) The term “CFIUS Notice” means a notification of a Potential CFIUS Transaction submitted to CFIUS pursuant to the DPA.
- (g) The term “CFIUS Approval” means, following a CFIUS Filing with respect to a Potential CFIUS Transaction, the applicable Investor and the Company shall have received written notice from CFIUS stating that: (i) CFIUS has concluded that the Potential CFIUS Transaction is not a “covered transaction” and not subject to review under the DPA; (ii) CFIUS has completed an assessment of the Mandatory Declaration or a review or investigation of the Potential CFIUS Transaction based on a CFIUS Notice and has concluded all action under the DPA; or (iii) CFIUS has sent a report to the President of the United States (the “President”) requesting the President’s decision and either (A) the President has announced a decision not to take any action to suspend, prohibit or place any limitations on the Potential CFIUS Transaction or (B) the President has not announced a decision to take any action to suspend or prohibit the Potential CFIUS Transaction within fifteen (15) days after the earlier of (x) the date upon which CFIUS has completed its investigation of the Potential CFIUS Transaction or (y) the date on which CFIUS has referred the Potential CFIUS Transaction to the President for action.
- (h) The term “Competitor” means a Person engaged, directly or indirectly (including, without limitation, through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in the business of the Company, but shall not include any financial investment firm or collective investment vehicle that, together with its Affiliates, holds less than ten percent (10)% of the outstanding equity of any Competitor and does not, nor do any of its Affiliates, have, or have the right to designate, any members of the Board of Directors of any Competitor.

- (i) The term “Direct Listing” shall have the meaning given to such term in the Restated Certificate.
- (j) The term “DPA” means Section 721 of the Defense Production Act of 1950, as amended, and any interim or final rules promulgated thereunder.
- (k) The term “Excluded Registration” means (i) a registration relating solely to the sale of securities of participants in a Company stock plan, (ii) a registration relating to a corporate reorganization or transaction under Rule 145 of the Act, (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities, or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.
- (l) The term “Family Member” means a spouse, child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, of a natural person referred to herein.
- (m) The term “Form S-3” means such form under the Act as in effect on the date hereof or any registration form under the Act subsequently adopted by the SEC that permits inclusion or incorporation of substantial information by reference to other documents filed by the Company with the SEC.
- (n) The term “Free Writing Prospectus” means a free-writing prospectus, as defined in Rule 405.
- (o) The term “Holder” means any Person owning or having the right to acquire Registrable Securities or any assignee thereof in accordance with Section 2.10 of this Agreement.
- (p) The term “Initial Offering” means the Company’s first Offering.
- (q) The term “Liquidation Event” shall have the meaning given to such term in the Restated Certificate.
- (r) The term “Mandatory Declaration” means a declaration of a Potential CFIUS Transaction filed with CFIUS pursuant to the DPA.
- (s) The term “1934 Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.
- (t) The term “Offering” means the Company’s firm commitment underwritten public offering of its Common Stock or other equity securities to the public under the Act.
- (u) The term “Potential CFIUS Transaction” means any subsequent offering or issuance of Shares pursuant to Section 3.4.

- (v) The term “Person” shall mean any individual, corporation, partnership, trust, limited liability company, association or other entity.
- (w) The term “Preferred Director” shall have the meaning given to such term in the Restated Certificate.
- (x) The terms “register,” “registered,” and “registration” refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Act, and the declaration or ordering of effectiveness of such registration statement or document.
- (y) The term “Registrable Securities” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; and (ii) Common Stock, or Common Stock issuable upon the conversion and/or exercise of any other securities of the Company, acquired by Investors after the date hereof. In addition, the number of shares of Registrable Securities outstanding shall equal the aggregate of the number of shares of Common Stock outstanding that are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities that are, Registrable Securities.
- (z) The term “Restated Certificate” shall mean the Company’s Restated Certificate of Incorporation, as amended and/or restated from time to time.
- (aa) The term “Restricted Securities” shall mean the securities of the Company required to be notated with the legend set forth in Subsection 2.13(b) hereof.
- (bb) The term “Rule 144” shall mean Rule 144 under the Act.
- (cc) The term “Rule 144(b)(1)(i)” shall mean subsection (b)(1)(i) of Rule 144 under the Act as it applies to Persons who have held shares for more than one (1) year.
- (dd) The term “Rule 405” shall mean Rule 405 under the Act.
- (ee) The term “SEC” shall mean the Securities and Exchange Commission.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Request for Registration.

(a) Subject to the conditions of this Section 2.1, if the Company shall receive at any time after six (6) months after the effective date of the Initial Offering or a Direct Listing, a written request from the Holders of a majority of the Registrable Securities then outstanding (for purposes of this Section 2.1, the “Initiating Holders”) that the Company file a registration statement under the Act covering the registration of Registrable Securities with an anticipated aggregate offering price of at least \$20,000,000, then the Company shall, within twenty (20) days of the receipt thereof, give written notice of such request to all Holders, and subject to the limitations of this Section 2.1, use its commercially reasonable efforts to effect, as soon as practicable, the registration under the Act of all Registrable Securities that the Holders request to be registered in a written request received by the Company within twenty (20) days of the mailing of the Company’s notice pursuant to this Section 2.1(a).

(b) If the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 2.1, and the Company shall include such information in the written notice referred to in Section 2.1(a). In such event the right of any Holder to include its Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by a majority in interest of the Initiating Holders and such Holder) to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company (which underwriter or underwriters shall be reasonably acceptable to those Initiating Holders holding a majority of the Registrable Securities then held by all Initiating Holders). Notwithstanding any other provision of this Section 2.1, if the underwriter advises the Company that marketing factors require a limitation on the number of securities underwritten (including Registrable Securities), then the Company shall so advise all Holders of Registrable Securities that would otherwise be underwritten pursuant hereto, and the number of shares that may be included in the underwriting shall be allocated to the Holders of such Registrable Securities pro rata based on the number of Registrable Securities held by all such Holders (including the Initiating Holders). In no event shall any Registrable Securities be excluded from such underwriting unless all other securities are first excluded. Any Registrable Securities excluded or withdrawn from such underwriting shall be withdrawn from the registration. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(c) Notwithstanding the foregoing, the Company shall not be required to effect a registration pursuant to this Section 2.1:

(i) in any particular jurisdiction in which the Company would be required to execute a general consent to service of process in effecting such registration, unless the Company is already subject to service in such jurisdiction and except as may be required under the Act; or

(ii) after the Company has effected two (2) registrations pursuant to this Section 2.1, and such registrations have been declared or ordered effective; or

(iii) during the period starting with the date sixty (60) days prior to the Company's good faith estimate of the date of the filing of and ending on a date one hundred eighty (180) days following the effective date of a Company-initiated registration subject to Section 2.2 below, provided that the Company is actively employing in good faith its commercially reasonable efforts to cause such registration statement to become effective; or

(iv) if the Initiating Holders propose to dispose of Registrable Securities that may be registered on Form S-3 pursuant to Section 2.3 hereof; or

(v) if the Company shall furnish to Holders requesting a registration statement pursuant to this Section 2.1 a certificate signed by the Company's Chief Executive Officer or Chairman of the Board of Directors stating that in the good faith judgment of the Board, it would be seriously detrimental to the Company and its stockholders for such registration statement to be effected or remain effective at such time, in which event the Company shall have the right to defer such filing for a period of not more than one hundred twenty (120) days after receipt of the request of the Initiating Holders; provided that such right shall be exercised by the Company not more than once in any twelve (12) month period; and provided further that the Company shall not register any securities for the account of itself or any other stockholder during such one hundred twenty (120) day period (other than an Excluded Registration).

(d) For purposes of Subsection 2.1(c)(ii), a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Subsection 2.1(b), fewer than twenty-five percent (25%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.2 Company Registration.

(a) If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for stockholders other than the Holders) any of its stock or other securities under the Act in connection with the public offering of such securities solely for cash (other than (i) a registration relating to a demand pursuant to Section 2.1 of this Agreement or (ii) an Excluded Registration), the Company shall, at such time, promptly give each Holder written notice of such registration. Upon the written request of each Holder given within twenty (20) days after mailing of such notice by the Company in accordance with Section 4.5 of this Agreement, the Company shall, subject to the provisions of Section 2.2(c) of this Agreement, use its commercially reasonable efforts to cause to be registered under the Act all of the Registrable Securities that each such Holder requests to be registered.

(b) Right to Terminate Registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 prior to the effectiveness of such registration whether or not any Holder has elected to include securities in such registration. The expenses of such withdrawn registration shall be borne by the Company in accordance with Section 2.6 hereof.

(c) Underwriting Requirements. In connection with any offering involving an underwriting of shares of the Company's capital stock, the Company shall not be required under this Section 2.2 to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by the Company (or by other Persons entitled to select the underwriters) and enter into an underwriting agreement in customary form with such underwriters, and then only in such quantity as the underwriters determine in their sole discretion will not jeopardize the success of the offering by the Company. If the total amount of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the amount of securities sold other than by the Company that the underwriters determine in their sole discretion is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, that the underwriters determine in their sole discretion will not jeopardize the success of the offering. In the event that the underwriters determine that less than all of the Registrable Securities requested to be registered

can be included in such offering, then the Registrable Securities that are included in such offering shall be apportioned pro rata among the selling Holders based on the number of Registrable Securities held by all selling Holders or in such other proportions as shall mutually be agreed to by all such selling Holders. Notwithstanding the foregoing, in no event shall (i) any Registrable Securities be excluded from such offering unless all other stockholders' securities have been first excluded from the offering and (ii) the amount of securities of the selling Holders included in the offering be reduced below twenty percent (20%) of the total amount of securities included in such offering, unless such offering is the Initial Offering, in which case the selling Holders may be excluded if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the preceding sentence concerning apportionment, for any selling stockholder that is a Holder of Registrable Securities and that is a venture capital fund, partnership or corporation, the affiliated venture capital funds, partners, members, retired partners and stockholders of such Holder, or the estates and Family Members of any such partners, members and retired partners and any trusts for the benefit of any of the foregoing Persons shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate amount of Registrable Securities owned by all such related entities and individuals. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

2.3 Form S-3 Registration. In case the Company shall receive from the Holders of at least thirty percent (30%) of the Registrable Securities (for purposes of this Section 2.3, the "S-3 Initiating Holders") a written request or requests that the Company effect a registration on Form S-3 and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company shall:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders; and

(b) use its commercially reasonable efforts to effect, as soon as practicable, such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holders joining in such request as are specified in a written request given within fifteen (15) days after receipt of such written notice from the Company; provided, however, that the Company shall not be obligated to effect any such registration, qualification or compliance, pursuant to this Section 2.3:

(i) if Form S-3 is not available for such offering by the Holders;

(ii) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public (net of any underwriters' discounts or commissions) of less than \$10,000,000;

(iii) if the Company shall furnish to all Holders requesting a registration statement pursuant to this Section 2.3 a certificate signed by the Company's Chief Executive Officer or Chairman of the Board of Directors stating that in the good faith judgment of the Board, it would be seriously detrimental to the Company and its stockholders for such registration statement to be effected at such time, in which event the Company shall have the right to defer such filing for a period of not more than ninety (90) days after receipt of the request of the S-3 Initiating Holders; provided that such right shall be exercised by the Company not more than once in any twelve (12) month period; and provided further that the Company shall not register any securities for the account of itself or any other stockholder during such ninety (90) day period (other than an Excluded Registration);

(iv) if the Company has, within the twelve (12) month period preceding the date of such request, already effected two (2) registrations on Form S-3 pursuant to this Section 2.3;

(v) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance;

(vi) if the Company, within thirty (30) days of receipt of the request of such S-3 Initiating Holders, gives notice of its bona fide intention to effect the filing of a registration statement with the SEC within one hundred twenty (120) days of receipt of such request (other than an Excluded Registration), (other than a registration specified in clause (iii) of the definition of Excluded Registration), provided that the Company is actively employing in good faith its commercially reasonable efforts to cause such registration statement to become effective; or

(vii) during the period starting with the date thirty (30) days prior to the Company's good faith estimate of the date of the filing of and ending on a date ninety (90) days following the effective date of a Company-initiated registration subject to Section 2.2 of this Agreement, provided that the Company is actively employing in good faith its commercially reasonable efforts to cause such registration statement to become effective.

(c) If the S-3 Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 2.3 and the Company shall include such information in the written notice referred to in Section 2.3(a). The provisions of Section 2.1(b) of this Agreement shall be applicable to such request (with the substitution of Section 2.3 for references to Section 2.1).

(d) Subject to the foregoing, the Company shall file a registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the S-3 Initiating Holders. Registrations effected pursuant to this Section 2.3 shall not be counted as requests for registration effected pursuant to Section 2.1 of this Agreement.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the Registration Statement has been completed; provided, however, that such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration;

(b) prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Act with respect to the disposition of all securities covered by such registration statement;

(c) furnish to the Holders such number of copies of a prospectus, including a preliminary prospectus and any Free Writing Prospectus, in conformity with the requirements of the Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering;

(f) notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus or Free Writing Prospectus (to the extent prepared by or on behalf of the Company) relating thereto is required to be delivered under the Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing, and, at the request of any such Holder, the Company will, as soon as reasonably practicable, file and furnish to all such Holders a supplement or amendment to such prospectus or Free Writing Prospectus (to the extent prepared by or on behalf of the Company) so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any fact necessary to make the statements therein not misleading in light of the circumstances under which they were made;

(g) cause all such Registrable Securities registered pursuant to this Section 2 to be listed on a national exchange or trading system and on each securities exchange and trading system on which similar securities issued by the Company are then listed; and

(h) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration.

Notwithstanding the provisions of this Section 2, the Company shall be entitled to postpone or suspend, for a reasonable period of time, the filing, effectiveness or use of, or trading under, any registration statement if the Company shall determine that any such filing or the sale of any securities pursuant to such registration statement would in the good faith judgment of the Board:

(i) materially impede, delay or interfere with any material pending or proposed financing, acquisition, corporate reorganization or other similar transaction involving the Company for which the Board has authorized negotiations;

(ii) materially and adversely impair the consummation of any pending or proposed material offering or sale of any class of securities by the Company; or

(iii) require disclosure of material nonpublic information that, if disclosed at such time, would be materially harmful to the interests of the Company and its stockholders; provided, however, that during any such period all executive officers and directors of the Company are also prohibited from selling securities of the Company (or any security of any of the Company's subsidiaries or Affiliates).

In the event of the suspension of effectiveness of any registration statement pursuant to this Section 2.4, the applicable time period during which such registration statement is to remain effective shall be extended by that number of days equal to the number of days the effectiveness of such registration statement was suspended.

2.5 Information from Holder. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications pursuant to Sections 2.1, and 2.2 and 2.3 of this Agreement, including, without limitation, all registration, filing and qualification fees, printers' and accounting fees, fees and disbursements of counsel for the Company and the reasonable fees and disbursements of one counsel for the selling Holders (not to exceed \$25,000) shall be borne by the Company. Notwithstanding the foregoing, the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 or Section 2.3 of this Agreement if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all participating Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration); provided, however, that if at the time of such withdrawal, the Holders have learned of a material adverse change in the condition, business or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness following disclosure by the Company of such material adverse change, then the Holders shall not be required to pay any of such expenses and shall retain their rights pursuant to Sections 2.1 and 2.3 of this Agreement

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. In the event any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder, the partners, members, officers, directors and stockholders of each Holder, legal counsel, accountants and investment managers for each Holder, any underwriter (as defined in the Act) for such Holder and each Person, if any, who controls such Holder or underwriter within the meaning of the Act or the 1934 Act, against any losses, claims, damages or liabilities (joint or several) to which they may become subject under the Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934 Act or any state securities laws, insofar as such losses, claims, damages, or liabilities (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively, a "Violation"): (i) any untrue or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus, final prospectus, or Free Writing Prospectus contained therein or any amendments or supplements thereto, any issuer information (as defined in Rule 433 of the Act) filed or required to be filed pursuant to Rule 433(d) under the Act or any other document incident to such registration prepared by or on behalf of the Company or used or referred to by the Company, (ii) the omission or alleged omission of a material fact required to be stated in such registration statement, or necessary to make the statements therein not misleading or (iii) any violation or alleged violation by the Company of the Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934 Act or any state securities laws, and the Company will reimburse each such Holder, underwriter, controlling Person or other aforementioned Person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, action or proceeding if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable in any such case for any such loss, claim, damage, liability, action or proceeding to the extent that it arises out of or is based upon a Violation that occurs in reliance upon, and in conformity with, written information furnished expressly for use in connection with such registration by any such Holder, underwriter, controlling Person or other aforementioned Person.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each Person, if any, who controls the Company within the meaning of the Act, legal counsel and accountants for the Company, any underwriter, any other

Holder selling securities in such registration statement and any controlling Person of any such underwriter or other Holder, against any losses, claims, damages or liabilities (joint or several) to which any of the foregoing Persons may become subject, under the Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934 Act or any state securities laws, insofar as such losses, claims, damages or liabilities (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will reimburse any Person intended to be indemnified pursuant to this Section 2.8(b) for any legal or other expenses reasonably incurred by such Person in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, action or proceeding if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and provided that in no event shall any indemnity under this Section 2.8(b) exceed the net proceeds from the offering received by such Holder, except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) for which a party may be entitled to indemnification, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, deliver to the indemnifying party a written notice of the commencement thereof and the indemnifying party shall have the right to participate in and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one (1) separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action or proceeding, if prejudicial to its ability to defend such action or proceeding, shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8 to the extent of such prejudice, but the omission to so deliver written notice to the indemnifying party will not relieve such indemnifying party of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) If the indemnification provided for in this Section 2.8 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage or expense referred to herein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and the indemnified party on the other hand in connection with the statements or omissions that resulted in such loss, liability, claim, damage or expense, as well as any other relevant equitable considerations; provided, however, that (i) no contribution by any Holder, when combined with

any amounts paid by such Holder pursuant to Section 2.8(b), shall exceed the net proceeds from the offering received by such Holder and (ii) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the net proceeds from the offering received by such Holder (net of any expenses paid by such Holder). The relative fault of the indemnifying party and the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) The obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 2 and otherwise.

2.9 Reports Under the 1934 Act. With a view to making available to the Holders the benefits of Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to:

(a) make and keep adequate current public information available, as those terms are understood and defined in Rule 144, at all times after the effective date of the Initial Offering or Direct Listing;

(b) file with the SEC in a timely manner all reports and other documents required of the Company under the Act and the 1934 Act; and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Act and the 1934 Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and (iii) such other information as may be reasonably requested to avail any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration or pursuant to such form.

2.10 Assignment of Registration Rights. The rights to cause the Company to register Registrable Securities pursuant to this Section 2 may be assigned (but only with all related obligations) by a Holder to a transferee or assignee of such securities that (a) is an Affiliate, subsidiary, parent, partner, limited partner, retired partner, member or stockholder of a Holder or (b) is a Holder's Family Member or trust for the benefit of an individual Holder or any of such Holder's Family Members, provided: (i) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; (ii) such transferee or assignee agrees in writing to be bound by and subject to the terms and conditions of this Agreement, including, without limitation, the provisions of Section 2.12 of this Agreement; and (iii) such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Act.

2.11 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders holding a majority of the Registrable Securities then held by all Holders, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder (a) to include any of such securities in any registration filed under Section 2.1, Section 2.2 or Section 2.3 of this Agreement, unless under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the amount of the Registrable Securities of the Holders that are included or (b) to demand registration of their securities; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Subsection 4.10.

2.12 "Market Stand-Off" Agreement.

(a) Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the Initial Offering and ending on the date specified by the Company and the managing underwriter, such period not to exceed one hundred eighty (180) days (i) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock held immediately prior to the effectiveness of the Registration Statement for the Initial Offering, or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing provisions of this Section 2.12 (i) shall apply only to the Initial Offering and (ii) shall not apply to (A) the sale of any shares to an underwriter pursuant to an underwriting agreement, or (B) the transfer of any shares to any trust for the direct or indirect benefit of a Holder or any Family Member of such Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided, further, that any such transfer shall not involve a disposition for value and (iii) shall only be applicable to the Holders if all officers, directors and greater than one percent (1%) stockholders of the Company enter into similar agreements. Notwithstanding the foregoing, the Company and the managing underwriter may extend the market stand-off period specified above solely to the extent necessary to accommodate regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, without limitation, the restrictions, if any, contained in FINRA Rule 2241 or any successor provisions or amendments thereto.

(b) The underwriters in connection with the Initial Offering are intended third-party beneficiaries of this Section 2.12 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in the Initial Offering that are consistent with this Section 2.12 or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the Registrable Securities of each Holder (and the shares or securities of every other Person subject to the foregoing restriction) until the end of such period. In the event that the Company or the managing underwriter waives or terminates any of the restrictions contained in this Section 2.12 or in a lock-up agreement with respect to the securities of any Holder, officer, director or greater than one-percent stockholder of the Company (in any such case, the “Released Securities”), the restrictions contained in this Section 2.12 and in any lock-up agreements executed by the Investors shall be waived or terminated, as applicable, to the same extent and with respect to the same percentage of securities of each Investor as the percentage of Released Securities represent with respect to the securities held by the applicable Holder, officer, director or greater than one-percent stockholder.

2.13 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge or transfer, except pursuant to the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Act. A transferring Holder will cause any proposed purchaser, pledgee or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions, and upon the conditions specified in, this Agreement. Notwithstanding the foregoing, the Company shall not require any transferee of shares pursuant to an effective registration statement or, following the Initial Offering, Rule 144 to be bound by the terms of this Agreement.

(b) Each certificate, instrument or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii) upon any stock split, stock dividend, recapitalization, merger, consolidation or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.13(c)) be notated with legends substantially in the following form:

“THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. SUCH SECURITIES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED PURSUANT TO A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SUCH ACT.”

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2.13. Before any proposed sale, pledge or transfer of any Restricted Securities, unless there is in effect a registration statement under the Act covering the proposed transaction or, following the Initial Offering, the transfer is made pursuant to Rule 144, the Holder thereof shall give notice to the Company of such Holder’s intention to effect such sale, pledge or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder’s expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Act; (ii) a “no action” letter from the SEC to the effect that the proposed sale, pledge or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge or transfer of the Restricted Securities may be effected without registration under the Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or “no action” letter (x) in any transaction in compliance with Rule 144 or pursuant to an effective registration statement; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration. Each certificate, instrument or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.13(b), except that such certificate, instrument or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Act.

2.14 Termination of Registration Rights. No Holder shall be entitled to exercise any right provided for in this Section 2: (a) after five (5) years following the consummation of the Initial Offering, (b) as to any Holder, such earlier time after the Initial Offering at which such Holder (i) can sell all shares held by it in compliance with Rule 144(b)(1)(i) or (ii) holds one percent (1%) or less of the Company’s outstanding Common Stock and all Registrable Securities held by such Holder (together with any Affiliate of the Holder with whom such Holder must aggregate its sales under Rule 144) can be sold in any three (3) month period without registration in compliance with Rule 144 or (c) after the consummation of a Liquidation Event.

3. Covenants of the Company.

3.1 Delivery of Financial Statements.

(a) The Company shall, upon request, deliver to each Investor (or transferee of an Investor) that, together with its Affiliates, holds at least 2,000,000 shares of Registrable Securities (as appropriately adjusted for any stock split, dividend, combination or other recapitalization) (a "Major Investor"), provided that (i) the Board, including at least one Preferred Director, has not reasonably determined that such Major Investor is a Competitor of the Company, (ii) subject to subclause (i) of this proviso, Four Rivers Partners IV, L.P. shall be deemed to be a Major Investor so long as such Investor, together with its Affiliates, holds at least 565,344 shares of Registrable Securities, (iii) subject to subclause (i) of this proviso, Adams Street 2022 Direct Growth Equity Fund LP shall be deemed a Major Investor so long as such Investor, together with its Affiliates, holds at least 1,000,247 shares of Registrable Securities, and (iv) subject to subclause (i) of this proviso, Wipro Enterprises Private Limited and its Affiliates including, but not limited to, Napean Trading and Investment Company (Singapore PTE. LTD.) (collectively, "Premji Invest") shall be deemed a Major Investor so long as such Investor, together with its Affiliates, holds at least 1,516,752 shares of Registrable Securities:

(i) as soon as practicable, but in any event within one hundred eighty (180) days after the end of each fiscal year of the Company, an audited income statement for such fiscal year, an audited balance sheet of the Company and statement of stockholders' equity as of the end of such year, and an audited statement of cash flows for such year, such year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles ("GAAP");

(ii) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, an unaudited income statement and statement of cash flows for such fiscal quarter and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (A) be subject to normal year-end audit adjustments and (B) not contain all notes thereto that may be required in accordance with GAAP);

(iii) upon request, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company; and

(iv) as soon as practicable, but in any event at least thirty (30) days prior to the end of each fiscal year, a budget and business plan for the next fiscal year, prepared on a monthly basis, including balance sheets, income statements and statements of cash flows for such months and, as soon as prepared, any other budgets or revised budgets prepared by the Company.

(b) such other information relating to the financial condition, business or corporate affairs of the Company as the Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this subsection (vi) or any other subsection of Section 3.1 to provide information that (A) it deems in good faith to be a trade secret or similar confidential information or (B) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel. If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

(c) Notwithstanding anything else in this Section 3.1 to the contrary, the Company may cease providing the information set forth in this Section 3.1 during the period starting with the date sixty (60) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Section 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective. Additionally, notwithstanding anything to the contrary set forth in this Agreement or any other agreement between the Company and any Investor(s), with the exception of performance-related financial information, no Investor shall have access to (i) any information developed by the Company that is not in the public domain and is necessary to design, fabricate, develop, test, produce, or manufacture the Company's genetic testing platform or (ii) any patient-related data.

3.2 Inspection. The Company shall permit each Major Investor, provided that the Board, including at least one Preferred Director, has not reasonably determined that such Major Investor is a Competitor of the Company, at such Major Investor's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Section 3.2 to provide access to any information that (a) it deems in good faith to be a trade secret or similar confidential information or (b) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Termination of Information and Inspection Covenants. The covenants set forth in Sections 3.1 and 3.2 shall terminate and be of no further force or effect upon the earlier to occur of (a) the consummation of the sale of securities pursuant to a registration statement under the Act in connection with the firm commitment underwritten offering of its securities to the general public, (b) when the Company first becomes subject to the periodic reporting requirements of Sections 12(g) or 15(d) of the 1934 Act, whichever event shall first occur, (c) the consummation of a Liquidation Event, or (d) the consummation of a Direct Listing.

3.4 Right of First Offer. Subject to the terms and conditions specified in this Section 3.4 and applicable securities laws, the Company hereby grants to each Major Investor a right of first offer with respect to future sales by the Company of its Shares (as hereinafter defined). For purposes of this Section 3.4, the term “Major Investor” includes any Affiliates of a Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted it among itself and its partners and Affiliates in such proportions as it deems appropriate; provided that each such party and Affiliate (x) has not been determined to be a Competitor by the Board, including at least one Preferred Director, and (y) agrees to enter into this Agreement and each of the Voting Agreement and Right of First Refusal and Co-Sale Agreement (as such terms are defined in the Purchase Agreement), as an investor under each such agreement (provided that any person reasonably determined by the Board, including at least one Preferred Director, to be a Competitor shall not be entitled to any rights as a Major Investor or Major Investor under Subsections 3.1, 3.2 and 3.4 hereof, if applicable).

Each time the Company proposes to offer any shares of, or securities convertible into or exchangeable or exercisable for any shares of, its capital stock (“Shares”), the Company shall first make an offering of such Shares to each Major Investor in accordance with the following provisions:

(a) The Company shall deliver a notice in accordance with Section 4.5 (“Notice”) to the Major Investors stating (i) its bona fide intention to offer such Shares, (ii) the number of such Shares to be offered and (iii) the price and terms upon which it proposes to offer such Shares.

(b) By written notification received by the Company within twenty (20) calendar days after the giving of Notice, each Major Investor may elect to purchase, at the price and on the terms specified in the Notice, up to that portion of such Shares that equals the proportion that the number of shares of Registrable Securities issued and held by such Major Investor (assuming full conversion, exercise and/or exchange of all convertible, exercisable and/or exchangeable securities then outstanding) bears to the total number of shares of Common Stock of the Company then outstanding (assuming full conversion, exercise and/or exchange of all convertible, exercisable and/or exchangeable securities then outstanding).

(c) If all Shares that Major Investors are entitled to obtain pursuant to Section 3.4(b) of this Agreement are not elected to be obtained as provided in Section 3.4(b) of this Agreement, the Company may, during the ninety (90) day period following the expiration of the period provided in Section 3.4(b) of this Agreement, offer the remaining unsubscribed portion of such Shares to any Person or Persons at a price not less than that, and upon terms no more favorable to the offeree than those, specified in the Notice. If the Company does not enter into an agreement for the sale of the Shares within such period, or if such agreement is not consummated within ninety (90) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such Shares shall not be offered unless first reoffered to the Major Investors in accordance herewith.

(d) The right of first offer in this Section 3.4 shall not be applicable to (i) offers of securities exempted from the definition of “Additional Stock” pursuant to subsection 4(d)(ii) of Article IV.B of the Restated Certificate (including any securities from which such exemptions from Additional Stock were derived), (ii) the issuance and sale of Series D Preferred Stock and Series C-1 Preferred Stock pursuant to the Purchase Agreement or (iii) the issuance of securities that are specifically deemed not to be subject to the right of first offer in this Section 3.4 by the written consent or affirmative vote of the Major Investors holding a majority of the Registrable Securities then held by all Major Investors. In addition to the foregoing, the right of first offer in this Section 3.4 shall not be applicable with respect to any Major Investor in any subsequent offering of Shares if (1) (A) at the time of such offering, the Major Investor is not an “accredited investor,” as that term is then defined in Rule 501(a) of the Act and (B) such offering of Shares is otherwise being offered only to accredited investors or (2) the issuance of securities, which constitutes a Potential CFIUS Transaction, to such Major Investor constitutes a “pilot program covered transaction” or “covered transaction” requiring, pursuant to the DPA, a CFIUS Filing.

(e) The rights provided in this Section 3.4 may not be assigned or transferred by any Major Investor; provided, however, that a Major Investor that is a venture capital or other investment fund, including Four Rivers Partners IV, L.P., Adams Street 2022 Direct Growth Equity Fund LP, NeoTribe Ventures I, L.P. and NeoTribe Ignite Fund I, L.P. (together, “NeoTribe”), Hummingbird Ventures III Comm. VA (“Hummingbird”) and Premji Invest, may assign or transfer such rights to its Affiliates.

(f) The covenants set forth in this Section 3.4 shall terminate and be of no further force or effect upon the consummation of (i) the Initial Offering (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to its stock option, stock purchase or similar plan or a SEC Rule 145 transaction), (ii) a Liquidation Event, or (iii) a Direct Listing.

3.5 Directors’ and Officers’ Insurance. Subject to Section 3.16, The Company has as of the date hereof and shall maintain from financially sound and reputable insurers directors and officers liability insurance in an amount of at least \$3 million and on terms and conditions satisfactory to the Board, including at least one Preferred Director, and the Company shall annually, within one hundred twenty (120) days after the end of each fiscal year of the Company, deliver to the Preferred Directors a certification that such insurance policy remains in effect.

3.6 Proprietary Information and Inventions Agreements. The Company shall require all employees and consultants with access to confidential information to execute and deliver a Proprietary Information and Inventions Agreement in substantially the form approved by the Board, including at least one Preferred Director, or a consulting agreement containing substantially similar proprietary rights assignment and confidentiality provisions.

3.7 Employee Agreements. Unless approved by the Board, including at least one Preferred Director, all future employees of the Company who shall purchase, or receive options to purchase, shares of Common Stock following the date hereof shall be required to execute stock purchase or option agreements providing for (a) vesting of shares over a four (4) year period with the first twenty five percent (25%) of such shares vesting following twelve (12) months of continued employment or services, and the remaining shares vesting in equal monthly installments over the following thirty six (36) months thereafter and (b) a one hundred and eighty (180)-day lockup period in connection with the Initial Offering, plus an additional period as specified in Section 2.12. The Company shall retain a right of first refusal on transfers until the Initial Offering and the right to repurchase unvested shares at cost

3.8 Indemnification Matters. The Company hereby acknowledges that one (1) or more of the directors nominated to serve on the Board by the Investors (each a “Fund Director”) may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their affiliates (collectively, the “Fund Indemnitors”). The Company hereby agrees (a) that it is the indemnitor of first resort (i.e., its obligations to any such Fund Director are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Fund Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Fund Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Fund Director to the extent legally permitted and as required by the Restated Certificate or Bylaws of the Company (or any agreement between the Company and such Fund Director), without regard to any rights such Fund Director may have against the Fund Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of any such Fund Director with respect to any claim for which such Fund Director has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Fund Director against the Company.

3.9 Confidentiality. Each Investor agrees, severally and not jointly, that such Investor (a) will keep confidential, (b) will not disclose, divulge or use for any purpose (other than to monitor its investment in the Company) and (c) will protect to the same degree as it protects its own confidential information any confidential information obtained from the Company pursuant to the terms of this Agreement (including, without limitation, notice of the Company’s intention to file a registration statement), unless such confidential information (i) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.9 by such Investor), (ii) is or has been independently developed or conceived by the Investor without use of the Company’s confidential information, or (iii) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (A) to its attorneys, accountants, consultants and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company, provided that such Persons are under a contractual or legal obligation to preserve the confidentiality of such information; (B) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.9; (C) to any Affiliate, partner, member, stockholder or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (D) as may otherwise be required by law, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure (each Person contemplated by clause (A), (B) and (C), a “Permitted Disclosee”). Investor shall be fully responsible for any use or disclosure of the confidential information by its Permitted Disclosees as if such Permitted Disclosees were an Investor.

3.10 Waiver of Statutory Information Rights. Each Investor hereby acknowledges and agrees that until the consummation of the Initial Offering, such Investor shall hereby be deemed to have waived any rights such Investor might otherwise have had under Section 220 of the Delaware General Corporation Law (or under similar rights under other applicable law) to inspect for any proper purpose and to make copies and extracts from the Company's stock ledger, a list of its stockholders and its other books and records or the books and records of any subsidiary. This waiver applies only in such Investor's capacity as a stockholder and does not affect any other information and inspection rights such Investor may expressly have pursuant to Sections 3.1 and 3.2 of this Agreement. This Section 3.10 has been fully discussed by each of the Investors and these provisions will not be subject to any exceptions. Each Investor hereby further warrants and represents that such Investor has reviewed this waiver with its legal counsel, and that such Investor knowingly and voluntarily waives its rights otherwise provided by Section 220 of the Delaware General Corporation Law (or under similar rights under other applicable law).

3.11 CFIUS Covenants 3.12 . In the event the Company determines a Potential CFIUS Transaction with respect to an Investor or group or of Investors constitutes a "pilot program covered transaction" or "covered transaction" requiring a CFIUS Filing, each of the Company and such Investor or Investors hereto agrees to use its reasonable best efforts to do or cause to obtain CFIUS Approval. Such reasonable best efforts shall include the following:

- (a) Engage in the pre-notice consultation process with CFIUS;
- (b) As promptly as practicable, either (A) file with CFIUS a Mandatory Declaration regarding the Potential CFIUS Transaction or (B) submit a draft CFIUS Notice to CFIUS regarding the Potential CFIUS Transaction;
- (c) If a Mandatory Declaration has been filed in accordance with clause (ii) above, as promptly as practicable and, in any event, within fifteen (15) Business Days after the receipt by the parties of written notification (including by e-mail) from CFIUS that, based on its assessment of the Mandatory Declaration, CFIUS either (1) requests the parties submit a CFIUS Notice or (2) is not able to complete action under the DPA on the basis of the Mandatory Declaration, file a draft CFIUS Notice in accordance with the DPA;
- (d) As promptly as practicable, and in any event, within five (5) Business Days after receipt by the parties of CFIUS notification (including by telephone or by e-mail) that CFIUS has no further comment on a draft CFIUS Notice submitted in accordance with either clause (ii) or (iii) above, submit to CFIUS a formal CFIUS Notice in accordance with the DPA;
- (e) Promptly and, in all events, within the timeframes set forth in the DPA, provide any information requested by CFIUS or any other agency or branch of the U.S. government in connection with a CFIUS Filing or obtaining CFIUS Approval; and

With respect to such Investor or Investors, such reasonable best efforts shall also include agreeing to any reasonable condition, restriction or other action required by CFIUS in order to obtain CFIUS Approval.

3.12 Qualified Small Business Stock. Subject to Section 3.16, the Company shall use commercially reasonable efforts to cause the shares of Series A Preferred Stock, as well as any shares into which such shares are converted, within the meaning of Section 1202(f) of the Internal Revenue Code (the “Code”), to constitute “qualified small business stock” as defined in Section 1202(c) of the Code; provided, however, that such requirement shall not be applicable if the Board determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within twenty (20) business days after any Investor’s written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company’s possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code.

3.13 Right to Conduct Activities. The Company hereby agrees and acknowledges that each of Hummingbird, NeoTribe, Adams Street 2022 Direct Growth Equity Fund LP, Premji Invest, and Neuberger Berman (together with their Affiliates) (each an “Investment Organization”) are professional investment organizations, and as such reviews the business plans and related proprietary information of many enterprises, some of which may compete directly or indirectly with the Company’s business (as currently conducted or as currently propose to be conducted). Nothing in this Agreement shall preclude or in any way restrict any Investment Organization from evaluating or purchasing securities, including publicly traded securities, of a particular enterprise, or investing or participating in any particular enterprise whether or not such enterprise has products or services that compete with those of the Company; and the Company hereby agrees that, to the extent permitted under applicable law, no Investment Organization shall be liable to the Company for any claim arising out of, or based upon, (i) the investment by such Investment Organization in any entity competitive with the Company, or (ii) actions taken by any partner, officer, employee or other representative of such Investment Organization to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any Investment Organization from liability associated with the unauthorized disclosure of the Company’s confidential information obtained pursuant to this Agreement, or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

3.14 C-Level Compensation Changes. The Company hereby covenants and agrees with each of the Investors that it shall not, without approval of the Board of Directors, including at least a majority of the Preferred Directors, (i) change the compensation of C-level executive officers, including approving any equity awards to C-level executive officers and (ii) appoint a new chief executive officer.

3.15 Termination of Certain Covenants. All covenants set forth in this Section 3, other than the covenants set forth in Section 3.6, 3.7, and 3.10, shall terminate and be of no further force or effect upon the consummation of (a) the Initial Offering (other than an Excluded Registration) or (b) a Liquidation Event.

3.16 Fiduciary Duties. The Company's obligations set forth in Sections 3.5 (Directors' and Officers' Insurance), 3.12 (Qualified Small Business Stock) and 3.14 (C-Level Compensation Changes) that are qualified by this Section 3.16 shall not be applicable to the extent (and only to the extent) that the Board of Directors determine in good faith and upon the advice of counsel that compliance would be inconsistent with the exercise of the fiduciary duties of the Board of Directors.

4. Miscellaneous

4.1 Successors and Assigns. Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties (including, without limitation, permitted transferees of any shares of Registrable Securities). Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

4.2 Governing Law. This Agreement shall be governed by and construed under the laws of the State of Delaware as applied to agreements among Delaware residents entered into and to be performed entirely within Delaware.

4.3 Counterparts. This Agreement may be executed by electronic signature and in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one (1) and the same instrument. Counterparts may be delivered by facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

4.4 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

4.5 Notices. All notices and other communications given or made pursuant hereto shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient; if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All notices and other communications shall be sent to the Company at and 1035 O'Brien Drive, Menlo Park, CA 94025, Attention: CEO; General Counsel, with a copy (which shall not constitute notice) to and Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, 201 South Main Street, 4th Floor, Ann Arbor, MI 48104, Attention: Nicholas B. Harley, and to the other parties at the addresses set forth on their signature page hereto (or at such other addresses as shall be specified by notice given in accordance with this Section 4.5).

4.6 Expenses. If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

4.7 Entire Agreement; Amendments. This Agreement (including the Exhibits hereto, if any) constitutes the full and entire understanding and agreement among the parties with regard to the subjects hereof and thereof. Any term of this Agreement (other than Section 3.1, Section 3.2, Section 3.3 and Section 3.4) may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the Investors holding a majority of the Registrable Securities. The provisions of Section 3.1, Section 3.2, Section 3.3 and Section 3.4 may be amended or waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the Major Investors holding a majority of the Registrable Securities then held by all of the Major Investors; provided, however, that notwithstanding any waiver of any of the provisions of Section 3.4, in the event any Major Investor actually purchases any Shares in any offering by the Company, then to the extent any Major Investor did not consent to such waiver, and was not offered the opportunity to purchase such Shares to the same extent as would have applied absent such waiver of Section 3.4, such non-consenting Major Investor shall be permitted to participate in such offering on a pro rata basis (based on the level of participation of the Major Investor purchasing the largest portion of such Major Investor's pro rata share of such Shares), in accordance with the other provisions (including notice and election periods) set forth in Section 3.4. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each holder of any Registrable Securities, each future holder of all such Registrable Securities and the Company. Notwithstanding the foregoing, this Agreement may not be amended or terminated, and the observance of any term of this Agreement may not be waived, with respect to the express rights and obligations herein of any Investor without the written consent of such Investor.

4.8 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

4.9 Aggregation of Stock. All shares of Registrable Securities held or acquired by affiliated entities (including, without limitation, affiliated venture capital funds or venture capital funds under common investment management) or Persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

4.10 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof, any purchaser of such shares of Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

4.11 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the foregoing courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR THE SUBJECT MATTER HEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

4.12 Effect on Prior Agreement. Upon the effectiveness of this Agreement, the Prior Agreement shall be amended and restated in its entirety by this Agreement and shall be of no further force or effect.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

COMPANY:

BILLIONTOONE, INC.

By: /s/ Oguzhan Atay

Name: Oguzhan Atay

Title: Chief Executive Officer

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

CIVILIZATION VENTURES II, L.P.

By: Civilization Ventures II LLC

Its: General Partner

By: /s/ Shahram Seyedin-Noor

Name: Shahram Seyedin-Noor

Title: Managing Member

**CIVILIZATION VENTURES OPPORTUNITY FUND,
L.P.**

By: Civilization Ventures II LLC

Its: General Partner

By: /s/ Shahram Seyedin-Noor

Name: Shahram Seyedin-Noor

Title: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

CIVILIZATION VENTURES B21, L.P.

By: Civilization Ventures II, LLC

Its: General Partner

By: /s/ Shahram Seyedin-Noor

Name: Shahram Seyedin-Noor

Title: Managing Member

CIVILIZATION VENTURES, L.P.

By: Civilization Ventures LLC

Its: General Partner

By: /s/ Shahram Seyedin Noor

Name: Shahram Seyedin-Noor

Title: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

CIVILIZATION VENTURES GALATA, L.P.

By: Civilization Ventures II, LLC

Its: General Partner

By: /s/ Shahram Seyedin-Noor

Name: Shahram Seyedin-Noor

Title: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

HUMMINGBIRD DRAGONS COMMV

Represented by:
Hummingbird Ventures Management BV
Permanently represented by:
Barend Van den Brande

By: /s/ Barend Van den Brande
Name: Barend Van den Brande
Title: Authorized Signatory

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

HB&Q NV (HB&Q COMPARTMENT III)

By: /s/ Barend Van den Brande

Name: MTE Comm.VA, permanently represented by Barend Van den Brande

Title: Director

By: /s/ Lukas Decoster

Name: Hummingbird GP NV, permanently represented by Lukas Decoster

Title: Director

HUMMINGBIRD COLLECTIVE COMMV

By: /s/ Barend Van den Brande

Name: Barend Van den Brande

Title: Managing Director

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

HUMMINGBIRD VENTURES III NV

Represented by Hummingbird GP NV

By: /s/ Barend Van den Brande

Name: Barend Van den Brande

Title: Representative of the Statutory Director

HUMMINGBIRD OPPORTUNITY FUND II COMMV

By: /s/ Barend Van den Brande

Name: Hummingbird Ventures Management NV, permanently represented by Barend Van den Brande

Title: Manager

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

JITSEN CHANG MD PC

By: /s/ Jitsen Chang

Name: Jitsen Chang

Title: President

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

LIBERTUS CAPITAL I

By: /s/ Pearl Pritchard
Name: Pearl Pritchard
Title: Director of Libertus Capital for and on behalf of
Libertus Capital I

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

LIBERTUS CAPITAL I (HV)

By: Libertus Capital (general partner acting on behalf of
Libertus Capital I (HV))

By: /s/ Pearl Pritchard

Name: Pearl Pritchard

Title: Director

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

LIBERTUS CAPITAL II

By: Libertus Capital (general partner acting on behalf of
Libertus Capital II)

By: /s/ Pearl Pritchard

Name: Pearl Pritchard

Title: Director of Libertus Capital, for and on behalf of
Libertus Capital II

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

BAILLIE GIFFORD US GROWTH TRUST PLC

Executed for and on behalf of Baillie Gifford US Growth Trust plc, acting through its agent, Baillie Gifford & Co

By: /s/ Peter Singlehurst

Name: Peter Singlehurst

Title: Partner, Baillie Gifford & Co, as agent

**BAILLIE GIFFORD PRIVATE
COMPANIES FUND II L.P.**

Executed for and on behalf of Baillie Gifford Private Companies Fund II L.P., by Baillie Gifford Overseas Limited, acting as agent for Baillie Gifford International LLC, manager

By: /s/ Peter Singlehurst

Name: Peter Singlehurst

Title: Authorized Signatory, Baillie Gifford Overseas Limited, as agent

**EDINBURGH WORLDWIDE
INVESTMENT TRUST PLC**

Executed for and on behalf of Edinburgh Worldwide Investment Trust Plc, acting through its agent, Ballie Gifford & Co.

By: /s/ Peter Singlehurst

Name: Peter Singlehurst

Title: Partner, Baillie Gifford & Co, as agent

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

ANDREW W. LO AND NANCY N. LO AS JTWR

By: /s/ Andrew W. Lo
Name: Andrew W. Lo

By: /s/ Nancy N. Lo
Name: Nancy N. Lo

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

Adams Street 2019 Direct Growth Equity Fund LP

By: ASP 2019 Direct Management LP its General Partner

By: ASP 2019 Direct Management LLC its General Partner

By: Adams Street Partners, LLC its Managing Member

By: /s/ Thomas S. Bremner

Name: Thomas S. Bremner

Title: Partner

Adams Street 2020 Direct Growth Equity Fund LP

By: ASP 2020 Direct Management LP its General Partner

By: ASP 2020 Direct Management LLC its General Partner

By: Adams Street Partners, LLC its Managing Member

By: /s/ Thomas S. Bremner

Name: Thomas S. Bremner

Title: Partner

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

Adams Street 2021 Direct Growth Equity Fund LP

By: ASP 2021 Direct Management LP its General Partner

By: ASP 2021 Direct Management LLC its General Partner

By: Adams Street Partners, LLC its Managing Member

By: /s/ Thomas S. Bremner

Name: Thomas S. Bremner

Title: Partner

Adams Street 2022 Direct Growth Equity Fund LP

By: ASP 2022 Direct Management LP its General Partner

By: ASP 2022 Direct Management LLC its General Partner

By: Adams Street Partners, LLC its Managing Member

By: /s/ Thomas S. Bremner

Name: Thomas S. Bremner

Title: Partner

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

Adams Street Growth Equity Fund VII LP

By: ASP VG Management VII LP its General Partner

By: ASP VG Management VII LLC its General Partner

By: Adams Street Partners, LLC its Managing Member

By: /s/ Thomas S. Bremner

Name: Thomas S. Bremner

Title: Partner

Adams Street Global Private Markets Fund LP

By: ASP GPM GP Management LP, its General Partner

By: ASP GPM GP Management LLC, its General Partner

By: Adams Street Partners, LLC, its Managing Member

By: /s/ Thomas S. Bremner

Name: Thomas S. Bremner

Title: Partner

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

FCPR - GF Lumyna Private Equity World Fund

By: Fundrock Management Company S.A its management
company represented by
Lumyna Investments Limited, its Delegataire Financier,
itself represented by
Adams Street Partners, LLC, its Sous-Delgataire Financier

By: /s/ Thomas S. Bremner

Name: Thomas S. Bremner

Title: Partner

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

CHIU HOLDINGS LTD.

By: /s/ Tiffany Chiu

Name: Tiffany Chiu

Title: President

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

Fifty Years Fund II LP

By: Fifty Years II GP LLC, its General Partner

Fifty Years Fund I, LP

By: Fifty Years GP, LLC, its General Partner

By: /s/ Seth Bannon

Name: Seth Bannon

Its: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

FIFTY YEARS DEEP, LP

By: Fifty Years Deep, LLC

Its: General Partner

By: /s/ Seth Bannon

Name: Seth Bannon

Title: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

**FIFTY YEARS BILLIONTOONE, A SERIES OF
FIFTY YEARS SPECIAL LLC**

By: Assure Fund Management II, its General Partner

By: /s/ Kirk Carson

Name: Kirk Carson

Title: Manager of the Fund's Manager

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

FOUR RIVERS OPPORTUNITY FUND, LP

By: FSL CAPITAL V, LLC

Its: General Partner

By: /s/ Farouk Ladha

Farouk Ladha, Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

FOUR RIVERS PARTNERS IV, L.P.

By: FSL CAPITAL IV, LLC
Its: General Partner

By: /s/ Farouk Ladha
Farouk Ladha, Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

NEOTRIBE VENTURES I, L.P.

For itself and as nominee for
NeoTribe Associates I, L.P.

By: /s/ Krishna Kolluri

Name: Krishna Kolluri

Title: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

NEOTRIBE IGNITE FUND I, L.P.

By: Neotribe Ignite Partners I, LLC

Its: General Partner

By: /s/ Krishna Kolluri

Name: Krishna Kolluri

Title: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

NEOTRIBE SPV I BTO, LLC

By: Neotribe Partners SPV I BTO, LLC

Its: Managing Member

By: /s/ Krishna Kolluri

Name: Krishna Kolluri

Title: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

NG-CUMMINGS HOLDINGS LTD.

By: /s/ Clara Ng-Cummings

Name: Clara Ng-Cummings

Title: President

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

NORWEST VENTURE PARTNERS XV, LP

By: Genesis VC Partners XV, LLC

Its: General Partner

By: NVP Associates, LLC

Its: Managing Member

By: /s/ Casper de Clercq

Name: Casper de Clercq

Title: Partner

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTORS:

PACIFIC 8 VENTURES FUND I, L.P.

By: Pacific 8 Ventures GP LLC

Its: General Partner

By: /s/ Jack Liang Chien-Ko

Name: Jack Liang Chien-Ko

Title: Director

PACIFIC 8 VENTURES FUND II, L.P.

By: Pacific 8 Ventures GP II LTD.

Its: General Partner

By: /s/ Jack Liang Chien-Ko

Name: Jack Liang Chien-Ko

Title: Director

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

ALEXANDER “SANDY” KORY

By: /s/ Alexander Kory

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS’ RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

TIME BIOVENTURES I, LP

By: /s/ D.A. Wallach

Name: D.A. Wallach

Title: General Partner

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Wipro Enterprises Private Limited

By: /s/ Kumar Ayashkanta

Name: Kumar Ayashkanta

Designation: Chief Investment Officer

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

**NEUBERGER BERMAN PRINCIPAL STRATEGIES
PRIMA FUND LP**

By: Neuberger Berman Investment Advisers LLC, its
investment manager.

By: /s/ Gabe Cahill

Name: Gabe Cahill

Title: Managing Director

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Emerald Horizon Holdings Limited

By: /s/ Hanhan Xu
Name: Hanhan Xu
Title: Director

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Tarlton Properties, Inc.

By: /s/ John C. Tarlton
Name: John C. Tarlton
Title: Chief Executive Officer

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

John C. Tarlton Heritage Trust

By: /s/ John C. Tarlton
Name: John C. Tarlton
Title: Trustee

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Jeff Uittenbogaard

By: /s/ Jeff Uittenbogaard

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Krietemeyer Family Trust UTD 7/16/20

By: /s/ Ronald W. Krietemeyer

Name: Ronald W. Krietemeyer

Title: Trustee

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

David R. Johnson

By: /s/ David R. Johnson

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

BARRON PHILLIPS JETER

By: /s/ Barron Jeter

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

David L. Tarlton Heritage Trust

By: /s/ David L. Tarlton

Name: David L. Tarlton

Title: Trustee

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Fifty Years Northstar, LLC

By: Fifty Years Deep GP, LLC, its Manager

By: /s/ Seth Bannon

Name: Seth Bannon

Title: Managing Member

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

T K Kurien

By: /s/ T K Kurien

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Sandesh Kaveripatnam

By: /s/ Sandesh Kaveripatnam

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Akshay Rai

By: /s/ Akshay Rai

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Directed Trust Company FBO Eric Tong Roth IRA

By: /s/ Heidi Faulk

Name: Heidi Faulk

Title: Authorized Signor

Read and Approved by:

Name: Eric Tong

Title: Account owner

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Eric Aisi Tong

By: /s/ Eric Aisi Tong

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Andrew Chang

By: /s/ Andrew Chang

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

Vedant Agrawal

By: /s/ Vedant Agrawal

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

THOMAS ELI TURLINGTON III

By: /s/ Thomas Eli Turlington III

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

GOPAE TURQUOISE STRATEGIES PTE. LTD.

By: /s/ Tan Keng Chye

Name: Tan Keng Chye

Title: Director

SIGNATURE PAGE TO BILLIONTOONE, INC. AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

SCHEDULE A
COMMON HOLDERS

S-1

SCHEDULE B
SCHEDULE OF INVESTORS

S-2

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED. SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT TO PURCHASE STOCK

Corporation:	BILLIONTOONE, INC., a Delaware corporation
Number of Shares:	9,660 or 15,456 (Subject to Section 1.5)
Class of Stock:	Series A-6 Preferred Stock
Warrant Price:	\$2.5879 per share
Issue Date:	March 16, 2020
Expiration Date:	March 16, 2030 (Subject to Section 5.1)

THIS WARRANT TO PURCHASE STOCK (THIS "WARRANT") CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, COMERICA BANK, a Texas banking association, or its assignee ("Holder"), is entitled to purchase the number of fully paid and nonassessable shares of the class of securities (the "Shares") of BILLIONTOONE, INC. (the "Company") at the Warrant Price, all as set forth above and as adjusted pursuant to the terms of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

ARTICLE 1 EXERCISE

1.1 Method of Exercise. Holder may exercise this Warrant from time to time for all or any part of the unexercised Shares by delivering a duly executed Notice of Exercise in substantially the form attached as Appendix I to the principal office of the Company (or such other appropriate location as Holder is so instructed by the Company). Holder shall also deliver to the Company a check, wire transfer (to an account designated by the Company) or other form of cash payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased. Notwithstanding any other provision hereof, if an exercise of any portion of this Warrant is to be made in connection with a public offering or an Acquisition (as defined below), such exercise may at the election of the Holder be conditioned upon the consummation of such transaction, in which case such exercise shall not be deemed to be effective until immediately prior to the closing of such transaction.

1.2 Delivery of Certificate and New Warrant. Within thirty (30) days after Holder exercises this Warrant and the Company receives payment of the aggregate Warrant Price, the Company shall deliver to Holder certificates for the Shares acquired and, if this Warrant has not been fully exercised and has not expired, a new warrant representing the Shares not so acquired.

1.3 Replacement of Warrants. In the case of loss, theft or destruction of this Warrant, upon delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company at its expense shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.4 Acquisition of the Company.

1.4.1 Defined Terms.

(a) "Acquisition." For the purpose of this Warrant, "Acquisition" means (a) any sale, lease, license, or other disposition of all or substantially all of the assets (including intellectual property) of the Company by means of any transaction or series of related transactions, or (b) any reorganization, consolidation, acquisition, merger, sale of the voting securities of the Company or any other transaction or series of related transactions where the holders of the Company's securities before the transaction or series of related transactions beneficially own less than fifty percent (50%) of the outstanding voting securities of the surviving entity after the transaction or series of related transactions.

(b) “Cash/Public Stock Acquisition.” For the purpose of this Warrant, “Cash/Public Stock Acquisition” means, an Acquisition where the consideration that the holders of the Shares are entitled to receive on account of the Shares consists entirely of cash and/or shares of common stock, interests or units that are publicly traded and listed on a national exchange and where the shares or other securities, if any, receivable by the Holder of this Warrant were the Holder to exercise this Warrant in full immediately prior to the closing of such Acquisition may be publicly re-sold by the Holder in their entirety within the three (3) months following such closing pursuant to Rule 144 or an effective registration statement under the Act.

1.4.2 Treatment of Warrant in the Event of an Acquisition. The Company shall give Holder written notice at least twenty (20) days prior to the closing of any proposed Acquisition. The Company will use commercially reasonable efforts to cause (i) the acquirer of the Company, (ii) successor or surviving entity or (iii) parent entity in an Acquisition (the “Acquirer”) to assume this Warrant as a part of an Acquisition other than a Cash/Public Stock Acquisition.

(a) If the Acquirer assumes this Warrant, then this Warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing of the Acquisition. The Warrant Price shall be adjusted accordingly, and the Warrant Price and number and class of Shares shall continue to be subject to adjustment from time to time in accordance with the provisions hereof.

(b) If the Acquirer refuses to assume this Warrant in connection with an Acquisition other than a Cash/Public Stock Acquisition, the Company shall give Holder an additional written notice at least ten (10) days prior to the closing of the Acquisition of such fact. In such event, notwithstanding any other provision of this Warrant to the contrary, Holder may immediately exercise this Warrant in the manner specified in this Warrant with such exercise effective immediately prior to closing of the Acquisition. If Holder elects not to exercise this Warrant, then this Warrant will terminate immediately prior to the closing of the Acquisition. Notwithstanding any other provision of this Warrant to the contrary if the Acquirer does not assume this Warrant in connection with such Acquisition, then effective as of the date of closing of such Acquisition, the Holder shall be deemed to have put this Warrant to the Company for a per Share amount in cash equal to the difference between the Acquisition consideration payable for one Share and the Warrant Price, such amount to be paid in connection with the closing of such Acquisition.

1.5 Adjustment in Number of Shares Purchasable and Warrant Price. (a) Prior to the time that the aggregate amount of Growth Capital Advances (as defined in the Loan and Security Agreement dated as of the date hereof between Comerica Bank and the Company, as it may be amended, restated, modified, replaced or supplemented from time to time) funded exceeds \$2,500,000, the “Number of Shares” set forth on page I of this Warrant shall be deemed to be 9,660. If the aggregate amount of Growth Capital Advances funded exceeds Two Million Five Hundred Thousand Dollars (\$2,500,000), the “Number of Shares” set forth on page I of this Warrant shall automatically be increased to 15,456. Except as otherwise adjusted under the terms of this Warrant, the Warrant Price shall not change as a result of the increased number of Shares issuable under this Warrant pursuant to this Section 1.5.

(b) If, in the first equity financing occurring after the Issue Date, the Company sells and issues to any investors preferred stock with a price per share lower than the Warrant Price set forth on the first page of this Warrant, the Warrant Price, shall, concurrent with the issuance of such shares of preferred stock, automatically be adjusted to equal the per share purchase price of such preferred stock, and the number of such shares subject to this Warrant shall be automatically adjusted to equal (i) (A) 9,660 if the aggregate amount of Growth Capital Advances funded does not exceed \$2,500,000 or (B) 15,456 if the aggregate amount of Growth Capital Advances funded exceeds \$2,500,000, divided by (ii) such modified per share Warrant Price. Any adjustments pursuant to this Section 1.5 shall be in addition to any adjustments pursuant to Article 2 below.

ARTICLE 2
ADJUSTMENTS TO THE SHARES

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on its common stock payable in common stock, or other securities, or subdivides the outstanding common stock into a greater amount of common stock, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend or subdivision occurred.

2.2 Reclassification, Exchange or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include any automatic conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock pursuant to the terms of the Company's Certificate of Incorporation upon the closing of a registered public offering of the Company's common stock. The Company or its successor shall promptly issue to Holder a new warrant for such new securities or other property. The new warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price, the number of securities or property issuable upon exercise of the new warrant and expiration date. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Combinations, Splits, Etc. If the outstanding Shares are combined or consolidated, by reclassification, reverse split or otherwise, into a lesser Number of Shares, the Warrant Price shall be proportionately increased. If the outstanding Shares are subdivided, split or multiplied, by reclassification, a dividend payable in common stock or otherwise, into a greater Number of Shares, the Warrant Price shall be proportionately decreased.

2.4 Adjustments for Diluting Issuances. In the event of the issuance (a "Diluting Issuance") by the Company, after the Issue Date of this Warrant, of securities at a price per share less than the Warrant Price, then the number of shares of common stock issuable upon conversion of the Shares shall be adjusted in accordance with those provisions of the Company's Certificate of Incorporation, a copy of which is attached hereto as Exhibit A, which apply to Diluting Issuances as if the Shares were outstanding on the date of such Diluting Issuance. The provisions set forth for the Shares in the Company's Certificate of Incorporation relating to the above in effect as of the Issue Date may not be amended, modified or waived, without the prior written consent of Holder unless such amendment, modification or waiver affects the rights associated with the Shares in the same manner as such amendment, modification or waiver affects the rights associated with all other shares of the same series and class as the Shares granted to the Holder. Under no circumstances shall the aggregate Warrant Price payable by the Holder upon exercise of this Warrant increase as a result of any adjustment arising from a Diluting Issuance.

2.5 No Impairment. The Company shall not, by amendment of its Articles or Certificate of Incorporation or Bylaws or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by the Company, but shall at all times in good faith assist in carrying out all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article 2 against dilution or other impairment, unless such amendment, reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or other action affects the rights associated with the Shares in the same manner as the rights associated with all other shares of the same series and class of Shares granted to the Holder.

2.6 Certificate as to Adjustments. Upon each adjustment of the Warrant Price or Number of Shares, the Company at its expense shall promptly compute such adjustment, and furnish Holder with a certificate signed by its Chief Executive Officer setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price and Number of Shares in effect upon the date thereof and the series of adjustments leading to such Warrant Price and Number of Shares.

2.7 Limitations on Liability. Nothing contained in this Warrant shall be construed as imposing any liabilities on Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

2.8 Fractional Shares. No fractional Shares shall be issuable upon exercise of this Warrant and the Number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise of this Warrant, the Company shall eliminate such fractional share interest by paying Holder an amount in cash computed by multiplying the fractional interest by the fair market value, as determined by the Company's Board of Directors, of a full Share.

ARTICLE 3 REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to, and agrees with, the Holder as follows:

3.1.1 The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which the Company most recently sold its Series A-6 Preferred Stock.

3.1.2 This Warrant is and any Warrant issued in substitution for or replacement of this Warrant shall be, upon issuance, duly authorized and validly issued. All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. The Company will at all times until the Expiration Date (or, if such date shall not be a business day, then on the next succeeding business day) reserve and keep available, out of its authorized but unissued preferred stock, solely for the purpose of providing for the exercise of the Shares underlying this Warrant, the aggregate number of Shares then issuable upon exercise hereof at any time.

3.1.3 The Company's summary capitalization table delivered to Holder as of the Issue Date is true and complete as of the Issue Date in all material respects.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon its stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription pro rata to the holders of any class or series of its stock any additional shares of stock of any class or series or other rights; (c) to effect any reclassification or recapitalization of stock; or (d) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up, then, in connection with each such event, the Company shall give Holder (1) at least ten (10) days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above; and (2) in the case of the matters referred to in (c) and (d) above at least ten (10) days prior written notice of the date when the same will take place (and specifying the date on which the holders of stock will be entitled to exchange their stock for securities or other property deliverable upon the occurrence of such event). Upon request, the Company shall provide Holder with such information reasonably necessary for Holder to evaluate its rights as a holder of this Warrant or Shares in the case of matters referred to (a), (b), (c) and (d) herein above.

3.3 Information Rights. So long as the Holder holds this Warrant and/or any of the Shares, the Company shall deliver to the Holder (a) promptly after mailing, copies of all communications, information and/or communiques to the shareholders of the Company, (b) within one hundred eighty (180) days after the end of each fiscal year of the Company, the annual financial statements of the Company and (c) within forty five (45) days after the end of each fiscal quarter, the Company's quarterly, unaudited financial statements. In addition, and without limiting the generality of the foregoing, so long as the Holder holds this Warrant and/or any of the Shares, the Company shall afford to the Holder the same access to information concerning the Company and its business and financial condition as would be afforded to a holder of the class of Shares under applicable state law and/or any agreement with any holder of the class of Shares.

3.4 Registration Under the Act; Market Standoff. The Company agrees that the Shares or, if the Shares are convertible into common stock of the Company, such common stock, shall be deemed "Registrable Securities" or otherwise entitled to "piggy back" registration rights for registrations initiated by either the Company or a stockholder in accordance with the terms of the that certain Investors Rights Agreement between the Company and its investors dated as of March 13, 2019 (as may be amended from time to time, the "Agreement"), a copy of which is attached hereto as Exhibit B. The Company agrees that no amendments will be made to the Agreement which would have an adverse impact on Holder's registration rights hereunder this provision unless such amendment affects the rights associated with the Shares in the same manner as such amendment, modification or waiver affects the rights associated with all other shares of the same series and class as the Shares granted to the Holder. Holder shall be deemed to be a party to the Agreement solely for the purpose of the above-mentioned registration rights including, without limitation, the "Market Stand-off" provisions set forth therein, provided that the Holder shall execute a Joinder to the Agreement in the form attached hereto as Exhibit C upon exercise of the warrant.

ARTICLE 4 INVESTMENT REPRESENTATIONS AND COVENANTS FOR WARRANTS

As of the Issue Date and of the date of issuance of any of the Shares issuable upon exercise of this Warrant, Holder hereby represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase Entirely for Own Account. This Warrant is issued to Holder in reliance upon Holder's representation to the Company that this Warrant and the Shares issuable upon exercise of this Warrant will be acquired for investment for Holder's, or its affiliate's, own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof other than to an affiliate, and that Holder has no present intention of selling, granting any participation in, or otherwise distributing the same other than to an affiliate. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person, other than an affiliate, to sell, transfer or grant participations to such person or to any third person with respect to this Warrant or any of the Shares issuable upon exercise of this Warrant.

4.2 Reliance upon Holder's Representations. Holder understands that this Warrant and the Shares issuable upon exercise of this Warrant are not registered under the Act on the ground that the issuance of such securities is exempt from registration under the Act, and that the Company's reliance on such exemption is predicated on Holder's representations set forth herein.

4.3 Accredited Investor Status. Holder represents to the Company that Holder is an Accredited Investor (as defined in the Act).

4.4 Restricted Securities. Holder understands that this Warrant and the Shares issuable upon exercise of this Warrant are "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such securities may be resold without registration under the Act only in certain limited circumstances.

ARTICLE 5 MISCELLANEOUS

5.1 Term; Exercise Upon Expiration. This Warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above; provided, however, that if the Company completes its initial public offering within the one-year period immediately prior to the Expiration Date, the Expiration Date shall automatically be extended until the first anniversary of the effective date of the Company's initial public offering. The Company agrees that Holder may terminate this Warrant, upon notice to the Company, at any time in its sole discretion.

5.2 Legends. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee. The Company shall not require Comerica Bank ("Bank") or a Bank Affiliate (as defined herein) to provide an opinion of counsel or investment representation letter if the transfer is to Bank's parent company, Comerica Incorporated ("Comerica"), or any other affiliate of Bank ("Bank Affiliate"), provided that such Bank Affiliate is an "accredited investor" as defined in Regulation D promulgated under the Act.

5.4 Transfer Procedure. After receipt of the executed Warrant, Bank will transfer all of this Warrant to Comerica Ventures Incorporated, a non-banking subsidiary of Comerica and a Bank Affiliate ("Ventures"). Holder may not transfer this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) without the Company's prior written consent; *provided, however*, that Holder may transfer all or part of this Warrant to its affiliates, including, without limitation, Ventures, at any time without notice, consent or the delivery of any other instrument to the Company, and such affiliate shall then be entitled to all the rights of Holder under this Warrant and any related agreements, and the Company shall cooperate fully in ensuring that any stock issued upon exercise of this Warrant is issued in the name of the affiliate that exercises this Warrant; and *provided, further*, that the foregoing proviso shall not apply to any of Holder's affiliates that are a direct competitor of the Company. The terms and conditions of this Warrant shall inure to the benefit of, and be binding upon, the Company and the holders hereof and their respective permitted successors and assigns.

5.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be deemed delivered and effective when: (i) given personally or mailed by first-class registered or certified mail, postage prepaid, or sent via a nationally recognized overnight courier service (such as, but not limited to, Federal Express, DHL or UPS), fee prepaid, or (ii) on the date sent by email or facsimile if sent during normal business hours of the recipient, and on the next business day if sent after normal business hours of the recipient. Such communications must be sent to the respective parties at the address or facsimile number as may have been furnished to the Company or the Holder, as the case may be, in writing by the Company or such Holder from time to time. Effective upon the receipt of executed Warrant and initial transfer described in Section 5.4 above, all notices to the Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

Comerica Ventures Incorporated
Attn: Warrant Administrator
1717 Main Street, 5th Floor, MC 6406
Dallas, Texas 75201
Facsimile No.

All notices to the Company shall be addressed as follows:

BillionToOne, Inc.
1455 Adams Drive Suite 1130
Menlo Park, CA 94025
Attention: CEO
Email:

With a copy (which shall not constitute notice) to:

Gunderson Dettmer Stough Villeneuve Franklin and Hachigian, LLP
550 Allerton Street
Redwood City, CA 94063
Attention: Nicholas Harley
Email:

5.6 Amendments; Waiver. This Warrant and any term hereof may be amended, modified or supplemented by an agreement in writing signed by each party hereto. No waiver by the Company or the Holder of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Warrant shall operate or be construed as a waiver thereof, nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

5.7 Cumulative Remedies. The rights and remedies provided in this Warrant are cumulative and are not exclusive of, and are in addition and not in substitution for, any other rights or remedies available at law, in equity or otherwise.

5.8 No Strict Construction. This Warrant shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.10 **WAIVER OF JURY TRIAL**. **HOLDER AND THE COMPANY ACKNOWLEDGE THAT THE RIGHT TO TRIAL BY JURY IS A CONSTITUTIONAL RIGHT, BUT ONE THAT MAY BE WAIVED. AFTER CONSULTING (OR HAVING HAD THE OPPORTUNITY TO CONSULT) WITH COUNSEL OF THEIR CHOICE, KNOWINGLY AND VOLUNTARILY, AND FOR THEIR MUTUAL BENEFIT, HOLDER AND THE COMPANY WAIVE ANY RIGHT TO TRIAL BY JURY IN THE EVENT OF LITIGATION REGARDING THE PERFORMANCE OR ENFORCEMENT OF, OR IN ANY WAY RELATED TO THIS AGREEMENT.**

5.11 Confidentiality.

(a) The Company hereby agrees to keep the terms and conditions of this Warrant confidential, provided that the Company may provide copies of this Warrant in connection with third party due diligence in equity financing and acquisition transactions provided that the recipient thereof agrees to keep the terms hereof. Notwithstanding the foregoing confidentiality obligation, the Company may disclose information relating to this Warrant as required by law, rule, regulation, court order or other legal authority, provided that (i) the Company has given Holder at least ten (10) days' notice of such required disclosure, and (ii) the Company only discloses information that is required, in the opinion of counsel reasonably satisfactory to Holder, to be disclosed.

(b) In handling any confidential information, Holder and all employees and agents of Holder shall exercise the same degree of care that Holder exercises with respect to its own proprietary information of the same types to maintain the confidentiality of any non-public information thereby received or received pursuant to this Warrant except that disclosure of such information may be made (i) to the parent, subsidiaries, or affiliates and service providers of Holder, (ii) to prospective transferees, (iii) as required by law, regulations, rule or order, subpoena, judicial order or similar order, (iv) as may be required in connection with the examination, audit or similar investigation of Holder, (v) to Holder's accountants, auditors and regulators, and (vi) as Holder may determine in connection with the enforcement of any remedies hereunder. Confidential information hereunder shall not include information that either: (a) is in the public domain or in the knowledge or possession of Holder when disclosed to Holder, or becomes part of the public domain after disclosure to Holder through no fault of Holder; or (b) is disclosed to Holder by a third party, provided Holder does not have actual knowledge that such third party is prohibited from disclosing such information.

5.12 Counterparts. This Warrant may be executed in counterparts, all of which taken together shall constitute one and the same instrument.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, each of the parties have caused this Warrant to be duly executed by its duly authorized officer(s) as of the first date written above.

BILLIONTOONE, INC.

By: /s/ Oguzhan Atay
Name: Oguzhan Atay
Title: Chief Executive Officer

COMERICA BANK

By: /s/ Robert Hernandez
Name: Robert Hernandez
Title: Senior Vice President

[Signature Page to Warrant]

NOTICE OF EXERCISE

1. The undersigned hereby elects to purchase shares of the stock of **BillionToOne, Inc.** pursuant to the terms of the attached Warrant dated March 16, 2020, and tenders herewith payment of the purchase price of such shares in full.

2. Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below:

Comerica Ventures Incorporated
Attn: Warrant Administrator
1717 Main Street, 5th Floor. MC 6406
Dallas, Texas 75201
Facsimile No.

3. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

COMERICA VENTURES INCORPORATED or
Assignee

(Signature)

(Name and Title)

(Date)

Exhibit A

Anti-Dilution Provisions

Exhibit B

Registration Rights

Exhibit C

Joinder to Investors Right Agreement

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, PLEDGED, OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR PURSUANT TO RULE 144 OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE CORPORATION AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.

WARRANT TO PURCHASE STOCK

Issuer: BILLIONTOONE, INC., a Delaware corporation (the “Company”)

Number of Shares: 53,571 shares of Common Stock (the “Initial Shares”), plus all Additional Shares (as defined in Section 1.8 hereof) which Holder (as defined below) is entitled to purchase pursuant to Section 1.8 hereof (subject to adjustments made pursuant to stock splits, reverse stock splits, and other events specified in Article 2); provided, however, that the maximum aggregate number of shares of Common Stock issuable pursuant to the terms and conditions of this Warrant shall not exceed 80,357 shares of Common Stock (as may be adjusted in accordance with Article 2).

Class of Stock: Common Stock.

Exercise Price per Share: \$2.80

Issue Date: October 12, 2021

Expiration Date: October 12, 2031

THIS WARRANT CERTIFIES THAT, for the agreed upon value of \$1.00 and for other good and valuable consideration, WESTERN ALLIANCE BANK, or its assignees (“Holder”) is entitled to purchase the number of fully paid and nonassessable shares of the Company’s capital stock set forth above (the “Shares”) at the Exercise Price per Share set forth above, as the same may be from time to time adjusted pursuant to Article 2 hereof and subject to the provisions and upon the terms and conditions set forth in this Warrant.

ARTICLE 1. EXERCISE.

1.1 Method of Exercise. This Warrant is exercisable, in whole or in part, at any time and from time to time on or before the Expiration Date set forth above. Holder may exercise this Warrant by delivering a duly executed Notice of Exercise, in substantially the form attached hereto as Appendix 1, to the principal office of Company. Unless Holder is exercising the conversion right set forth in Section 1.2, Holder shall also deliver to Company an amount equal to the aggregate Exercise Price for Shares being purchased, by check or wire.

1.2 Conversion Right. In lieu of exercising this Warrant as specified in Section 1.1, Holder may from time to time convert this Warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of Shares or other securities otherwise issuable upon exercise of this Warrant minus the aggregate Exercise Price of such Shares by (b) the fair market value of one Share. The fair market value of Shares shall be determined pursuant to Section 1.3.

1.3 Fair Market Value. If the Shares are traded in a public market, the fair market value of the Shares shall be the closing price of the Shares (or the closing price of the Company’s stock into which the Shares are convertible) reported for the business day immediately before Holder delivers its Notice of Exercise to the Company. If the Shares are not traded in a public market, the Board of Directors of Company shall determine fair market value in its reasonable good faith judgment. The foregoing notwithstanding, if Holder advises the Board of Directors in writing that Holder disagrees with such determination, then Company and Holder shall promptly agree upon a reputable investment banking firm to undertake such valuation. If the valuation of such investment banking firm is greater than that determined by the Board of Directors, then all fees and expenses of such investment banking firm shall be paid by Company. In all other circumstances, such fees and expenses of such investment banking firm shall be paid by Holder.

1.4 Delivery of Certificate and New Warrant. Promptly (and in no event more than 3 business days after exercise) after Holder exercises or converts this Warrant, Company shall deliver to Holder certificates for Shares acquired and, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant representing Shares not yet acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to Company or, in the case of mutilation, on surrender and cancellation of this Warrant, Company at its expense shall execute and deliver a replacement Warrant.

1.6 Sale, Merger, or Consolidation of Company.

(a) For the purpose of this Warrant, “Acquisition” means any sale, license, or other disposition of all or substantially all of the assets of Company, or any reorganization, consolidation, or merger of Company where the holders of Company’s securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction, other than by the sale of the Company’s equity securities to venture capital or private equity investors in a bona fide equity financing primarily for capital raising purposes so long as the Company identifies to Bank the venture capital or private equity investors at least five (5) Business Days prior to the closing of the transaction and provides to Bank a description of the material terms of the transaction.

(b) For the purpose of this Warrant “Marketable Securities” means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and is then current in its filing of all required reports and other information under the Securities Act of 1933, as amended, and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market, and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly re-selling all of the issuer’s shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

(c) In the event of an Acquisition in which the consideration to be received by the Company’s stockholders consists solely of cash, solely of Marketable Securities or a combination of cash and Marketable Securities (a “Cash/Public Acquisition”), and the fair market value of one Share as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date immediately prior to such Cash/Public Acquisition, and Holder has not exercised this Warrant pursuant to Section 1.1 above as to all Shares, then this Warrant shall automatically be deemed to be exercised pursuant to Section 1.2 above as to all Shares effective immediately prior to and contingent upon the consummation of a Cash/Public Acquisition. In connection with such exercise, Holder shall be deemed to have restated each of the representations and warranties in Section 4 of the Warrant as the date thereof and the Company shall promptly notify the Holder of the number of Shares (or such other securities) issued upon exercise. In the event of a Cash/Public Acquisition where the fair market value of one Share as determined in accordance with Section 1.3 above would be less than the Warrant Price in effect immediately prior to such Cash/Public Acquisition, then this Warrant will expire immediately prior to the consummation of such Cash/Public Acquisition.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition defined above, either (i) the acquiring, surviving or successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant, or (ii) if the acquiring, successor or surviving entity shall not have assumed this Warrant, Holder shall put this Warrant back to the Company for a cash fee equal to the greater of (x) (i) Three Hundred Thousand Dollars (\$300,000), plus (ii) if the Additional Term B Loan Shares have been granted hereunder, an additional Seventy-Five Thousand Seven Hundred Dollars (\$75,000) plus (iii) if the Additional Term C Loan Shares have been granted hereunder, an additional Seventy-Five Thousand Seven Hundred Dollars (\$75,000), or (y) the value of the aggregate consideration payable to Holder had Holder exercised this Warrant pursuant to Section 1.2 immediately prior to such Put Right Trigger Event (such right, the “Put Right” and such fee the “Put Fee”). Company shall provide Holder no less than ten (10) days’ written notice prior to the occurrence of an Acquisition. Upon Holder’s exercise of the Put Right and receipt of the Put Fee in immediately available funds, this Warrant shall terminate automatically and be of no further force or effect.

1.7 Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date or other termination of the warrant, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Exercise Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

1.8 Additional Shares. In addition to the right to purchase the Initial Shares granted to Holder on the Issue Date, on the Funding Date (as defined in the Loan Agreement) of the Term B Loan (as defined in the Loan Agreement) in accordance with the Loan Agreement, this Warrant shall become exercisable for a number of Shares equal to (a) the number of Initial Shares for which this Warrant is then exercisable, plus (b) 13,393 shares of Common Stock (the “Additional Term B Loan Shares”). Furthermore, on the Funding Date (as defined in the Loan Agreement) of the Term C Loan (as defined in the Loan Agreement) in accordance with the Loan Agreement, this Warrant shall become exercisable for a number of Share equal to (a) the number of Initial Shares for which this Warrant is then exercisable, plus (b) the Additional Term B Loan Shares, plus (c) 13,393 (the “Additional Term C Loan Shares”). For the sake of clarity, the maximum aggregate number of Shares issuable pursuant to the terms and conditions of this Warrant shall not exceed 80,357 Shares (as may be adjusted in accordance with Article 2).

ARTICLE 2. ADJUSTMENTS.

2.1 Stock Dividends, Splits, Etc. If Company declares or pays a dividend on its common stock (or Shares, if Shares are securities other than common stock) payable in common stock or other securities or property, subdivides the outstanding common stock into a greater amount of common stock, or, if Shares are securities other than common stock, subdivides Shares in a transaction that increases the amount of common stock into which Shares are convertible, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned Shares on the record date the dividend or subdivision occurred since the original issue date of this Warrant.

2.2 Reclassification, Recapitalization, Exchange or Substitution. Upon any reclassification, recapitalization, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for Shares if this Warrant had been exercised immediately before such reclassification, recapitalization, exchange, substitution, or other event. Company or its successor shall promptly issue to Holder a new Warrant for such new securities or other property. The new Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Exercise Price and to the number of securities or property issuable upon exercise of the new Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, recapitalizations, exchanges, substitutions, or other events.

2.3 Adjustments for Combinations, Etc. If the outstanding Shares are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Exercise Price shall be proportionately increased and the number of Shares as to which this warrant is exercisable shall be proportionately decreased.

2.4 No Impairment. Company shall not, by amendment of its Certificate of Incorporation or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by Company, but shall at all times in good faith assist in carrying out of all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article against impairment. If Company takes any action affecting Shares as described above that adversely affects Holder's rights under this Warrant, the Exercise Price shall be adjusted downward and the number of Shares issuable upon exercise of this Warrant shall be adjusted upward in such a manner that such action is offset and the aggregate Exercise Price of this Warrant is unchanged.

2.5 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of the Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, Company shall eliminate such fractional share interest by paying Holder an amount computed by multiplying the fractional interest by the fair market value of a full Share.

2.6 Certificate as to Adjustments. Upon each adjustment of the Exercise Price, Company at its expense shall promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer setting forth the Exercise Price in effect upon the date thereof and the series of adjustments leading to such Exercise Price, and the facts upon which such adjustment is based.

ARTICLE 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF COMPANY.

3.1 Representations and Warranties. The Company hereby represents and warrants to the Holder as follows:

(a) The initial Exercise Price referenced on the first page of this Warrant is not greater than the fair market value of the Shares as of the date of this Warrant.

(b) As of the date hereof, the Company has sufficient authorized shares reserved for the issuance of all capital stock which may be issued upon the exercise of this Warrant.

(c) The Company's capitalization table attached to this Warrant as Appendix 2 is true and complete as of the Issue Date.

3.2 Valid Issuance. Company shall take all steps necessary to insure that all Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.3 Notice of Certain Events. If Company proposes at any time (a) to declare any dividend or distribution upon its common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription pro rata to the holders of any class or series of its stock any additional shares of stock of any class or series or other rights; (c) to effect any reclassification or recapitalization of common stock; (d) to merge or consolidate with or into any other corporation, or sell,

lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up; or (e) offer holders of registration rights the opportunity to participate in an underwritten public offering of the company's securities for cash, then, in connection with each such event, Company shall give Holder (1) in the case of the matters referred to in (a) and (b) above at least 10 days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of common stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (c) and (d) above; (2) in the case of the matters referred to in (c) and (d) above at least 10 days prior written notice of the date when the same will take place (and specifying the date on which the holders of common stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event); and (3) in the case of the matter referred to in (e) above, the same notice as is given to the holders of such registration rights.

3.4 (a) Information. So long as the Holder holds this Warrant and/or any of the Shares, Company shall deliver to Holder (a) promptly, copies of all notices or other written communications to which Holder would be entitled if it held Shares as to which this Warrant was then exercisable and (b) such other financial statements required under and in accordance with any loan documents between Holder and Company, or if there are no such requirements or if the subject loan(s) are no longer outstanding, the financial statements deliverable pursuant to Sections 3.1(a)(i) and 3.1(a)(ii) of the Investors' Rights Agreement (as defined below) as if the Holder were a "Major Investor" (as defined in the Investors' Rights Agreement) under the Investors' Rights Agreement.

(b) Exempt Transaction. The issuance of the Shares will each constitute a transaction exempt from (i) the registration requirements of Section 5 of the Act, in reliance upon Section 4(2) thereof and/or Regulation D thereunder, and (ii) the qualification requirements of applicable state securities laws.

(c) Compliance with Rule 144. If the Holder proposes to sell the Shares issuable upon the exercise of this Warrant in compliance with Rule 144 promulgated by the SEC, then, upon Holder's written request to the Company, the Company shall furnish to the Holder, within ten days after receipt of such request, a written statement confirming the Company's compliance with the filing requirements of the SEC as set forth in such rule (as may be amended from time to time).

3.5 Registration Rights. The Shares shall have the same "piggyback" registration rights as are set forth in the Investors' Rights Agreement, dated as of February 26, 2021, between Company and its investors, as from time to time in effect (the "Investors' Rights Agreement"). The Company has provided Holder with a true and correct copy of the Investors' Rights Agreement, which is in full force and effect on the date hereof. Company agrees that no amendments will be made to the Investors' Rights Agreement, which would have an adverse impact on Holder's registration rights thereunder.

ARTICLE 4. REPRESENTATIONS AND COVENANTS OF HOLDER.

4.1 With respect to the acquisition of this Warrant and any of the Shares, Holder hereby represents and warrants to, and agrees with, the Company as follows:

(a) Purchase Entirely for Own Account. This Warrant is issued to Holder in reliance upon Holder's representation to the Company that this Warrant and the Shares will be acquired for investment for Holder's, or its affiliate's, own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof other than to an affiliate, and that Holder has no present intention of selling, granting any participation in, or otherwise distributing the same other than to an affiliate. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person, other than an affiliate, to sell, transfer or grant participations to such person or to any third person with respect to any of the Shares.

(b) Reliance upon Holder's Representations. Holder understands that this Warrant and the Shares are not registered under the Act on the ground that the issuance of such securities is exempt from registration under the Act, and that the Company's reliance on such exemption is predicated on Holder's representations set forth herein.

(c) Accredited Investor Status. Holder represents to the Company that Holder is an Accredited Investor (as defined in the Act).

(d) Restricted Securities. Holder understands that this Warrant and the Shares are “restricted securities” under the federal securities laws as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such securities may be resold without registration under the Act only in certain limited circumstances.

ARTICLE 5. MISCELLANEOUS.

5.1 Legends. This Warrant and the Shares (and the securities issuable, directly or indirectly, upon conversion of Shares, if any) shall be imprinted with a legend in substantially the following form:

“THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED, OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT REGISTRATION IS NOT REQUIRED UNDER SUCH ACT OR UNLESS SOLD PURSUANT TO RULE 144 UNDER SUCH ACT.”

5.2 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to Company, as reasonably requested by Company). Company shall not require Holder to provide an opinion of counsel if the transfer is to Holder’s parent company, Western Alliance Bancorporation, or any other affiliate of Holder, or if there is no material question as to the availability of current information as referenced in Rule 144(c). Holder represents that it has complied with Rule 144(d) and (e) in reasonable detail, the selling broker represents that it has complied with Rule 144(f), and the Company is provided with a copy of Holder’s notice of proposed sale.

5.3 Transfer Procedure. After receipt by Holder of the executed Warrant, Holder may transfer all of this Warrant to Holder’s parent company, Western Alliance Bancorporation, or an affiliate thereof or successor thereto (the “Subsequent Holder”), by execution of an Assignment substantially in the form of Appendix 3. Subject to the provisions of Article 4.7 and 5.1 and upon providing Company with written notice, the Subsequent Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any Affiliate of the Subsequent Holder, provided, however, in connection with any such transfer, the Subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable).

5.4 “Market Stand-Off” Agreement. The Holder hereby agrees that any Shares issued upon exercise of this Warrant, or Shares, shall also be subject to the market stand-off provisions of Section 2.12 of the Investors Rights Agreement, as may be amended from time to time.

5.5 Voting Agreement. Upon any exercise of this Warrant, other than in connection with an Acquisition, and solely with respect to the Shares issued thereupon, Holder shall, if the Company so requests in writing, execute a counterpart signature page to that certain Amended and Restated Voting Agreement, dated as of February 26, 2021, by and between the Company and the other parties thereto, and shall be come a “Stockholder” thereunder.

5.6 Notices. All notices and other communications from Company to Holder, or vice versa, shall be in writing and shall be deemed delivered and effective when given personally or mailed by first class registered or certified mail, postage prepaid, or by overnight courier, at such address as may have been furnished to Company or Holder, as the case may be, in writing by Company or such Holder from time to time.

5.7 Attorneys Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the undersigned has executed this Warrant as of the day and year first above written.

COMPANY:

BILLIONTOONE, INC., a Delaware corporation

By: /s/ Oguzhan Atay

Name: Oguzhan Atay

Title: Chief Executive Officer

IN WITNESS WHEREOF, the undersigned has executed this Warrant as of the day and year first above written.

HOLDER:

WESTERN ALLIANCE BANK, an Arizona corporation

By: /s/ Brian Kirkpatrick

Name: Brian Kirkpatrick

Title: Vice President

APPENDIX 1
NOTICE OF EXERCISE

[Strike paragraph that does not apply.]

1. The undersigned hereby elects to purchase shares of the Common Stock of Company pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price of such shares in full.
1. The undersigned hereby elects to convert the attached Warrant into Shares/cash [strike one] in the manner specified in the Warrant. This conversion is exercised with respect to _____ of the Shares covered by the Warrant.

2. Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below:

Name: _____

Address: _____

3. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

WESTERN ALLIANCE BANK, an Arizona corporation

By: _____

Name: _____

Title: _____

APPENDIX 2

CAPITALIZATION TABLE

APPENDIX 3

ASSIGNMENT

For value received, WESTERN ALLIANCE BANK, hereby sells, assigns and transfers unto:

Name: WESTERN ALLIANCE BANCORPORATION
Address: One E. Washing, Suite 1400
Phoenix, Arizona 85004
Fax: _____

that certain Warrant to Purchase Stock issued by BILLIONTOONE, INC., a Delaware corporation (the "Company"), on October 12, 2021 (the "Warrant") together with all rights, title and interest therein.

WESTERN ALLIANCE BANK

By: _____
Name: _____
Title: _____

By its execution below, and for the benefit of the Company, Western Alliance Bancorporation agrees to all other provisions of the Warrant as of the date hereof.

WESTERN ALLIANCE BANCORPORATION

By: _____
Name: _____
Title: _____

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, PLEDGED, OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR PURSUANT TO RULE 144 OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE CORPORATION AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.

WARRANT TO PURCHASE STOCK

Issuer: BILLIONTOONE, INC., a Delaware corporation (the "Company")

Number of Shares: 30,907 shares of Common Stock (the "Initial Shares"), plus all Additional Shares (as defined in Section 1.8 hereof) which Holder (as defined below) is entitled to purchase pursuant to Section 1.8 hereof (subject to adjustments made pursuant to stock splits, reverse stock splits, and other events specified in Article 2); provided, however, that the maximum aggregate number of shares of Common Stock issuable pursuant to the terms and conditions of this Warrant shall not exceed 41,209 shares of Common Stock (as may be adjusted in accordance with Article 2).

Class of Stock: Common Stock.

Exercise Price per Share: \$10.92

Issue Date: July 22, 2022

Expiration Date: July 22, 2032

THIS WARRANT CERTIFIES THAT, for the agreed upon value of \$1.00 and for other good and valuable consideration, WESTERN ALLIANCE BANK, or its assignees ("Holder") is entitled to purchase the number of fully paid and nonassessable shares of the Company's capital stock set forth above (the "Shares") at the Exercise Price per Share set forth above, as the same may be from time to time adjusted pursuant to Article 2 hereof and subject to the provisions and upon the terms and conditions set forth in this Warrant.

ARTICLE 1. EXERCISE.

1.1 Method of Exercise. This Warrant is exercisable, in whole or in part, at any time and from time to time on or before the Expiration Date set forth above. Holder may exercise this Warrant by delivering a duly executed Notice of Exercise, in substantially the form attached hereto as Appendix 1, to the principal office of Company. Unless Holder is exercising the conversion right set forth in Section 1.2, Holder shall also deliver to Company an amount equal to the aggregate Exercise Price for Shares being purchased, by check or wire.

1.2 Conversion Right. In lieu of exercising this Warrant as specified in Section 1.1, Holder may from time to time convert this Warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of Shares or other securities otherwise issuable upon exercise of this Warrant minus the aggregate Exercise Price of such Shares by (b) the fair market value of one Share. The fair market value of Shares shall be determined pursuant to Section 1.3.

1.3 Fair Market Value. If the Shares are traded in a public market, the fair market value of the Shares shall be the closing price of the Shares (or the closing price of the Company's stock into which the Shares are convertible) reported for the business day immediately before Holder delivers its Notice of Exercise to the Company. If the Shares are not traded in a public market, the Board of Directors of Company shall determine fair market value in its reasonable good faith judgment. The foregoing notwithstanding, if Holder advises the Board of Directors in writing that Holder disagrees with such determination, then Company and Holder shall promptly agree upon a reputable investment banking firm to undertake such valuation. If the valuation of such investment banking firm is greater than that determined by the Board of Directors, then all fees and expenses of such investment banking firm shall be paid by Company. In all other circumstances, such fees and expenses of such investment banking firm shall be paid by Holder.

1.4 Delivery of Certificate and New Warrant. Promptly (and in no event more than 3 business days after exercise) after Holder exercises or converts this Warrant, Company shall deliver to Holder certificates for Shares acquired and, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant representing Shares not yet acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to Company or, in the case of mutilation, on surrender and cancellation of this Warrant, Company at its expense shall execute and deliver a replacement Warrant.

1.6 Sale, Merger, or Consolidation of Company.

(a) For the purpose of this Warrant, “Acquisition” means any sale, license, or other disposition of all or substantially all of the assets of Company, or any reorganization, consolidation, or merger of Company where the holders of Company’s securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction, other than by the sale of the Company’s equity securities to venture capital or private equity investors in a bona fide equity financing primarily for capital raising purposes so long as the Company identifies to Bank the venture capital or private equity investors at least five (5) Business Days prior to the closing of the transaction and provides to Bank a description of the material terms of the transaction.

(b) For the purpose of this Warrant “Marketable Securities” means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and is then current in its filing of all required reports and other information under the Securities Act of 1933, as amended, and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market, and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly re-selling all of the issuer’s shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

(c) In the event of an Acquisition in which the consideration to be received by the Company’s stockholders consists solely of cash, solely of Marketable Securities or a combination of cash and Marketable Securities (a “Cash/Public Acquisition”), and the fair market value of one Share as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date immediately prior to such Cash/Public Acquisition, and Holder has not exercised this Warrant pursuant to Section 1.1 above as to all Shares, then this Warrant shall automatically be deemed to be exercised pursuant to Section 1.2 above as to all Shares effective immediately prior to and contingent upon the consummation of a Cash/Public Acquisition. In connection with such exercise, Holder shall be deemed to have restated each of the representations and warranties in Section 4 of the Warrant as the date thereof and the Company shall promptly notify the Holder of the number of Shares (or such other securities) issued upon exercise. In the event of a Cash/Public Acquisition where the fair market value of one Share as determined in accordance with Section 1.3 above would be less than the Warrant Price in effect immediately prior to such Cash/Public Acquisition, then this Warrant will expire immediately prior to the consummation of such Cash/Public Acquisition.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition defined above, either (i) the acquiring, surviving or successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant, or (ii) if the acquiring, successor or surviving entity shall not have assumed this Warrant, Holder shall put this Warrant back to the Company for a cash fee equal to the greater of (x) (i) Three Hundred Thirty-Seven Thousand and Five Hundred Dollars (\$337,500), plus (ii) if the Additional Term B Loan Shares have been granted hereunder, an additional Thirty-Seven Thousand Five Hundred Dollars (\$37,500) plus (iii) if the Additional Term C Loan Shares have been granted hereunder, an additional Thirty-Seven Thousand Five Hundred Dollars (\$37,500) plus (iv) if the Additional Term D Loan Shares have been granted hereunder, an additional Thirty-Seven Thousand Five Hundred Dollars (\$37,500), or (y) the value of the aggregate consideration payable to Holder had Holder exercised this Warrant pursuant to Section 1.2 immediately prior to such Put Right Trigger Event (such right, the “Put Right” and such fee the “Put Fee”). Company shall provide Holder no less than ten (10) days’ written notice prior to the occurrence of an Acquisition. Upon Holder’s exercise of the Put Right and receipt of the Put Fee in immediately available funds, this Warrant shall terminate automatically and be of no further force or effect.

1.7 Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date or other termination of the warrant, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Exercise Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

1.8 Additional Shares. In addition to the right to purchase the Initial Shares granted to Holder on the Issue Date, on the Funding Date (as defined in the Loan and Security Agreement between Holder and Company dated as of October 12, 2021, as amended from time to time, including by that certain First Amendment to Loan and Security Agreement dated as of the Issue Date, collectively, the “Loan Agreement”) of the Term B Loan (as defined in the Loan Agreement) in accordance with the Loan Agreement, this Warrant shall become exercisable for a number of Shares equal to (a) the number of Initial Shares for which this Warrant is then exercisable, plus (b) 3,434 shares of Common Stock (the “Additional Term B Loan Shares”). Furthermore, on the Funding Date (as defined in the Loan Agreement) of the Term C Loan (as defined in the Loan Agreement) in accordance with the Loan Agreement, this Warrant shall become exercisable for a number of Shares equal to (a) the number of Initial Shares for which this Warrant is then exercisable, plus (b) the Additional Term B Loan Shares, plus (c) 3,434 (the “Additional Term C Loan Shares”). Furthermore, on the Funding Date (as defined in the Loan Agreement) of the Term D Loan (as defined in the Loan Agreement) in accordance with the Loan Agreement, this Warrant shall become exercisable for a number of Shares equal to (a) the number of Initial Shares for which this Warrant is then exercisable, plus (b) the Additional Term B Loan Shares, plus (c) the Additional Term C Loan Shares, plus (d) 3,434 (the “Additional Term D Loan Shares”). For the sake of clarity, the maximum aggregate number of Shares issuable pursuant to the terms and conditions of this Warrant shall not exceed 41,209 Shares (as may be adjusted in accordance with Article 2).

ARTICLE 2. ADJUSTMENTS.

2.1 Stock Dividends, Splits, Etc. If Company declares or pays a dividend on its common stock (or Shares, if Shares are securities other than common stock) payable in common stock or other securities or property, subdivides the outstanding common stock into a greater amount of common stock, or, if Shares are securities other than common stock, subdivides Shares in a transaction that increases the amount of common stock into which Shares are convertible, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned Shares on the record date the dividend or subdivision occurred since the original issue date of this Warrant.

2.2 Reclassification, Recapitalization, Exchange or Substitution. Upon any reclassification, recapitalization, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for Shares if this Warrant had been exercised immediately before such reclassification, recapitalization, exchange, substitution, or other event. Company or its successor shall promptly issue to Holder a new Warrant for such new securities or other property. The new Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Exercise Price and to the number of securities or property issuable upon exercise of the new Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, recapitalizations, exchanges, substitutions, or other events.

2.3 Adjustments for Combinations, Etc. If the outstanding Shares are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Exercise Price shall be proportionately increased and the number of Shares as to which this warrant is exercisable shall be proportionately decreased.

2.4 No Impairment. Company shall not, by amendment of its Certificate of Incorporation or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by Company, but shall at all times in good faith assist in carrying out of all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article against impairment. If Company takes any action affecting Shares as described above that adversely affects Holder's rights under this Warrant, the Exercise Price shall be adjusted downward and the number of Shares issuable upon exercise of this Warrant shall be adjusted upward in such a manner that such action is offset and the aggregate Exercise Price of this Warrant is unchanged.

2.5 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of the Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, Company shall eliminate such fractional share interest by paying Holder an amount computed by multiplying the fractional interest by the fair market value of a full Share.

2.6 Certificate as to Adjustments. Upon each adjustment of the Exercise Price, Company at its expense shall promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer setting forth the Exercise Price in effect upon the date thereof and the series of adjustments leading to such Exercise Price, and the facts upon which such adjustment is based.

ARTICLE 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF COMPANY.

3.1 Representations and Warranties. The Company hereby represents and warrants to the Holder as follows:

(a) The initial Exercise Price referenced on the first page of this Warrant is not greater than the fair market value of the Shares as of the date of this Warrant.

(b) As of the date hereof, the Company has sufficient authorized shares reserved for the issuance of all capital stock which may be issued upon the exercise of this Warrant.

(c) The Company's capitalization table attached to this Warrant as Appendix 2 is true and complete as of the Issue Date.

3.2 Valid Issuance. Company shall take all steps necessary to insure that all Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.3 Notice of Certain Events. If Company proposes at any time (a) to declare any dividend or distribution upon its common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription pro rata to the holders of any class or series of its stock any additional shares of stock of any class or series or other rights; (c) to effect any reclassification or recapitalization of common stock; (d) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up; or (e) offer holders of registration rights the opportunity to participate in an underwritten public offering of the company's securities for cash, then, in connection with each such event, Company shall give Holder (1) in the case of the matters referred to in (a) and (b) above at least 10 days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of common stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (c) and (d) above; (2) in the case of the matters referred to in (c) and (d) above at least 10 days prior written notice of the date when the same will take place (and specifying the date on which the holders of common stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event); and (3) in the case of the matter referred to in (e) above, the same notice as is given to the holders of such registration rights.

3.4 (a) Information. So long as the Holder holds this Warrant and/or any of the Shares, Company shall deliver to Holder (a) promptly, copies of all notices or other written communications to which Holder would be entitled if it held Shares as to which this Warrant was then exercisable and (b) such other financial statements required under and in accordance with any loan documents between Holder and Company, or if there are no such requirements or if the subject loan(s) are no longer outstanding, the financial statements deliverable pursuant to Sections 3.1(a)(i) and 3.1(a)(ii) of the Investors' Rights Agreement (as defined below) as if the Holder were a "Major Investor" (as defined in the Investors' Rights Agreement) under the Investors' Rights Agreement.

(b) Exempt Transaction. The issuance of the Shares will each constitute a transaction exempt from (i) the registration requirements of Section 5 of the Act, in reliance upon Section 4(2) thereof and/or Regulation D thereunder, and (ii) the qualification requirements of applicable state securities laws.

(c) Compliance with Rule 144. If the Holder proposes to sell the Shares issuable upon the exercise of this Warrant in compliance with Rule 144 promulgated by the SEC, then, upon Holder's written request to the Company, the Company shall furnish to the Holder, within ten days after receipt of such request, a written statement confirming the Company's compliance with the filing requirements of the SEC as set forth in such rule (as may be amended from time to time).

3.5 Registration Rights. The Shares shall have the same "piggyback" registration rights as are set forth in the Amended and Restated Investors' Rights Agreement, dated as of March 16, 2022, between Company and its investors, as from time to time in effect (the "Investors' Rights Agreement"). The Company has provided Holder with a true and correct copy of the Investors' Rights Agreement, which is in full force and effect on the date hereof. Company agrees that no amendments will be made to the Investors' Rights Agreement, which would have an adverse impact on Holder's registration rights thereunder.

ARTICLE 4. REPRESENTATIONS AND COVENANTS OF HOLDER.

4.1 With respect to the acquisition of this Warrant and any of the Shares, Holder hereby represents and warrants to, and agrees with, the Company as follows:

(a) Purchase Entirely for Own Account. This Warrant is issued to Holder in reliance upon Holder's representation to the Company that this Warrant and the Shares will be acquired for investment for Holder's, or its affiliate's, own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof other than to an affiliate, and that Holder has no present intention of selling, granting any participation in, or otherwise distributing the same other than to an affiliate. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person, other than an affiliate, to sell, transfer or grant participations to such person or to any third person with respect to any of the Shares.

(b) Reliance upon Holder's Representations. Holder understands that this Warrant and the Shares are not registered under the Act on the ground that the issuance of such securities is exempt from registration under the Act, and that the Company's reliance on such exemption is predicated on Holder's representations set forth herein.

(c) Accredited Investor Status. Holder represents to the Company that Holder is an Accredited Investor (as defined in the Act).

(d) Restricted Securities. Holder understands that this Warrant and the Shares are "restricted securities" under the federal securities laws as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such securities may be resold without registration under the Act only in certain limited circumstances.

ARTICLE 5. MISCELLANEOUS.

5.1 Legends. This Warrant and the Shares (and the securities issuable, directly or indirectly, upon conversion of Shares, if any) shall be imprinted with a legend in substantially the following form:

"THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED, OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT REGISTRATION IS NOT REQUIRED UNDER SUCH ACT OR UNLESS SOLD PURSUANT TO RULE 144 UNDER SUCH ACT."

5.2 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to Company, as reasonably requested by Company). Company shall not require Holder to provide an opinion of counsel if the transfer is to Holder's parent company, Western Alliance Bancorporation, or any other affiliate of Holder, or if there is no material question as to the availability of current information as referenced in Rule 144(c), Holder represents that it has complied with Rule 144(d) and (e) in reasonable detail, the selling broker represents that it has complied with Rule 144(f), and the Company is provided with a copy of Holder's notice of proposed sale.

5.3 Transfer Procedure. After receipt by Holder of the executed Warrant, Holder may transfer all of this Warrant to Holder's parent company, Western Alliance Bancorporation, or an affiliate thereof or successor thereto (the "Subsequent Holder"), by execution of an Assignment substantially in the form of Appendix 3. Subject to the provisions of Article 4.7 and 5.1 and upon providing Company with written notice, the Subsequent Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any Affiliate of the Subsequent Holder, provided, however, in connection with any such transfer, the Subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable).

5.4 “Market Stand-Off” Agreement. The Holder hereby agrees that any Shares issued upon exercise of this Warrant, or Shares, shall also be subject to the market stand-off provisions of Section 2.12 of the Investors Rights Agreement, as may be amended from time to time.

5.5 Voting Agreement. Upon any exercise of this Warrant, other than in connection with an Acquisition, and solely with respect to the Shares issued thereupon, Holder shall, if the Company so requests in writing, execute a counterpart signature page to that certain Amended and Restated Voting Agreement, dated as of March 16, 2022, by and between the Company and the other parties thereto, and shall be come a “Stockholder” thereunder.

5.6 Notices. All notices and other communications from Company to Holder, or vice versa, shall be in writing and shall be deemed delivered and effective when given personally or mailed by first class registered or certified mail, postage prepaid, or by overnight courier, at such address as may have been furnished to Company or Holder, as the case may be, in writing by Company or such Holder from time to time.

5.7 Attorneys Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys’ fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the undersigned has executed this Warrant as of the day and year first above written.

COMPANY:

BILLIONTOONE, INC., a Delaware corporation

By: /s/ Oguzhan Atay

Name: Oguzhan Atay

Title: Chief Executive Officer

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned hereby elects to purchase _____ shares of the Common Stock of Company pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price of such shares in full.

1. The undersigned hereby elects to convert the attached Warrant into Shares/cash in the manner specified in the Warrant. This conversion is exercised with respect to _____ of the Shares covered by the Warrant.

2. Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below:

Name: _____

Address: _____

3. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

WESTERN ALLIANCE BANK, an Arizona corporation

By: _____
Name: _____
Title: _____

APPENDIX 2

CAPITALIZATION TABLE

APPENDIX 3

ASSIGNMENT

For value received, WESTERN ALLIANCE BANK, hereby sells, assigns and transfers unto:

Name: WESTERN ALLIANCE BANCORPORATION
Address: One E. Washing, Suite 1400
Phoenix, Arizona 85004
Fax: _____

that certain Warrant to Purchase Stock issued by BILLIONTOONE, INC., a Delaware corporation (the "Company"), on October 12, 2021 (the "Warrant") together with all rights, title and interest therein.

WESTERN ALLIANCE BANK

By: _____
Name: _____
Title: _____

By its execution below, and for the benefit of the Company, Western Alliance Bancorporation agrees to all other provisions of the Warrant as of the date hereof.

WESTERN ALLIANCE BANCORPORATION

By: _____
Name: _____
Title: _____

NOTE PURCHASE AGREEMENT

dated as of August 2, 2024

among

BillionToOne, Inc.

as Issuer,

THE OTHER OBLIGORS PARTY HERETO,

THE PURCHASERS PARTY HERETO,

and

**BWCB SA LLC
as Purchaser Agent**

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This **NOTE PURCHASE AGREEMENT** (as the same may from time to time be amended, restated, amended and restated, supplemented or otherwise modified from time to time, this “**Agreement**”) is entered into as of August 2, 2024, by and among the Purchasers listed on Schedule 1.1 hereof or otherwise a party hereto from time to time (each a “**Purchaser**” and collectively, the “**Purchasers**”), BWCB SA LLC, a Delaware limited liability company, as agent for the Purchasers (in such capacity, “**Purchaser Agent**”), BillionToOne, Inc., a Delaware corporation (“**Issuer**”) and the other Obligor from time to time party hereto.

RECITALS

Issuer wishes to sell and issue Notes to the Purchasers, and the Purchasers desire to purchase Notes from Issuer, all on the terms and subject to the conditions set forth herein.

AGREEMENT

The parties agree as follows:

1. DEFINITIONS AND CONSTRUCTION.

1.1 Definitions. As used in this Agreement, the following terms shall have the following definitions:

“Accounts” means all presently existing and hereafter arising accounts, contract rights, payment intangibles, and all other forms of obligations owing to an Obligor arising out of the sale or lease of goods (including, without limitation, the licensing of software and other technology) or the rendering of services by such Obligor, whether or not earned by performance, and any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by such Obligor and such Obligor’s Books relating to any of the foregoing.

“Acquisition” means (a) any transaction, or any series of related transactions, by which any Person directly or indirectly, by means of a take-over bid, tender offer, amalgamation, merger, purchase of assets or shares or similar transaction having the same effect as any of the foregoing, (i) acquires any business, product, business line or product line, division or unit of operation of any Person, or all or substantially all of the assets of any business, product, business line or product line, division or other unit of operation of any Person, (ii) acquires control of securities of a Person representing more than 50% of the ordinary voting power for the election of directors or other governing body of such Person if the business affairs of such Person are managed by a board of directors or other governing body or (iii) acquires control of more than 50% of the ownership interest in any Person that is not managed by a board of directors or other governing body and (b) any In-License.

“Acquisition Cost” means consideration paid or payable for an Acquisition (including all maintenance and/or similar payments, earnouts, milestone payments and deferred purchase price and other contractual commitments), excluding royalties on sales calculated on an arm’s-length basis.

“Affiliate” means, with respect to any Person, any Person that owns or controls directly or indirectly such Person, any Person that controls or is controlled by or is under common control with such Person, and each of such Person’s senior executive officers, directors, and partners.

“Agreement” is defined in the preamble hereof.

“Anti-Corruption Laws” means all laws of any jurisdiction applicable to Issuer or any of its Subsidiaries from time to time prohibiting bribery or corruption, including without limitation: (a) legislation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, 1997; (b) the United Kingdom Bribery Act 2010; (c) the United States Foreign Corrupt Practices Act of 1977, as amended; (d) the (India) Prevention of Corruption Act, 1988; and (e) other similar laws, rules and regulations in other jurisdictions.

“Anti-Terrorism Laws” means any laws relating to terrorism or money laundering, including, without limitation, (i) the Money Laundering Control Act of 1986 (e.g., 18 U.S.C. §§ 1956 and 1957), (ii) the Bank Secrecy Act of 1970 (e.g., 31 U.S.C. §§ 5311 – 5330), as amended by the USA PATRIOT Act, (iii) the laws, regulations and Executive Orders administered by OFAC, (iv) the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 and implementing regulations by the United States Department of the Treasury, (v) any law prohibiting or directed against terrorist activities or the financing of terrorist activities (e.g., 18 U.S.C. §§ 2339A and 2339B), (vi) any legislation or regulations applicable to any party to the Note Documents and relating to the fight against money laundering for capital arising from drug-trafficking and the activities of criminal organizations and counter-terrorist financing, (vii) the (India) Prevention of Money Laundering Act, 2002, or (viii) any similar laws enacted in the United States, United Kingdom, European Union, India or any other jurisdictions in which the parties to this agreement operate, and all other present and future legal requirements of any Governmental Authority governing, addressing, relating to, or attempting to eliminate, terrorist acts and acts of war.

“Applicable Rate” means a rate per annum equal to 8%.

“Approved Fund” means any (i) investment company, fund, trust, securitization vehicle or conduit that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its business or (ii) any Person (other than a natural person) which temporarily warehouses loans for any Purchaser or any entity described in the preceding clause (i) and that, with respect to each of the preceding clauses (i) and (ii), is administered or managed by (a) a Purchaser, (b) an Affiliate of a Purchaser or (c) a Person (other than a natural person) or an Affiliate of a Person (other than a natural person) that administers or manages a Purchaser.

“Approved Purchaser” is defined in [Section 13.1\(a\)](#).

“Books” means Issuer’s or any of its Subsidiaries’ books and records including: ledgers; records concerning such Persons’ assets or liabilities, the Collateral, business operations or financial condition; and all computer programs, or tape files, and the equipment, containing such information.

“Business Day” means any day that is not a Saturday, Sunday, or other day on which banks in the State of New York are authorized or required to close.

“Cash Equivalents” means (i) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one (1) year from the date of acquisition thereof, (ii) commercial paper maturing no more than one (1) year from the date of creation thereof and currently having rating of at least A-2 or P-2 from either Standard & Poor’s Corporation or Moody’s Investors Service, (iii) certificates of deposit maturing no more than one (1) year from the date of investment therein issued by a bank or trust company organized under the laws of the United States of America (or any state thereof) (A) that has combined capital and surplus of at least \$500,000,000 or (B) that has (or is a subsidiary of a bank holding company that has) a longterm unsecured debt rating of at least A or the equivalent thereof by Standard & Poor’s Ratings Services or at least A2 or the equivalent thereof by Moody’s Investors Service, Inc. or A or better by Fitch Investor Services, and (iv) money market accounts money market funds that are SEC registered 2a-7 eligible only, have assets in excess of \$1,000,000,000, offer a daily purchase/redemption feature and seek to maintain a constant share price; provided that, the Obligor will invest only in ‘no-load’ funds which have a constant \$1.00 net asset value target.

“Change of Control” means (A) a transaction in which any “person” or “group” (within the meaning of Section 13(d) and 14(d)(2) of the Securities Exchange Act of 1934) becomes the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of a sufficient number of shares of all classes of stock or other equity securities, as applicable, then outstanding of Issuer ordinarily entitled to vote in the election of directors, empowering such “person” or “group” to elect a majority of the board of directors of Issuer, who did not have such power before such transaction, other than (i) as a result of the sale of Issuer’s equity securities

in a public offering or (ii) by the sale of Issuer's equity securities to Issuer's existing investors (as of the Effective Date) in a bona fide equity financing primarily for capital raising purposes, or (B) any event or series of events that results in Issuer's failure to own, directly or indirectly, beneficially and of record, 100% of all issued and outstanding equity interests of each other Obligor (other than directors' qualifying shares required pursuant to applicable law).

"Claims" are defined in Section 13.2.

"Code" means the New York Uniform Commercial Code, as amended from time to time.

"Collateral" means the property described on Exhibit A attached hereto.

"Collateral Account" means any deposit account, securities account or commodity account, or any other bank account maintained by any Obligor at any time (other than any Excluded Account).

"Commitment" means, for any Purchaser, the obligation of such Purchaser to purchase Notes, up to the principal amount shown on Schedule 1.1.

"Commitments" means the aggregate amount of such commitments of all Purchasers.

"Commitment Percentage" is set forth in Schedule 1.1, as amended from time to time.

"Commitment Termination Date" means the earliest of (i) (a) with respect to the First Purchase, the First Purchase Date, (b) with respect to the Second Purchase, September 30, 2025, (c) with respect to the Third Purchase, March 31, 2026, and (d) with respect to the Fourth Purchase, March 31, 2026, (ii) the occurrence of a Change of Control, (iii) the redemption or repurchase by Issuer in full of all outstanding Notes, (iv) the payment to the Purchasers of the Repayment Amount, and (v) the termination of the Commitments pursuant to Section 9.1.

"Communication" is defined in Article 10.

"Compliance Certificate" means that certain certificate in the form attached hereto as Exhibit C.

"Confidential Information" means (a) all information disclosed, directly or indirectly, through any means of communication or observation, by or on behalf of the Disclosing Party to the other Receiving Party on or after the date hereof, that relates to or is derived from the Disclosing Party's business, strategic, marketing or technological affairs, or to any other matter that the Receiving Party is advised or has reason to know is the confidential or proprietary information of the Disclosing Party, (b) the Note Documents and any term sheets, transaction structures and draft agreements or amendments and any discussions or negotiations relating thereto and (c) all notes, analyses, reports, compilations, forecasts, memoranda, studies or other documents or writings (including emails, text or other instant messages and handwritten documents) based on, containing or relating to any of the foregoing which may be prepared or created by, for or on behalf of the Receiving Party or its Representatives.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any indebtedness, lease, dividend, letter of credit or other obligation of another; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards, or merchant services issued or provided for the account of that Person; and (iii) all obligations arising under any agreement or arrangement designed to protect such Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by Purchaser Agent in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

“Control Agreement” is any control agreement entered into among the depository institution at which an Obligor maintains a deposit account or the securities intermediary or commodity intermediary at which an Obligor maintains a securities account or a commodity account, such Obligor, and Purchaser Agent pursuant to which Purchaser Agent obtains control (within the meaning of the Code) over any such account.

“Copyrights” means any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

“Default” means any event that upon the giving of notice, the passage of time or both, would constitute an Event of Default.

“Default Rate” is defined in [Section 2.3\(c\)](#).

“Designated Deposit Account” means Issuer’s deposit account, account number 8553414569, maintained with Western Alliance Bank, and any successor deposit account designated by Issuer as such by written notice to Purchaser Agent; provided that the Designated Deposit Account shall be (a) located in the United States, (b) held with a financial institution that meets the requirements set forth in clause (b)(ii) of the definition of “Permitted Investments”, and (c) at all times subject to a Control Agreement and an ACH authorization in favor of Purchaser Agent.

“Disclosing Party” is defined in [Section 13.9\(a\)](#).

“Disqualified Equity Interest” means any equity interest which, by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable), or upon the happening of any event, (a) matures (excluding any maturity as the result of an optional redemption by the issuer thereof) or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or is redeemable at the option of the holder thereof, in whole or in part, on or prior to 181 days after the Maturity Date (other than solely for (x) equity interests that are not Disqualified Equity Interests and (y) cash in lieu of fractional shares), (b) is convertible into or exchangeable (unless at the sole option of the issuer thereof) for (i) debt securities or (ii) any equity interest referred to this definition, in each case at any time on or prior to 181 days after the Maturity Date, or (c) contains any repurchase obligation or provides for mandatory distributions which may come into effect prior to Payment in Full; ~~provided, however, that~~ if such equity interests are issued pursuant to any plan for the benefit of any employee, director, manager or consultant of Issuer or its Subsidiaries or by any such plan to such employee, director, manager or consultant, such equity interests shall not constitute Disqualified Equity Interests because they may be required to be repurchased by Issuer or its Subsidiaries (x) to the extent permitted by [Section 7.6](#), in order to satisfy applicable statutory or regulatory obligations or (y) to the extent permitted by [Section 7.6](#), as a result of the termination, death or disability of such employee, director, manager or consultant.

“Distressed Debt Investor” means, as reasonably determined by the Purchaser Agent, any investor or investment fund specializing in distressed debt and a majority of whose investment portfolio at all times consists of distressed debt; provided, that for the avoidance of doubt, any investment fund that is not itself a Distressed Debt Investor, but whose parent or operator also owns or operates one or more investment funds that are Distressed Debt Investors, shall not be deemed to be a Distressed Debt Investor.

“DOJ” means the U.S. Department of Justice or any successor thereto, or any other comparable Governmental Authority.

“Effective Date” means the date of this Agreement.

“Eligible Assignee” means (i) a Purchaser, (ii) an Affiliate of a Purchaser, (iii) an Approved Fund and (iv) any commercial bank, savings and loan association or savings bank or any other entity which is an “accredited investor” (as defined in Regulation D under the Securities Act) and which extends credit or buys loans as one of its businesses, including insurance companies, mutual funds, lease financing companies and commercial finance companies, in each case of this clause (iv), which either (A) has a rating of BBB or higher from Standard & Poor’s Rating Group and a rating of Baa2 or higher from Moody’s Investors Service, Inc. at the date that it becomes a Purchaser or (B) has total assets in excess of Five Billion Dollars (\$5,000,000,000). Notwithstanding the foregoing, in no event shall any Person who is (a) an Affiliate or Subsidiary of Issuer or a direct competitor of Issuer as reasonably determined by Purchaser Agent or (b) a Distressed Debt Investor constitute an Eligible Assignee.

“Equipment” means all present and future machinery, equipment, tenant improvements, furniture, fixtures, vehicles, tools, parts and attachments in which an Obligor has any interest.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended, and the regulations thereunder.

“Event of Default” has the meaning assigned in Article 8.

“Exchange Act” means the Securities Exchange Act of 1934, as amended.

“Excluded Accounts” means, collectively, (a) any deposit account of any Obligor that is used for payroll, payroll Taxes and other employee wage and benefit payments to or for the benefit of Issuer’s or any of its Subsidiaries’ employees, (b) any escrow accounts, deposit accounts and trust accounts that are pledged or otherwise encumbered pursuant to Permitted Liens described in clause (j) of the definition thereof, (c) “zero balance” accounts, and (d) other accounts, the balance of which such accounts, in the case of this clause (d), does not exceed, \$1,000,000 individually and \$2,500,000 in the aggregate at any time.

“Excluded Subsidiary” means any Foreign Subsidiary that (i) individually constitutes or holds less than 5% of Issuer’s consolidated total assets and generates less than 5% of Issuer’s consolidated total revenue, and (ii) when taken together with all then existing Excluded Subsidiaries, such Subsidiary and such Excluded Subsidiaries, in the aggregate, would constitute or hold less than 10% of Issuer’s consolidated total assets and generate less than 10% of Issuer’s consolidated total revenue, in each case determined with reference to the most recent fiscal period for which financial statements were required to have been delivered pursuant to Section 6.3(a). If at any time the aggregate amount of Issuer’s consolidated total assets or consolidated total revenue attributable to Excluded Subsidiaries exceeds 10% of Issuer’s consolidated total assets or consolidated total revenue, Issuer shall promptly (and in any event within thirty (30) days of becoming aware of such excess) designate sufficient Subsidiaries as ceasing to constitute “Excluded Subsidiaries” to eliminate such excess, and such designated Subsidiaries shall be required to become Guarantors in accordance with Article 12. If at any time any Subsidiary designated as an Excluded Subsidiary individually constitutes or holds 5% or more of Issuer’s consolidated total assets or generates 5% or more of Issuer’s consolidated total revenue, such Subsidiary shall cease to constitute an Excluded Subsidiary and Issuer shall promptly (and in any event within thirty (30) days of becoming aware thereof) cause such Subsidiary to become a Guarantor in accordance with Article 12.

“Excluded Taxes” means any of the following Taxes imposed on or with respect to any Purchaser or required to be withheld or deducted from a payment to any Purchaser: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case (i) imposed as a result of the Purchaser being organized under the laws of, or having its principal office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes; (b) Taxes attributable to such Purchaser’s failure to comply with Section 14.2; (c) Taxes resulting directly from such Purchaser changing its jurisdiction of domicile or form of legal entity; and (d) any withholding Taxes imposed under FATCA. For the purposes of the definition of “Excluded Taxes,” the term “Purchaser” includes its successors and assigns pursuant to Section 13.1.

“Existing Indebtedness” is the indebtedness of Issuer to Western Alliance Bank in the aggregate principal outstanding amount as of the Effective Date of approximately \$35,000,000.00 pursuant to that certain Loan and Security Agreement, dated as of October 12, 2021, as amended by the First Amendment to Loan and Security Agreement, dated as of July 22, 2022, by and between Western Alliance Bank, an Arizona corporation, and Issuer.

“FATCA” means Sections 1471 through 1474 of the IRC, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the IRC and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities and implementing such Sections of the IRC.

“FDA” means the U.S. Food and Drug Administration or any successor thereto, or any other comparable Governmental Authority, bodies that are designated to assess the conformity of medical devices, that is concerned with the safety, efficacy, reliability, manufacture, sale, advertising, promotion, reimbursement, import, export or marketing of medical products or drugs.

“Federal Healthcare Program” is defined in [Section 5.10\(c\)](#).

“First Purchase” is defined in [Section 2.1\(a\)](#).

“First Purchase Date” means the Purchase Date in respect of the First Purchase, which shall occur on the first Business Day immediately following the Effective Date.

“Foreign Subsidiary” means any Subsidiary of Issuer not formed under the laws of the United States or any state or territory thereof.

“Fourth Purchase” is defined in [Section 2.1\(d\)](#).

“Fourth Purchase Date” means each Purchase Date in respect of a Fourth Purchase.

“GAAP” means generally accepted accounting principles as in effect from time to time.

“Governmental Approval” is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

“Governmental Authority” is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body (including, without limitation, the FDA), court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

“Gross Margin” means, for any period of determination, (I) Net Revenue *minus* cost of goods sold *divided* by (II) Net Revenue, all determined in accordance with GAAP and expressed as a percentage.

“Guarantee Assumption Agreement” means a Guarantee Assumption Agreement substantially in the form of [Exhibit E](#) by a Person that, pursuant to [Section 6.11](#), is required to become a “Guarantor” hereunder.

“Guaranteed Obligations” is defined in [Section 12.1](#).

“Guarantor” means each Person that is a guarantor of the Obligations under a Guaranty, including, without limitation, a Person that becomes a guarantor pursuant to a Guarantee Assumption Agreement.

“Guaranty” means the guaranty set forth in Section 12 and/or any guarantee of all or any part of the Obligations in form and substance reasonably satisfactory to Purchaser Agent, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“Health Care Laws” is defined in Section 5.10(a).

“HIPAA” is defined in Section 5.11(a).

“In-License” means any license or other agreement between the Issuer or any of its Subsidiaries and any third party pursuant to which the Issuer or such Subsidiary obtains a license or sublicense of, covenant not to sue under, or other similar rights to, any Intellectual Property of such third party (other than off-the-shelf software licenses and nonexclusive licenses of Intellectual Property in the ordinary course of business).

“Indebtedness” means (a) all indebtedness for borrowed money or the deferred purchase price of property or services, including without limitation reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, (d) all Contingent Obligations, (e) all obligations with respect to Disqualified Equity Interests, and (f) all liability and obligations under receivables factoring, receivable sales or similar transactions or arising under revenue interest agreements, royalty financing agreements or similar financings.

“Insolvency Proceeding” means any proceeding commenced by or against any person or entity under any provision of the United States Bankruptcy Code, as amended, or under any other bankruptcy or insolvency law, including assignments for the benefit of creditors, formal or informal moratoria, compositions, extension generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

“Intellectual Property” means all of Issuer’s or any Subsidiary’s right, title, and interest in and to the following: Copyrights, Trademarks and Patents; all trade secrets, all design rights, claims for damages by way of past, present and future infringement of any of the rights included above, all licenses or other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights; all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents; and all proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

“Interest Period” means, with respect to each Note, (a) initially, the period commencing on the Purchase Date of such Note and ending on the last day of the calendar quarter in which such Purchase Date occurs, and (b) thereafter, each period beginning on the first day following the end of the immediately preceding Interest Period and ending on the last day of the next succeeding calendar quarter.

“Inventory” means all inventory in which Issuer or a Subsidiary has or acquires any interest, including work in process and finished products intended for sale or lease or to be furnished under a contract of service, of every kind and description now or at any time hereafter owned by or in the custody or possession, actual or constructive, of Issuer or a Subsidiary, including such inventory as is temporarily out of its custody or possession or in transit and including any returns upon any accounts or other proceeds, including insurance proceeds, resulting from the sale or disposition of any of the foregoing and any documents of title representing any of the above, and Issuer’s and its Subsidiaries’ Books relating to any of the foregoing.

“Investment” means (a) any beneficial ownership of (including stock, partnership interest or other securities) any Person, (b) any loan, advance or capital contribution to any Person, (c) the incurrence of any Contingent Obligation or the assumption of any liabilities of any other Person, and (d) any Acquisition.

“IRC” means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

“Issuer” is defined in the preamble hereof.

“Lien” means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

“Liquidity” means, at any time, the aggregate amount of cash and Cash Equivalents held by the Issuer in the Designated Deposit Account.

“Liquidity Condition” means, as of any date of determination, Issuer’s Liquidity was greater than 1.1 *times* the aggregate principal amount of the Notes issued at the time of such date of determination pursuant to this Agreement.

“Margin Stock” means “margin stock” as such term is defined in Regulation T, U, or X of the Board of Governors of the Federal Reserve System.

“Market Capitalization” means, as at any date of determination, the product of (x) the number of issued and outstanding shares of common stock of Issuer on such date multiplied by (y) the closing price per share of such common stock.

“Material Adverse Effect” means a material adverse effect on (i) the business, operations or condition (financial or otherwise) of Issuer and its Subsidiaries taken as a whole, (ii) the ability of Issuer to repay the Obligations or otherwise perform its obligations under the Note Documents as and when due, (iii) the validity, value, perfection (except to the extent permitted under this Agreement) or priority of Purchaser Agent’s security interests in the Collateral, or (iv) the validity or enforceability of any of the Note Documents.

“Material Contract” means (a) any “material contract” (as such term is defined in Item 601(b)(10) of Regulation S-K of the Securities Act, other than those agreements and arrangements described in Item 601(b)(10)(iii)) with respect to Issuer or its Affiliates that relates to the development, manufacture, or commercialization of any product or service; and (b) any agreement with consideration or other payments in excess of \$2,500,000.

“Maturity Date” means the seventh anniversary of the First Purchase Date.

“Milestone” means Issuer’s achievement of all of the following: (a) trailing twelve-month Net Revenue of at least \$220,000,000 and annualized quarterly Net Revenue of at least \$275,000,000, in each case as of the last day of the most recent fiscal quarter for which financial statements were delivered pursuant to Section 6.3(a) and (b) a Qualified Public Offering.

“Negotiable Collateral” means all letters of credit of which an Obligor is a beneficiary, notes, drafts, instruments, securities, documents of title, and chattel paper, and each Obligor’s Books relating to any of the foregoing.

“Net Revenue” means, for any relevant fiscal period, consolidated worldwide net revenue of Issuer and its Subsidiaries properly recognized and reported under GAAP, consistently applied, during such period.

“Note Documents” means, collectively, this Agreement, the Notes, any mortgages, deeds of trust or deeds to secure debt that encumbers real property, each Guaranty, the Perfection Certificate, each Compliance Certificate, each Purchase Notice, any subordination agreements, notes or guaranties executed by Issuer or any other Obligor and any other present or future agreement entered into by Issuer, any Guarantor or any other Person, in each case, for the benefit of the Secured Parties in connection with this Agreement; all as amended, restated, or otherwise modified.

“Note Record” means a record maintained by each Purchaser with respect to the outstanding Obligations owed by Issuer to such Purchaser and credits made thereto.

“Notes” means the senior secured notes issued from time to time pursuant to this Agreement.

“Obligations” means, with respect to any Obligor, all amounts, obligations, liabilities, covenants and duties of every type and description owing by such Obligor to Purchaser Agent or any Purchaser, any other indemnitee hereunder or any participant, arising out of, under, or in connection with, any Note Document, whether direct or indirect (regardless of whether acquired by assignment), absolute or contingent, due or to become due, whether liquidated or not, now existing or hereafter arising and however acquired, and whether or not evidenced by any instrument or for the payment of money, including, without duplication, (i) all principal and interest and other amounts owing under any Note, all Revenue Participation Payments and the Repayment Amount, whether or not accruing after the filing of any petition in bankruptcy or after the commencement of any insolvency, reorganization or similar proceeding, and whether or not a claim for post-filing or post-petition interest is allowed in any such proceeding and (ii) all other documented out-of-pocket fees, expenses (including documented out-of-pocket fees, charges and disbursement of counsel), interest, commissions, charges, costs, disbursements, indemnities and reimbursement of amounts paid and other sums chargeable to such Obligor under any Note Document. Unless the context otherwise requires, all references herein to Obligations refers to the Obligations of all of the Obligors.

“Obligors” means, collectively, Issuer and the Guarantors.

“OFAC” means the U.S. Department of Treasury Office of Foreign Assets Control.

“OIG” is defined in [Section 5.10\(a\)](#).

“Open Source License” is defined in [Section 5.5](#).

“Other Connection Taxes” means, with respect to any Purchaser, Taxes imposed as a result of a present or former connection between such Purchaser and the jurisdiction imposing such Tax (other than connections arising from such Purchaser having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to, or enforced this Agreement).

“Patents” means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, revisions, extensions and continuations-in-part of the same and including foreign equivalents.

“Payment Date” means each March 31, June 30, September 30 and December 31, commencing on the first such date to occur following the First Purchase Date.

“Payment in Full” means all Obligations of the Obligors (other than inchoate indemnity obligations for which no claim has been made) have been fully repaid in cash and all Commitments have been terminated.

“Perfection Certificate” means a completed perfection certificate signed by an officer of each Obligor (as updated from time to time (without retroactive effect), subject to the review and approval of Purchaser Agent, including pursuant to [Section 3.5](#)).

“Permitted Acquisition” means an Acquisition which satisfies each of the following conditions:

(a) no Event of Default has occurred and is continuing or would exist after giving effect to the Acquisition and Purchaser Agent has received satisfactory evidence that Issuer is in compliance with all terms and conditions of this Agreement (and that it will be in compliance after giving effect to the Acquisition);

(b) all transactions in connection therewith shall be consummated, in all material respects, in accordance with applicable law;

(c) in the case of the purchase or other acquisition of equity interests of any Person, (i) all of the equity interests (except for any such equity interest in the nature of directors' qualifying shares required pursuant to applicable law) acquired or otherwise issued by such Person or any newly formed Subsidiary in connection with such acquisition shall be wholly owned by Issuer or a Guarantor, and (ii) all such Persons whose equity interests are being acquired shall become Obligor to the extent required by Section 6.11;

(d) the Obligor shall have delivered written notice of such Acquisition to the Purchaser Agent, on behalf of the Purchasers, not less than ten (10) Business Days prior to the execution of a definitive agreement for such Acquisition (or such shorter period as may be specified by the Purchaser Agent in its sole discretion), together with (i) the board package(s) provided to Issuer's board of directors in connection with such Acquisition and (ii) a draft of any acquisition agreement related to the proposed acquisition (together with disclosure schedules, other material agreements and any other related documents reasonably requested by Purchaser Agent and Purchasers);

(e) Purchaser Agent, on behalf of the Purchasers, shall have received, substantially concurrently with the execution of the definitive documentation relating to such Acquisition, fully executed acquisition agreements and other material agreements with all attachments and schedules;

(f) any assets acquired from such Acquisition shall be acquired by Issuer or a Guarantor and shall be subject to the security interest granted to Purchaser Agent under the Note Documents, and the security interest in such assets shall be perfected in accordance with requirement set forth in this Agreement and other Note Documents;

(g) if the Milestone has not occurred at the time the definitive binding documentation relating to such Permitted Acquisition is entered into, the aggregate Acquisition Cost that is or may become payable in connection with such Acquisition, either at or before the closing thereof or any time thereafter, shall not exceed (x) \$20,000,000 with respect to any individual Acquisition or (y) \$50,000,000 when combined with the aggregate Acquisition Cost that has or may at any time become payable in connection with all other Permitted Acquisitions entered into during the term of this Agreement;

(h) if the Milestone has occurred at the time the definitive binding documentation relating to such Permitted Acquisition is entered into, the aggregate Acquisition Cost that is or may become payable in connection with such Acquisition, either at or before the closing thereof or any time thereafter (excluding all or any portion of the Acquisition Cost for such Acquisition that is financed by the substantially concurrent issuance, for the specific purpose of making such Acquisition, of Issuer's equity interests (other than Disqualified Equity Interests), or that is paid in Issuer's equity interests (other than Disqualified Equity Interests)), combined with the aggregate Acquisition Cost that has or may at any time become payable in connection with all other Permitted Acquisitions entered into during the term of this Agreement, shall not exceed 10% of Issuer's Market Capitalization (measured, with respect to any particular Permitted Acquisition, as of the trading day immediately preceding the execution of the definitive documentation relating to such Permitted Acquisition);

(i) the Obligor shall have sufficient liquidity to pay their projected expenses and all debt service when due for a period of twelve (12) months after the consummation of such Acquisition (after giving effect to such Acquisition);

(j) no Change of Control shall result from such Acquisition;

(k) the Person whose equity interests or business are being acquired shall be engaged in, or the asset acquired shall be used to engage in, or any In-License shall be in relation to, the same line of business as Issuer or a business reasonably related, incidental or ancillary thereto, as determined by the reasonable judgment of the Required Purchasers;

- (l) to the extent such Acquisition is an In-License, such In-License shall not constitute a Restricted License;
- (m) the Acquisition is consensual and approved by the board of directors (or equivalent control group) of all parties thereto; and
- (n) immediately prior to and after giving effect to the Acquisition, the Issuer is compliant with the Liquidity Condition and would have been compliant with the Liquidity Condition at all times during the most recent fiscal quarter on a pro forma basis.

Notwithstanding anything to the contrary contained herein, in order for any acquisition of equity interests or assets of another Person to constitute a Permitted Acquisition, on or prior to the date of such Permitted Acquisition, Purchaser Agent shall have received, in form and substance reasonably satisfactory to Purchaser Agent, a certificate of an authorized officer of Parent certifying (to the knowledge, after due inquiry, of such authorized officer of Parent) compliance with the requirements contained in this definition of "Permitted Acquisition" and with the other terms of the Note Documents (before and after giving effect to such Permitted Acquisition).

"Permitted Indebtedness" means:

- (a) Indebtedness to the Purchasers and Purchaser Agent arising under this Agreement or any other Note Document;
- (b) Indebtedness existing on the Effective Date and disclosed in the Perfection Certificate delivered on or prior to the Effective Date;
- (c) Indebtedness secured by a lien described in clause (c) of the defined term "Permitted Liens," provided (i) such Indebtedness does not exceed the lesser of the cost or fair market value of the equipment financed with such Indebtedness and (ii) such Indebtedness does not exceed (X) prior to the Milestone, \$15,000,000 in the aggregate at any time and (Y) from and after the Milestone, \$25,000,000 in the aggregate at any given time;
- (d) Indebtedness consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business;
- (e) unsecured Indebtedness to trade creditors incurred in the ordinary course of business to the extent not more than (90) days' past due;
- (f) Indebtedness in connection with the Obligors' corporate credit cards provided such Indebtedness does not exceed \$2,500,000 in the aggregate at any given time;
- (g) any cash management or related services including treasury, depository, return items, overdraft, controlled disbursement, electronic funds transfer, interstate depository network, automatic clearing house transfer (including the Automated Clearing House processing of electronic funds transfers through the direct Federal Reserve Fedline system) and other cash management arrangements, in each case, incurred in the ordinary course of business;
- (h) reimbursement obligations in connection with letters of credit, banker's acceptances or similar instruments that are unsecured or secured by cash and issued on behalf of Issuer or a Subsidiary for: (i) real estate purposes in the ordinary course of business in a face amount up to \$2,500,000 at any time outstanding and (ii) any other purposes in a face amount not to exceed \$2,500,000 at any time outstanding; and
- (i) Subordinated Debt.

“Permitted Investment” means:

- (a) Investments existing on the Effective Date disclosed in the Perfection Certificate delivered on or prior to the Effective Date;
- (b) Investments consisting of Cash Equivalents;
- (c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business;
- (d) Investments consisting of deposit accounts in which Purchaser Agent has a perfected security interest;
- (e) Investments accepted in connection with Transfers permitted by Section 7.1;
- (f) Investments consisting of the creation of a Subsidiary for the purpose of consummating a merger transaction permitted by Section 7.3 of this Agreement, which is otherwise a Permitted Investment;
- (g) Investments consisting of repurchases of equity interests permitted pursuant to Section 7.6;
- (h) Investments (i) in Issuer or any Guarantor (other than any Guarantor that is a Foreign Subsidiary), (ii) by Obligor in Foreign Subsidiaries and Subsidiaries that are not Obligors not to exceed \$2,000,000 in the aggregate in any fiscal year (which amount shall increase to \$5,000,000 in the aggregate in any fiscal year from and after the Milestone) (provided that no Investments of Intellectual Property material to Issuer and its Subsidiaries shall be permitted under this subclause (ii)), and (iii) by Subsidiaries that are not Obligors in other Subsidiaries that are not Obligors;
- (i) Investments consisting of (i) travel advances and employee relocation loans in the ordinary course of business, (ii) other employee loans and advances in the ordinary course of business not to exceed \$2,000,000 in the aggregate, and (iii) noncash loans to employees, officers or directors relating to the purchase of equity securities of Issuer or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Issuer’s board of directors;
- (j) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;
- (k) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (k) shall not apply to Investments of Issuer in any Subsidiary;
- (l) Investments consisting of Permitted Acquisitions; and
- (m) joint ventures or strategic alliances in the ordinary course of Issuer’s business consisting of the non-exclusive licensing of technology, the development of technology or the providing of technical support, provided that any value of investments by Issuer and its Subsidiaries do not exceed (X) prior to the Milestone, \$2,000,000 in the aggregate in any fiscal year subject to a total of \$5,000,000, and (Y) from and after the Milestone, \$5,000,000 in the aggregate in any fiscal year subject to a total of \$10,000,000.

“Permitted Licenses” are (A) licenses of over-the-counter software that is commercially available to the public, and (B) non-exclusive and exclusive licenses for the use of the Intellectual Property of Issuer or any of its Subsidiaries entered into in the ordinary course of business, provided, that, with respect to each such license described in clause (B), (i) no Event of Default has occurred and is continuing at the time of such license; (ii) the license constitutes an arms-length transaction, the terms of which, on their face, do not provide for a sale or assignment of any Intellectual Property and do not restrict the ability of Issuer or any of its Subsidiaries, as applicable, to pledge,

grant a security interest in or lien on, or assign or otherwise Transfer any Intellectual Property; (iii) such license is not a Restricted License; and (iv) in the case of any exclusive license, (x) Issuer delivers ten (10) days' prior written notice and a brief summary of the terms of the proposed license to Purchaser Agent and delivers to Purchaser Agent copies of the final executed licensing documents in connection with the exclusive license promptly upon consummation thereof, and (y) any such license could not result in a legal transfer of title of the licensed property but may be exclusive in respects other than territory and may be exclusive as to territory only as to discrete geographical areas outside of the United States; and (v) all upfront payments, royalties, milestone payments or other proceeds arising from the licensing agreement that are payable to Issuer or any of its Subsidiaries are paid to a deposit account that is governed by a Control Agreement.

"Permitted Liens" means the following:

(a) Any Liens existing on the Effective Date and disclosed in the Perfection Certificate delivered on or prior to the Effective Date or arising under this Agreement or the other Note Documents;

(b) Liens for Taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings, provided the same have no priority over any of the Secured Parties' security interests;

(c) Liens (i) upon or in any equipment acquired or held by Issuer or any of its Subsidiaries to secure the purchase price of such equipment or indebtedness incurred solely for the purpose of financing the acquisition of such equipment, or (ii) existing on such equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed \$2,000,000, and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) leases or subleases of real property granted in the ordinary course of Issuer's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Issuer's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting the Secured Parties a security interest therein;

(g) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under Sections 8.4 and 8.7;

(h) Liens consisting of Permitted Licenses;

(i) Liens in favor of financial institutions arising in connection with Issuer's or its Subsidiaries' deposit and/or securities accounts held at such institutions, provided that Issuer or such Subsidiary is permitted under the terms of this Agreement to maintain such accounts and Secured Parties have a perfected security interest in the amounts held by Obligor in such deposit and/or securities accounts;

(j) Liens on cash deposits securing Indebtedness permitted pursuant to clause (h) of the definition of "Permitted Indebtedness"; provided that the amount of such cash deposits in respect of any letter of credit does not exceed (X) 105% of the face amount thereof with respect to any obligations denominated in U.S. dollars and (Y) 110% of the face amount thereof with respect to any obligations denominated in another currency, and Liens on cash deposits securing Indebtedness permitted pursuant to clause (f) of the definition of "Permitted Indebtedness"; and

(k) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clauses (a) through (j) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase.

“Permitted Purpose” is defined in Section 13.9(a).

“Person” means any individual, sole proprietorship, partnership, limited liability company, joint venture, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental agency.

“Personal Information” is defined in Section 5.11(a).

“Press Release” means a press release mutually agreed upon by the Obligors and Purchaser Agent in respect of the transactions contemplated by the Note Documents.

“Pro Rata Share” means, as of any date of determination, with respect to each Purchaser, a percentage (expressed as a decimal, rounded to the ninth decimal place) determined by dividing the outstanding principal amount of Notes held by such Purchaser by the aggregate outstanding principal amount of all Notes; provided that after repayment of the Notes, each Purchaser’s Pro Rata Share shall be calculated based on the outstanding Notes immediately prior to the repayment hereof.

“Process Agent” is defined in Article 10.

“Product Regulatory Laws” is defined in Section 5.10(h).

“Purchase” is defined in Section 2.1(c).

“Purchase Date” means any date on which a purchase of Notes is made by the Purchasers, which date shall be a Business Day.

“Purchase Notice” is that certain form attached hereto as Exhibit B.

“Purchase Percentage” means, for any Purchaser, the percentage set forth on Schedule 1.1 opposite such Purchaser’s name.

“Purchaser” means any one of the Purchasers.

“Purchaser Agent” means BWCB SA LLC (or any successor thereto pursuant to Section 13.14(h)), not in its individual capacity, but solely in its capacity as agent on behalf of and for the benefit of the Purchasers.

“Purchaser Transfer” is defined in Section 13.1(a).

“Purchasers” means the Persons identified on Schedule 1.1 hereto and each assignee that becomes a party to this Agreement or that acquires a Note pursuant to Section 13.1.

“Qualified Public Offering” is defined in Issuer’s Restated Certificate of Incorporation as in effect on the date hereof.

“Receiving Party” is defined in Section 13.9(a).

“Register” is defined in Section 13.1(b).

“Registration” means any registration, authorization, approval, license, permit, clearance, certificate, and exemption issued, received or allowed by the FDA or state pharmacy licensing authorities (including, without limitation, new drug applications, abbreviated new drug applications, biologics license applications, investigational new drug applications, over-the-counter drug monograph, device pre-market approval applications, device pre-market notifications, investigational device exemptions, product re-certifications, manufacturing approvals, registrations and authorizations, CE Marks, pricing and reimbursement approvals, labeling approvals or their foreign equivalent, controlled substance registrations, and wholesale distributor permits).

“Regulatory Action” means an administrative, regulatory, or judicial enforcement action, proceeding, investigation or inspection, FDA Form 483 notice of inspectional observation, warning letter, untitled letter, other notice of violation letter, recall, seizure, Section 305 notice or other similar written communication, injunction or consent decree, issued by the FDA or a federal or state court.

“Reimbursable Expenses” means all: reasonable and documented costs or out-of-pocket expenses (including reasonable and documented attorneys’ fees and out-of-pocket expenses) incurred in connection with the preparation, negotiation, administration, and enforcement of the Note Documents; reasonable and documented Collateral audit fees; and the Secured Parties’ reasonable and documented attorneys’ fees and out-of-pocket expenses incurred in amending, enforcing or defending the Note Documents (including fees and expenses of appeal), incurred before, during and after an Insolvency Proceeding, whether or not suit is brought or any other Event of Default; provided that Reimbursable Expenses incurred prior to the Closing Date shall not exceed \$225,000.00.

“Repayment Amount” means, with respect to any payment in full of all Obligations under this Agreement, as of any date of the determination thereof:

(a) from and after the First Purchase Date and on or prior to the second anniversary of the First Purchase Date, an amount equal to 130% of the principal amount of the Notes issued pursuant to this Agreement;

(b) after the second anniversary of the First Purchase Date and on or prior to the third anniversary of the First Purchase Date, an amount equal to 145% of the principal amount of the Notes issued pursuant to this Agreement;

(c) after the third anniversary of the First Purchase Date and on or prior to the fourth anniversary of the First Purchase Date, the amount (greater than zero) that would generate an internal rate of return (calculated utilizing the same methodology utilized by the XIRR function in Microsoft Excel) to the Purchasers equal to 12.25% on the aggregate purchase price paid for the Notes, calculated from the First Purchase Date to the date of repayment (for the avoidance of doubt, the calculation of such amount shall be made for the period beginning on the First Purchase Date and ending on the repayment date regardless of the actual Purchase Date of the Notes);

(d) after the fourth anniversary of the First Purchase Date and on or prior to the fifth anniversary of the First Purchase Date, the amount (greater than zero) that would generate an internal rate of return (calculated utilizing the same methodology utilized by the XIRR function in Microsoft Excel) to the Purchasers equal to 11.75% on the aggregate purchase price paid for the Notes, calculated from the First Purchase Date to the date of repayment (for the avoidance of doubt, the calculation of such amount shall be made for the period beginning on the First Purchase Date and ending on the repayment date regardless of the actual Purchase Date of the Notes);

(e) after the fifth anniversary of the First Purchase Date and prior to the Maturity Date, the amount (greater than zero) that would generate an internal rate of return (calculated utilizing the same methodology utilized by the XIRR function in Microsoft Excel) to the Purchasers equal to 11.25% on the aggregate purchase price paid for the Notes, calculated from the First Purchase Date to the date of repayment (for the avoidance of doubt, the calculation of such amount shall be made for the period beginning on the First Purchase Date and ending on the repayment date regardless of the actual Purchase Date of the Notes); and

(f) on the Maturity Date, the amount (greater than zero) that would generate an internal rate of return (calculated utilizing the same methodology utilized by the XIRR function in Microsoft Excel) to the Purchasers equal to 10% on the aggregate purchase price paid for the Notes, calculated from the First Purchase Date to the date of repayment (for the avoidance of doubt, the calculation of such amount shall be made for the period beginning on the First Purchase Date and ending on the repayment date regardless of the actual Purchase Date of the Notes);

minus, in each case, the sum, without duplication, of (i) all regularly scheduled interest paid in cash to the Purchasers prior to such date with respect to the Notes (excluding for the avoidance of doubt, any default interest), *plus* (ii) all payments of principal in cash to the Purchasers prior to such date with respect to the Notes, *plus* (iii) all Revenue Participation Payments paid in cash to the Purchasers prior to such date; provided that the Repayment Amount shall not be less than zero or, if any Notes remain outstanding immediately prior to the payment of the Repayment Amount, the outstanding principal amount of the Notes being repurchased.

“Representatives” is defined in [Section 13.9\(b\)](#).

“Required Purchasers” means, at any time, (i) prior to the expiration of the Commitments, the Purchasers holding at least 50% of the aggregate principal amount of Notes and unused or unexpired Commitments, and (ii) thereafter, the Purchasers holding at least 50% of the Pro Rata Shares.

“Responsible Officer” means, with respect to any Person, each of the Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer, the General Counsel and the Controller of such Person.

“Restricted License” means any Material Contract (i) under which a default or of which a termination could interfere with Purchaser Agent’s or any Purchaser’s right to sell any Collateral, (ii) that cannot be collaterally assigned to secure the Obligations or otherwise contains provisions that restrict or penalize the granting of a security interest in or Lien on such Material Contract or if entered into after the Effective Date by Issuer or any other Obligor, does not recognize the collateral assignment thereof to secure the Obligations, (iii) that contains provisions that restrict or penalize the granting of a security interest in or Lien on, or the assignment or other Transfer of, any Intellectual Property, (iv) that restricts the assignment of such Material Contract upon the sale or other disposition of all or substantially all of the assets to which such Material Contract relates (other than customary provisions requiring the assumption by the applicable purchaser of all obligations under such Material Contract), (v) that provides for or results in the legal transfer of any title in or to any Intellectual Property, or (vi) that does not permit the disclosure of information to be provided thereunder to Purchaser Agent and the Purchasers, to any purchaser or prospective purchaser in a foreclosure or other Transfer of all or any portion of the Collateral (subject to customary confidentiality obligations).

“Revenue Participation Payments” means, for any fiscal quarter, 0.01% of Net Revenue for such fiscal quarter (up to \$100,000,000 of Net Revenue for each fiscal year) per each \$1,000,000 principal amount of Notes issued pursuant to this Agreement.

“Revenue Participation Period” means the period beginning on the First Purchase Date and ending on the Maturity Date.

“Revenue Report” is defined in [Section 6.3\(q\)](#).

“Sanctioned Country” means, at any time, a country, region or territory which is itself the subject or target of any comprehensive territorial Sanctions (including, but not limited to, Cuba, Iran, North Korea, Syria, and the Crimea, Donetsk People’s Republic, and Luhansk People’s Republic regions in Ukraine).

“Sanctioned Person” means, at any time, (i) any Person listed in any Sanctions-related list of designated Persons maintained by any Sanctions Authority (including, without limitation, any “Specially Designated Nationals and Blocked Persons” as designated by OFAC), (ii) any Person operating, organized, located or resident in a Sanctioned Country or (iii) any Person 50% or more owned or otherwise controlled by any such Person or Persons described in the foregoing clauses (i) or (ii).

“Sanctions” means all economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by any Sanctions Authority.

“Sanctions Authority” means the U.S. government (including OFAC and the U.S. Department of State), the United Nations Security Council, His Majesty’s Treasury, the European Union, any European Union member state or any other applicable sanctions authority.

“Second Purchase” is defined in [Section 2.1\(b\)](#).

“Second Purchase Date” means the Purchase Date in respect of the Second Purchase.

“Secured Parties” means Purchaser Agent and the Purchasers.

“Securities Act” means the Securities Act of 1933, as amended.

“Shares” means 100% of the issued and outstanding capital stock, membership units or other securities owned or held of record by any Obligor in any Subsidiary of an Obligor.

“Subordinated Debt” means any debt incurred by an Obligor that is subordinated to the Obligations on terms acceptable to Purchaser Agent (and identified as being such by such Obligor and Purchaser Agent).

“Subsidiary” means any corporation, company or partnership in which (i) any general partnership interest or (ii) more than 50% of the stock or other units of ownership which by the terms thereof has the ordinary voting power to elect the board of directors, managers or trustees of the entity, at the time as of which any determination is being made, is owned by Issuer, either directly or through an Affiliate.

“Taxes” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“Third Purchase” is defined in [Section 2.1\(c\)](#).

“Third Purchase Date” means each Purchase Date in respect of a Third Purchase.

“Trademarks” means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Issuer connected with and symbolized by such trademarks.

“Transfer” is defined in [Section 7.1](#).

“Withholding Taxes” is defined in [Section 14.1](#).

1.2 Divisions. For all purposes under the Note Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction’s laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person, and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its equity interests at such time.

1.3 Accounting Terms. All accounting terms not specifically defined herein shall be construed in accordance with GAAP and all calculations made hereunder shall be made in accordance with GAAP. When used herein, the terms “financial statements” shall include the notes and schedules thereto.

2. NOTES; TERMS OF PAYMENT; REVENUE PARTICIPATION.

2.1 Purchase and Sale of Notes.

(a) Subject to the terms and conditions of this Agreement (including the conditions precedent set forth in Sections 3.1 and 3.5), on the First Purchase Date, the Purchasers agree, severally and not jointly, to purchase Notes from Issuer, and Issuer agrees to issue and sell Notes to each Purchaser, in an aggregate principal amount of \$50,000,000 in one (1) purchase according to each Purchaser’s Commitment as set forth on Schedule 1.1 hereto for a purchase price equal to 100% of the principal amount thereof (the “**First Purchase**”).

(b) Subject to the terms and conditions of this Agreement (including the conditions precedent set forth in Sections 3.1, 3.2 and 3.5), on the Second Purchase Date, at the option of Issuer, the Purchasers agree, severally and not jointly, to purchase Notes from Issuer, and Issuer agrees to issue and sell Notes to each Purchaser, in an aggregate principal amount of \$35,000,000 in one (1) purchase according to each Purchaser’s Commitment as set forth on Schedule 1.1 hereto for a purchase price equal to 100% of the principal amount thereof (the “**Second Purchase**”).

(c) Subject to the terms and conditions of this Agreement (including the conditions precedent set forth in Sections 3.1, 3.3 and 3.5), on the Third Purchase Date, each Purchaser will, severally and not jointly, purchase Notes from Issuer, and Issuer agrees to issue and sell Notes to each Purchaser, in an aggregate principal amount of \$30,000,000 in one (1) purchase according to each Purchaser’s Commitment as set forth on Schedule 1.1 hereto for a purchase price equal to 100% of the principal amount thereof (the “**Third Purchase**”).

(d) Subject to the terms and conditions of this Agreement (including the conditions precedent set forth in Sections 3.1, 3.4 and 3.5), on a Fourth Purchase Date, at the option of Issuer and subject to the approval of the Purchasers in their sole discretion, each Purchaser may, severally and not jointly, purchase Notes from Issuer, and Issuer agrees to issue and sell Notes to each Purchaser, in an aggregate principal amount not to exceed \$25,000,000, according to each Purchaser’s Purchase Percentage, in each case for a purchase price equal to 100% of the principal amount thereof (each, a “**Fourth Purchase**”; together with the First Purchase, the Second Purchase and the Third Purchase, individually, a “**Purchase**” and collectively the “**Purchases**”).

Notwithstanding anything to the contrary herein, (A) each Purchaser’s Commitments shall expire on the applicable Commitment Termination Date, (B) no Purchaser shall be committed to purchase any Notes as part of any Fourth Purchase, (C) the Purchasers’ aggregate Commitments shall not exceed \$115,000,000, and (D) the aggregate principal amount of Notes to be issued pursuant to this Agreement will not exceed \$140,000,000.

2.2 Payments of Repayment Amount and Revenue Participation Payments.

(a) **Repayment of the Notes.** The Repayment Amount, together with any accrued and unpaid default interest and Reimbursable Expenses, shall be due and payable in full on the earlier of (i) the Maturity Date and (ii) the date that all Obligations are accelerated and become due and payable pursuant to Section 9.1. To the extent redeemed or otherwise repaid, the Notes may not be re-issued and the principal amount thereunder may not be re-borrowed.

(b) **Voluntary Repurchase and Repayment.** Issuer shall have the option to repurchase all, but not less than all, of the outstanding Notes (if any) and pay all other outstanding Obligations under this Agreement, provided Issuer provides at least ten (10) Business Days’ advance written notice to Purchaser Agent of the date of such redemption and payment. On the applicable date, Issuer shall repurchase the Notes and pay all other Obligations by paying the Repayment Amount, plus all accrued and unpaid default interest, Reimbursable Expenses and all other Obligations to the Purchasers. Notwithstanding anything to the contrary contained in this Agreement, Issuer may rescind any notice of repurchase and payment pursuant to this Section 2.2(b) if such repurchase

would have resulted from a refinancing of the Obligations or a Change of Control, which refinancing or Change of Control shall not be consummated or shall otherwise be delayed; provided that Issuer must provide Purchaser Agent with a new notice at least one (1) Business Day prior to any repurchase date if Issuer has rescinded the prior notice. Upon repurchase of the Notes pursuant to this Section 2.2(b), the Purchasers' remaining Commitments shall immediately and irrevocably terminate.

(c) Revenue Participation Payments.

(i) From and after the commencement of the Revenue Participation Period, Issuer shall pay to the Purchasers the Revenue Participation Payments quarterly in cash on each Payment Date, until the earlier of (x) Payment in Full and (ii) the end of the Revenue Participation Period.

(ii) With respect to each fiscal quarter, the relevant amount payable in respect of the Revenue Participation Payments for such fiscal quarter shall be paid on the applicable Payment Date, with such payment to be calculated based on Issuer's good faith estimate of Net Revenue for such fiscal quarter; provided that all payments in respect of any fiscal quarter shall be subject to reconciliation (x) based on the final Net Revenue for the applicable fiscal quarter on the Payment Date for the subsequent fiscal quarter, with such reconciliation being prepared by Issuer and delivered to the Purchasers on the Payment Date for such subsequent fiscal quarter, and (y) based on the final Net Revenue for the applicable fiscal year in which such fiscal quarter occurs based on the audited financial statements for such fiscal year, with such reconciliation to be prepared by Issuer and delivered to the Purchasers no later than ninety (90) days after the end of such fiscal year. With respect to each reconciliation, any overpayments shall be credited against, and any underpayments shall be added to, the immediately subsequent payment in respect of the Revenue Participation Payments. For the avoidance of doubt, the Purchasers shall not be required to refund any Revenue Participation Payments.

(iii) All Revenue Participation Payments and other payments pursuant to this Section 2.2(d) shall be made to each Purchaser in accordance with its Pro Rata Share.

(d) **Change of Control.** In the event of any Change of Control, Issuer shall provide ten (10) Business Days' prior written notice of the anticipated date of such Change of Control to Purchaser Agent and the Purchasers. In connection with any Change of Control or any announcement of any tender offer or other transaction, which if consummated would constitute a Change of Control, the Required Purchasers in their sole discretion may require Issuer to repurchase the outstanding Notes (if any) and pay all other outstanding Obligations under this Agreement. If the Required Purchasers require Issuer to repurchase the outstanding Notes (if any) and pay all other Obligations, the Required Purchasers (or Purchaser Agent on behalf of the Required Purchasers) shall provide written notice thereof no later than five (5) Business Days after receipt of Issuer's notice of a Change of Control. If the Required Purchasers have elected to require Issuer to repurchase the Notes (if any) and pay all other Obligations pursuant to this Section 2.2(d), Issuer shall make such repurchase and payment concurrently with, the consummation of such Change of Control transaction (or on such later date as is acceptable to the Required Purchasers in their sole discretion) by paying the Repayment Amount, plus all accrued and unpaid default interest, Reimbursable Expenses and all other Obligations to the Purchasers.

2.3 Payments of Principal and Interest.

(a) **Interest Payments.** Issuer shall make quarterly payments of interest on each outstanding Note and any other Obligations commencing on the first (1st) Payment Date following the First Purchase Date and continuing on each successive Payment Date thereafter through and including the Payment Date immediately preceding the Maturity Date.

(b) **Interest Rate.** Subject to Section 2.3(e), the principal amount outstanding under the Notes and any other Obligations shall accrue interest at per annum rate equal to the Applicable Rate, which interest shall be payable quarterly in arrears in accordance with Sections 2.3(a) and 2.3(f). Interest shall accrue on each Note commencing on, and including, the Purchase Date of such Note, and shall accrue on the principal amount outstanding under such Note through and including the day on which such Note is paid in full. Interest shall accrue on all other Obligations commencing on, and including, the date that such Obligations are due, and shall accrue on the unpaid amount of such Obligations through and including the day on which such Obligations are paid in full.

(c) **Default Rate.** Immediately upon the occurrence and during the continuance of an Event of Default, all outstanding Obligations shall accrue interest at a floating per annum rate equal to the rate that is otherwise applicable thereto plus 5% (the “**Default Rate**”). Payment or acceptance of the increased interest rate provided in this Section 2.3(c) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Purchaser Agent or any Purchaser

(d) **360-Day Year.** Interest shall be computed on the basis of a three hundred sixty (360) day year for the actual number of days elapsed.

(e) **Debit of Accounts.** Upon the occurrence and during the continuance of any Default or Event of Default, Purchaser Agent and each Purchaser may debit (or ACH) the Designated Deposit Account, or, to the extent adequate funds are not available in the Designated Deposit Account, any other Collateral Account maintained by any Obligor, for principal and interest payments or any other amounts Issuer owes the Purchasers under the Note Documents when due. Any such debits (or ACH activity) shall not constitute a set-off.

(f) **Payments.** Except as otherwise expressly provided herein, all payments by Issuer under the Note Documents shall be made to the respective Purchaser to which such payments are owed (or in the case of any Obligations owed to Purchaser Agent, to Purchaser Agent), at such Purchaser’s office (or if applicable, Purchaser Agent’s office) in immediately available funds on the date specified herein. Payments received after 2:00 pm Eastern time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment is due the next preceding Business Day. All payments to be made by Issuer or any Guarantor hereunder or under any other Note Document, including payments of principal and interest, and all fees, expenses, indemnities and reimbursements, shall be made without set-off, recoupment or counterclaim, in lawful money of the United States and in immediately available funds.

2.4 Form of Notes; Note Record. The Notes shall be substantially in the form attached as Exhibit D hereto, and the terms of this Agreement shall be incorporated by reference into the Notes as if set forth therein; provided that in the event of any conflict between the terms of this Agreement and the Notes, the terms of this Agreement shall control. Issuer irrevocably authorizes each Purchaser to make or cause to be made, on or about the Purchase Date of any Notes or at the time of receipt of any payment of principal on such Purchaser’s Note, an appropriate notation on such Purchaser’s Note Record reflecting the purchase of such Notes or (as the case may be) the receipt of such payment. The outstanding amount of each Note set forth on such Purchaser’s Note Record shall be prima facie evidence of the principal amount thereof owing and unpaid to such Purchaser, but the failure to record, or any error in so recording, any such amount on such Purchaser’s Note Record shall not limit or otherwise affect the obligations of Issuer under any Note or any other Note Document to make payments of principal of or interest on, or the Repayment Amount in respect of, any Note when due. Upon receipt of an affidavit of an officer of a Purchaser as to the loss, theft, destruction, or mutilation of its Note, Issuer shall issue, in lieu thereof, a replacement Note in the same principal amount thereof and of like tenor.

2.5 Reimbursable Expenses. Issuer shall pay to Purchaser Agent all Reimbursable Expenses (including reasonable and documented out-of-pocket attorneys’ fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, except as set forth in Sections 3.1(f) and 3.5(f), within ten (10) Business Days of the delivery of an invoice therefor, or if later, when due. It is the intention of the parties hereto that Issuer shall pay Reimbursable Expenses directly. In the event Purchaser Agent pays any of such expenses directly, Issuer will reimburse Purchaser Agent for such expenses and interest on such expenses shall accrue beginning on the third (3rd) Business Day following written notice to Issuer of such expenses until reimbursed at the interest rate specified in Section 2.3(b) (or, subject to Section 2.3(c), the Default Rate).

3. CONDITIONS PRECEDENT.

3.1 Conditions Precedent to the Effective Date and First Purchase. The effectiveness of this Agreement, and the obligation of Purchasers to make the First Purchase, are subject to the condition precedent that Purchasers shall have received, in form and substance reasonably satisfactory to Purchasers, the following, duly executed by the applicable parties thereto (provided that the satisfaction or performance of each condition may be waived by the Required Purchasers in their sole discretion):

Agreement;

- (a) this Agreement;
- (b) a certificate of the Secretary of Issuer with respect to incumbency and resolutions authorizing the execution and delivery of this Agreement;
- (c) UCC National Form Financing Statement;
- (d) [reserved];
- (e) [reserved];
- (f) payment of the Reimbursable Expenses then due specified in Section 2.5 hereof to the extent invoiced at least one (1) Business Day prior to the Effective Date;
- (g) current financial statements of Issuer;
- (h) duly executed signature to a payoff letter from Western Alliance Bank with respect to the Existing Indebtedness which provides that the documents and/or filings evidencing the perfection of any Liens, including without limitation any financing statements and/or control agreements, have or will, subject to payment of the payoff amount owing thereunder substantially concurrently (subject to Section 3.6(d)) with the First Purchase, be terminated;
- (i) certified copies, dated as of a recent date, of financing statement searches, as Purchasers may request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the First Purchase, will be terminated or released;
- (j) the Perfection Certificate;
- (k) [reserved];
- (l) [reserved];
- (m) if applicable, the certificate(s) for the Shares, duly endorsed in blank;
- (n) short-form security agreements for Intellectual Property in proper form for filing against Issuer with the United States Patent and Trademark Office or the United States Copyright Office, as applicable;
- (o) a duly executed legal opinion of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, counsel to Issuer, dated as of the First Purchase Date and in form and substance satisfactory to Purchaser Agent;
- (p) a duly executed legal opinion of Rutan & Tucker, LLP, counsel to Issuer, dated as of the First Purchase Date and in form and substance satisfactory to Purchaser Agent;
- (q) the annual audited consolidated financial statements of Issuer for the fiscal year ended December 31, 2023, prepared in accordance with GAAP, consistently applied, together with a report and opinion on the financial statements and on internal controls and procedures from PwC (which report and opinion shall be prepared in accordance with GAAP and shall not be subject to any qualification, emphasis of matter or statement as to “going concern” or scope of audit, except for qualifications relating to changes in accounting principles or practices reflecting changes in GAAP and required or approved by PwC);

(r) Purchaser Agent shall have received bank statements containing substantially current information as of the First Purchase Date with respect to each deposit account and securities account of Issuer; and

(s) such other documents, and completion of such other matters, as the Purchasers may reasonably deem necessary or appropriate.

3.2 Conditions Precedent to the Second Purchase Date. The obligation of each Purchaser to make the Second Purchase is subject to the satisfaction of the following conditions precedent, the satisfaction or performance of which may be waived by the Required Purchasers in their sole discretion:

(a) the First Purchase shall have occurred;

(b) the applicable Second Purchase Date shall occur on or prior to the applicable Commitment Termination Date;

(c) Issuer shall have achieved trailing six-month Net Revenue of at least \$80,000,000 as of the last day of the most recent fiscal quarter for which financial statements were delivered pursuant to Section 6.3(a), determined by Purchaser Agent in its reasonable discretion with reference to such financial statements; and

(d) Issuer shall have satisfied all of the post-closing obligations set forth in Section 3.6.

3.3 Conditions Precedent to the Third Purchase Date. The obligation of each Purchaser to make a Third Purchase is subject to the satisfaction of the following conditions precedent, the satisfaction or performance of which may be waived by the Required Purchasers in their sole discretion:

(a) the First Purchase shall have occurred;

(b) the applicable Third Purchase Date shall occur on or prior to the applicable Commitment Termination Date;

(c) Issuer shall have achieved trailing six-month Net Revenue of at least \$112,500,000 and trailing six-month Gross Margin of at least 45%, in each case as of the last day of the most recent fiscal quarter for which financial statements were delivered pursuant to Section 6.3(a), determined by Purchaser Agent in its reasonable discretion with reference to such financial statements; and

(d) Issuer shall have satisfied all of the post-closing obligations set forth in Section 3.6.

3.4 Conditions Precedent to any Fourth Purchase Date. The Fourth Purchase is subject to the approval of each Purchaser in its sole discretion, and each Fourth Purchase Date shall occur on or prior to the applicable Commitment Termination Date (or such later date as specified in writing by the Required Purchasers in their sole discretion). It is understood and agreed that the making of any Fourth Purchase shall be at each Purchaser's sole discretion.

3.5 Conditions Precedent to all Note Purchases. The obligation of each Purchaser to make any Purchase is subject to the following conditions precedent, the satisfaction or performance of which may be waived by the Required Purchasers in their sole discretion:

(a) within the time period required by Section 3.8 (or such shorter period as agreed in writing by Purchaser Agent and the Purchasers), receipt by Purchaser Agent of an executed Purchase Notice in the form of Exhibit B attached hereto;

(b) the representations and warranties in Article 5 hereof shall be true, accurate and complete in all material respects on the date of the Purchase Notice, and on the Purchase Date of each purchase of Notes; provided that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date;

(c) no Default or Event of Default shall have occurred and be continuing or result from the purchase of Notes;

(d) Purchasers shall have received duly executed Notes, in number, form and content acceptable to each Purchaser, and in favor of each Purchaser with respect to the Notes purchased by such Purchaser in such Purchase;

(e) Issuer shall have provided updates to the information in the Perfection Certificate since the Effective Date or the most recent update thereto and all financial statements, reports or notices required under the Note Documents prior to the applicable Purchase Date to the extent required under Section 6.3; and

(f) payment of Reimbursable Expenses then due as specified in Section 2.5(b) hereof.

3.6 Post-Closing Items. Following the First Purchase Date, Issuer agrees to:

(a) Within 30 days of the Effective Date (or such later date acceptable to Purchaser Agent in its sole discretion), provide Purchaser Agent with a landlord's consent in favor of Purchaser Agent for each of Issuer's leased locations, by the respective landlord thereof, together with the duly executed signatures thereto, and a bailee waiver in favor of Purchaser Agent from each third party bailee, together with the duly executed signatures thereto, in each case, to the extent any Collateral at such location is valued in excess of \$1,000,000 as of the Effective Date;

(b) Within 30 days of the Effective Date (or such later date acceptable to Purchaser Agent in its sole discretion), provide Purchaser Agent with an ACH authorization and Control Agreement in favor of Purchaser Agent for each of Issuer's accounts (except for Excluded Accounts), including, for the avoidance of doubt, the Designated Deposit Account;

(c) Within 30 days of the Effective Date (or such later date acceptable to Purchaser Agent in its sole discretion), provide Purchaser Agent with evidence satisfactory to Purchasers that the insurance policies and endorsements required by Section 6.6 hereof are in full force and effect; and

(d) Within 10 Business Days of the Effective Date (or such later date acceptable to Purchaser Agent in its sole discretion), deliver, or cause to be delivered, signed letters in form and substance satisfactory to the Purchaser Agent to each depository bank of Issuer, with respect to which a control agreement exists in favor of Western Alliance Bank in respect of the Existing Indebtedness, terminating such control agreements.

3.7 Covenant to Deliver. Issuer agrees to promptly deliver to Purchaser Agent and the Purchasers each item required to be delivered to Purchaser Agent under this Agreement as a condition precedent to any purchase of Notes. Issuer expressly agrees that a purchase of Notes made prior to the receipt by Purchaser Agent or any Purchaser of any such item shall not constitute a waiver by Purchaser Agent or any Purchaser of Issuer's obligation to deliver such item, and any such purchase of Notes in the absence of a required item shall be made in each Purchaser's sole discretion.

3.8 Procedures for Issuance and Purchase. Subject to the prior satisfaction of all other applicable conditions to the purchase of Notes set forth in this Agreement, to issue Notes, with respect to each Purchase, Issuer shall notify the Purchasers (which notice shall be irrevocable) by electronic mail or telephone by 2:00 pm Eastern time fifteen (15) Business Days (or such shorter periods as agreed in writing by Purchaser Agent and the Purchasers) prior to the date the Notes are to be issued; provided that Purchaser Agent and the Purchaser may waive

such notice requirement and specify a Purchase Date, notwithstanding the absence of any such notice, in their sole discretion; provided, further, that with respect to the First Purchase, one (1) Business Day's advance notice shall suffice. Together with any such electronic or telephonic notification, Issuer shall deliver to the Purchasers by electronic mail a completed Purchase Notice executed by a Responsible Officer of Issuer or his or her designee. The Purchasers may rely on any telephone notice given by a person whom a Purchaser reasonably believes is a Responsible Officer of Issuer or designee thereof. On each Purchase Date, each Purchaser shall credit and/or transfer (as applicable) to the Designated Deposit Account, an amount equal to the purchase price of the Notes purchased by such Purchaser on such Purchase Date.

4. CREATION OF SECURITY INTEREST.

4.1 Grant of Security Interest. Each Obligor grants and pledges to Purchaser Agent, for the benefit of the Secured Parties, a continuing security interest in all presently existing and hereafter acquired or arising Collateral in order to secure prompt repayment of any and all Obligations and in order to secure prompt performance by the Obligors of each of their covenants and duties under the Note Documents. Upon the taking of the actions contemplated by Schedule 4.1 (as updated from time to time after the First Purchase Date in respect of assets acquired or Obligors acquired or formed after the First Purchase Date), such security interest constitutes a valid, first priority security interest in the presently existing Collateral, and will constitute a valid, first priority security interest in Collateral acquired after the date hereof. If any Obligor shall acquire a Commercial Tort Claim (as defined in the UCC) asserting damages in excess of \$500,000, such Obligor shall promptly notify Purchaser Agent in a writing signed by Issuer, as the case may be, of the general details thereof (and further details as may be required by Purchaser Agent) and grant to Purchaser Agent, for the benefit of the Secured Parties, in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Purchaser Agent.

4.2 Pledge of Collateral. Each Obligor hereby pledges, assigns and grants to Purchaser Agent, for the benefit of the Secured Parties a security interest in all the Shares, together with all proceeds and substitutions thereof, all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing, as security for the performance of the Obligations. On the First Purchase Date, or, to the extent not certificated as of the First Purchase Date, within ten (10) days of the certification of any Shares, the certificate or certificates for the Shares will be delivered to Purchaser Agent, accompanied by an instrument of assignment duly governing the Shares. The Obligors shall cause the books of each entity whose Shares are part of the Collateral and any transfer agent to reflect the pledge of the Shares. Upon the occurrence and during the continuance of an Event of Default hereunder, Purchaser Agent may effect the transfer of any securities included in the Collateral (including but not limited to the Shares) into the name of Purchaser Agent and cause new certificates representing such securities to be issued in the name of Purchaser Agent or its transferee. Unless an Event of Default shall have occurred and be continuing, the Obligors shall be entitled to exercise any voting rights with respect to the Shares and to give consents, waivers and ratifications in respect thereof, provided that no vote shall be cast or consent, waiver or ratification given or action taken which would be inconsistent with any of the terms of this Agreement or which would constitute or create any violation of any of such terms. All such rights to vote and give consents, waivers and ratifications shall terminate upon the occurrence and continuance of an Event of Default.

4.3 Delivery of Additional Documentation Required. Each Obligor shall from time to time execute and deliver to Purchaser Agent, at the request of Purchaser Agent or the Purchasers, all Negotiable Collateral, all financing statements and other documents that Purchaser Agent or the Purchasers may reasonably request, in form satisfactory to Purchaser Agent or the Purchasers, to perfect and continue the perfection of Secured Parties' security interests in the Collateral and in order to fully consummate all of the transactions contemplated under the Note Documents.

4.4 Authorization to File Financing Statements. Each Obligor hereby authorizes Purchaser Agent, at Issuer's or such Obligor's sole cost and expense, to file financing statements, make any registration or take any other action, without notice to such Obligor, with all appropriate jurisdictions (as determined by Purchaser Agent) to perfect or protect Purchaser Agent's interest or rights hereunder, including a notice that any disposition of the Collateral, by any Obligor or any other Person, shall be deemed to violate the rights of the Secured Parties under the Code.

4.5 Right to Inspect. Purchaser Agent and the Purchasers (through any of their officers, employees, or agents) shall have the right, upon ten (10) Business Days' prior written notice, from time to time during the Obligors' usual business hours but no more than once a year (unless an Event of Default has occurred and is continuing), to inspect the Obligors' Books and to make copies thereof and to check, test, and appraise the Collateral in order to verify the Obligors' financial condition or the amount, condition of, or any other matter relating to, the Collateral; provided that Issuer shall be given the opportunity to be present during any such inspections.

5. REPRESENTATIONS AND WARRANTIES.

Each Obligor represents and warrants to Purchaser Agent and Purchasers as follows:

5.1 Due Organization and Qualification. Issuer and each Subsidiary is a corporation or limited liability company, as applicable, duly existing under the laws of its state or jurisdiction of incorporation or formation, as applicable, and is qualified and licensed to do business in: (a) its state or jurisdiction of incorporation or formation, and the state where its chief executive office is located, and (b) any other state or jurisdiction in which the conduct of its business or its ownership of property requires that it be so qualified, except, in the case of such other states and jurisdictions, where the failure to do so could not reasonably be expected to cause a Material Adverse Effect.

5.2 Due Authorization; No Conflict; No Consents. The execution, delivery, and performance of the Note Documents are within each Obligor's powers, have been duly authorized, and are not in conflict with nor constitute a breach of any provision contained in such Obligor's Certificate of Incorporation, Bylaws and/or other applicable governing documents, nor will they constitute an event of default under any Material Contract, nor will they contravene, conflict with or violate, in any material respect, any applicable law, order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which such Obligor or any of its property or assets may be bound or affected. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of the Obligors is required in connection with the consummation of the transactions contemplated by this Agreement, except such Governmental Approvals which have already been obtained and are in full force and effect and except for appropriate security interest filings to be made in any applicable jurisdiction). The Obligors are not in violation, default, conflict or breach in any material respect of any provision of its Certificate of Incorporation, Bylaws and/or other applicable governing documents, or in any material respect of any instrument, judgment, order, writ, decree, or contract to which it is a party or by which it is bound, or, to its knowledge, of any provision of any federal or state statute, rule or regulation applicable to the Issuer (including, without limitation, those related to export control).

5.3 No Prior Encumbrances. Issuer and each of its Subsidiaries has good and marketable title to its property, free and clear of Liens, except for Permitted Liens.

5.4 Merchantable Inventory. All Inventory is in all material respects of good and marketable quality, free from all material defects, except for Inventory for which adequate reserves have been made.

5.5 Intellectual Property. To the Obligors' knowledge, the Obligors have sufficient rights to use all Intellectual Property necessary for their business as now conducted, without any violation or infringement of the rights of others, except for such items as have yet to be conceived or developed or that are expected to be available for licensing on reasonable terms from third parties, which may include present and former employees and consultants, or academic or medical institutions with which any of them may be affiliated now or may have been affiliated with in the past. Schedule 5.5 (as updated by the Obligors from time to time after the Effective Date by written notice to Purchaser Agent) contains a complete list of applications and registrations for Intellectual Property owned by, or exclusively licensed to, Issuer or any Subsidiary. Except as set forth in Schedule 5.5 (as delivered to Purchaser Agent on the Effective Date), there are no outstanding options, licenses, agreements, claims, encumbrances or shared ownership of interests of any kind relating to Intellectual Property of Issuer or any Subsidiary, nor is the Issuer or any Subsidiary bound by or a party to any options, licenses or agreements of any kind with respect to the Intellectual Property of any other person or entity, except, in either

case, for agreements referenced in [Section 7.1\(ii\)](#). Neither Issuer nor any Subsidiary has received any communications alleging that Issuer or such Subsidiary has violated or would violate any of the Intellectual Property rights of any other person or entity. Neither Issuer nor any Subsidiary is aware that any of its employees or consultants is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would interfere with the use of his or her commercially reasonable efforts to promote the interests of Issuer or such Subsidiary or that would conflict with Issuer's or such Subsidiary's business as presently conducted. Neither the execution nor delivery of this Agreement, nor the carrying on of the Obligors' business by their employees, will, to the knowledge of the Obligors, conflict with or result in a breach of the terms, conditions or provisions of, or constitute a default under, any contract, covenant or instrument with a former employer of such employee, or academic or medical institutions with which any of them may be affiliated now or may have been affiliated with in the past, under which any of such employees is now obligated. Each employee and consultant has assigned to an Obligor all intellectual property rights he or she owns that are related to the Obligors' business as now conducted and all intellectual property rights that he, she or it solely or jointly conceived, reduced to practice, developed or made during the period of his, her or its employment or consulting relationship with such Obligor or any Subsidiary that (i) relate, at the time of conception, reduction to practice, development, or making of such intellectual property right, to the Obligors' business as then conducted, (ii) were developed on any amount of the Obligors' or any Subsidiary's time or with the use of any of the Obligors' or any Subsidiary's equipment, supplies, facilities or information, or (iii) resulted from the performance of services for any Obligor or Subsidiary. The Obligors do not believe it is or will be necessary to utilize any inventions of any of its employees (or people it currently intends to hire) made prior to or outside the scope of their employment by any Obligor or Subsidiary that have not been fully assigned to an Obligor prior to the date hereof. To the extent any Obligor or Subsidiary uses any "open source" or "copyleft" software in its products or services with respect to any components in its products or services (each, an "**Open Source License**"), such Obligor or Subsidiary is in substantial compliance with the material terms of any such licenses, and such Obligor or Subsidiary is not required under any such Open Source License to (a) make or permit any disclosure or to make available any source code for its (or any of its licensors') proprietary software or (b) distribute or make available any of the Obligors' or any Subsidiary's proprietary software or intellectual property (or to permit any such distribution or availability). For purposes of this [Section 5.5](#), the Obligors shall be deemed to have knowledge of a patent right if Issuer or any Subsidiary has actual knowledge of the patent right or would be found to be on notice of such patent right as determined by reference to United States patent laws. No government funding, facilities of a university, college, other educational institution or research center, or funding from third parties was used in the development of any Intellectual Property owned by any Obligor or Subsidiary. No person who was involved in, or who contributed to, the creation or development of any Intellectual Property owned by any Obligor or Subsidiary, has performed services for the government, university, college, or other educational institution or research center in a manner that would affect any Obligor's or Subsidiary's rights in such Intellectual Property.

5.6 Name; Location of Chief Executive Office. Except as disclosed in the most recent Perfection Certificate delivered pursuant to this Agreement, Issuer has not done business under any name other than that specified on the signature page hereof. The chief executive office of each Obligor is located at the address indicated in [Section 10](#) hereof, unless previously disclosed to Purchaser Agent in writing. Except as disclosed in the most recent Perfection Certificate delivered pursuant to this Agreement, all the Obligors' Inventory and Equipment is located only at the location set forth in [Section 10](#) hereof.

5.7 Litigation. Except as set forth in the most recent Perfection Certificate delivered pursuant to this Agreement, there are no actions or proceedings pending by or against Issuer or any Subsidiary before any court or administrative agency in which an adverse decision could have a Material Adverse Effect, or a material adverse effect on Issuer's interest or the Secured Parties' security interest in the Collateral.

5.8 No Material Adverse Change in Financial Statements. All consolidated and consolidating financial statements related to Issuer and any Subsidiary that the Purchasers have received from Issuer or any Subsidiary fairly present in all material respects Issuer's and its Subsidiaries' financial condition as of the date thereof and Issuer's and its Subsidiaries' consolidated and consolidating results of operations for the period then ended. There has not been a material adverse change in the consolidated financial condition of Issuer and its Subsidiaries since the date of the most recent of such financial statements submitted to Purchaser Agent.

5.9 Solvency, Payment of Debts. Issuer and its Subsidiaries are solvent and able to pay their debts (including trade debts) as they mature.

5.10 Regulatory Compliance.

(a) Issuer and each of its Subsidiaries is, and for the past six (6) years has been, operated in compliance in all material respects with all applicable laws, including but not limited to the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b and the regulations promulgated thereunder) and applicable state fraud and abuse laws, the Eliminating Kickbacks in Recovery Act, the Food Drug and Cosmetic Act (21 U.S.C. §§ 301 et seq. and regulations promulgated thereunder), the Public Health Service Act including the Clinical Laboratory Improvement Amendments 421 U.S.C. §§ 201 et seq. and regulations promulgated thereunder) and other applicable federal and state laws and regulations regulating clinical laboratories and products used therein, the Federal False Claims Act, laws related to the Medicare and Medicaid programs (including Titles XVIII and XIX of the Social Security Act), the Federal Civil Monetary Penalties Law (42 U.S.C. § 1320a-7a), the Federal Program Fraud Civil Remedies Act (31 U.S.C. § 3801 et seq.), the federal Exclusion Laws (42 U.S.C. § 1320a-7), the Federal Health Care Fraud Law (18 U.S.C. § 1347), the federal Physician Self-Referral Law ((42 U.S.C. § 1395nn) and all applicable state laws and regulations governing substantially the same conduct and all applicable state laws and regulations governing laboratory operations and the processing, storing, and transmitting of genetic information (collectively, “**Health Care Laws**”). Neither Issuer nor any of its Subsidiaries is currently, or has in the past six (6) years been, in violation in any material respect of any law, regulation, policy or guidance issued by any Governmental Authority. Neither Issuer nor any Subsidiary has received within the past six (6) years written or, to the knowledge of Issuer and its Subsidiaries, oral, notice, including notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, audit, investigation, or other action, from any Governmental Authority, including but not limited to the FDA, the Centers for Medicare & Medicaid Services, the HHS Office of Inspector General (“**OIG**”), or the DOJ, of noncompliance by, or liability of, Issuer or any Subsidiary or any person acting on behalf of Issuer or any Subsidiary. Issuer and its Subsidiaries have established, and maintain, a corporate compliance program consistent with the OIG model compliance plan for clinician laboratories that addresses applicable laws to which Issuer’s or such Subsidiary’s business, operations and activities are subject. Neither Issuer nor any Subsidiary has made any voluntary or involuntary self-disclosure to any Governmental Authority or representative thereof regarding any potential noncompliance with law applicable to Issuer’s or such Subsidiary’s business, operations, or activities.

(b) During the past six (6) years, all of the products or services of Issuer and its Subsidiaries have been and are being manufactured, processed, developed, packaged, labeled, promoted, marketed, sold, stored, tested, distributed, imported, exported, and provided in material compliance with all applicable Health Care Laws, as well requirements under all applicable laws regarding non-clinical testing, clinical research, establishment registration, drug and device listing, good manufacturing practices, record-keeping, adverse event reporting, and reporting of corrections and removals (collectively, “**Product Regulatory Laws**”), and Issuer and each Subsidiary is and has been in material compliance with all Health Care Laws and Product Regulatory Laws to the extent applicable.

(c) During the past six (6) years, neither Issuer, any Subsidiary, any of their respective officers, directors, managers, members, employees or, to the knowledge of Issuer and its Subsidiaries, independent contractors, (i) has been convicted of, charged with or investigated for a U.S. government or state health program, including Medicaid (“**Federal Healthcare Program**”) related offense, or convicted of, charged with or investigated for a violation of law related to fraud, abuse, theft, embezzlement, breach of fiduciary responsibility, financial misconduct, or obstruction of an investigation; (ii) has been debarred, excluded or suspended from participation in any Federal Healthcare Program; or (iii) has been subject to any order or consent decree of, or criminal or civil fine or penalty imposed by, any Governmental Authority. During the past six (6) years, neither Issuer nor any Subsidiary has arranged for or contracted with (by employment or otherwise) any person that it knows or should know has been convicted of or pled guilty or nolo contendere to any federal or state criminal offense under any Health Care Laws, entered into any settlement with any Governmental Authority for violation of any Health Care Laws, or is excluded from

participation in any Federal Healthcare Program. No exclusion, suspension, or debarment claims, actions, proceedings, audits or investigations relating to the business of Issuer or any Subsidiary are pending or, to the knowledge of Issuer and its Subsidiaries, threatened against Issuer or any Subsidiary, nor, to the knowledge of Issuer and its Subsidiaries, are there any exclusion, suspension or debarment claims, actions, proceedings, audits or investigations relating to the business of Issuer and its Subsidiaries pending or threatened against any of Issuer's or any Subsidiary's officers, directors, managers, members, employees or agents. Neither Issuer nor any Subsidiary entered into any settlement, deferred prosecution or reformation agreement with any Governmental Authority relating to the delivery of any item or service under a Federal Health Care Program. Neither Issuer nor any Subsidiary is currently, nor has it ever been, a party or subject to the terms of a corporate integrity agreement required by the OIG or similar agreement or consent order of any other Governmental Authority.

(d) Each of Issuer and its Subsidiaries holds and has held all permits required under Health Care Laws that are necessary for the conduct of Issuer's and its Subsidiaries' business and the ownership, use and operation of its assets. Except as disclosed on Schedule 5.10, (i) the permits are valid and in full force and effect and (ii) neither Issuer nor any Subsidiary is in breach or violation of, or default under, any such permit. There are no actions pending or, to Issuer's and its Subsidiaries' knowledge, threatened, that seek the revocation, cancellation, or adverse modification of any permit. All applications required to have been filed for the renewal of any permits have been duly filed on a timely basis with the appropriate Governmental Authority.

(e) During the past six (6) years, Issuer and its Subsidiaries have timely filed with the applicable Governmental Authorities all material filings, documents, declarations, listings, registrations, reports, statements, amendments, supplements or submissions, including but not limited to adverse event reports, as may be applicable, that are required to be filed by it under the applicable Health Care Laws and/or Product Regulatory Laws, any such filings were in material compliance with applicable laws when filed, and no material deficiencies have been asserted by any applicable Governmental Authority with respect to any such filings. To the knowledge of Issuer and its Subsidiaries, (i) each such filing was true and correct in all material respects as of the date of submission, or was corrected in or supplemented by a subsequent filing, and (ii) any material and legally necessary or required updates, changes, corrections, amendments, supplements or modifications to such filings have been submitted to the applicable Governmental Authority.

(f) During the past six (6) years, neither Issuer nor any Subsidiary has received or been subject to any action, notice, warning, administrative proceeding, review, or investigation by a Governmental Authority, including any FDA Form 483, FDA warning letter or untitled letter or any similar notice, that (i) alleged or asserted that Issuer or such Subsidiary violated any applicable Health Care Laws or Product Regulatory Laws, or (ii) commenced, or threatened to initiate, any action, suit, claim, investigation, proceeding or order to withdraw, discontinue, terminate, amend, change, correct or otherwise adversely affect a permit required under applicable Health Care Laws or Product Regulatory Laws.

(g) Neither Issuer nor any Subsidiary has (i) knowingly or willfully made or caused to be made any false statement or representation of a material fact for use in determining rights to any benefit or payment by any third party payor; (ii) presented or caused to be presented a claim for reimbursement to any third party payor for any item or service that Issuer or such Subsidiary knew or should have been known was not provided as claimed or was false or fraudulent in any way; (iii) failed to disclose knowledge of the occurrence of any event affecting the initial or continued right to any benefit or payment on its own behalf or on behalf of another, with intent to fraudulently secure such benefit or payment; or (iv) knowingly or willfully offered, paid, solicited or received any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind in return for referring an individual to a person for the furnishing or withholding of any item or service for which payment may be made in whole or in part by a Federal Health Care Program in violation of the Anti-Kickback Statute.

(h) None of Issuer, any of its Subsidiaries, or any of their Affiliates or, to the knowledge of Issuer or any of its Subsidiaries, any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is, or has been at any time during the past five (5) years, (i) in violation of any Anti-Terrorism Law or Anti-Corruption Laws, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law or Anti-Corruption Laws, or (iii) a Sanctioned Person. None of Issuer, any of its Subsidiaries or any of their Affiliates or, to the knowledge of Issuer or any of its Subsidiaries, any of their

respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Sanctioned Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked or sanctioned pursuant to any Sanctions (including Executive Order No. 13224, any similar executive order), other Anti-Terrorism Law or other Anti-Corruption Laws.

(i) Issuer and each Subsidiary have met the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA, and no event has occurred resulting from Issuer's failure to comply with ERISA that could reasonably be expected to result in Issuer's incurring any material liability. Issuer is not an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940. Issuer is not engaged principally, or as one of the important activities, in the business of extending credit for the purpose of purchasing or carrying Margin Stock. Issuer has complied in all material respects with all the provisions of the Federal Fair Labor Standards Act. Issuer has not violated any statutes, laws, ordinances or rules applicable to it, violation of which could be reasonably expected to have a Material Adverse Effect. Neither Issuer nor any of its Subsidiaries is in violation in any material respect of any applicable requirement of law relating to terrorism or money laundering, including Executive Order No. 13224, effective September 24, 2001, The Currency and Foreign Transactions Reporting Act (also known as the "Bank Secrecy Act," 31 U.S.C. §§ 5311-5330), the Trading With the Enemy Act (50 U.S.C. §§1-44, as amended), the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Public Law 107 56, signed into law October 26, 2001, the Criminal Justice (Money Laundering and Terrorist Financing) Act 2010 as amended and the Criminal Justice (Terrorist Offences) Act 2005.

5.11 Data Privacy

(a) In connection with its collection, storage, transfer (including, without limitation, any transfer across national borders) and/or use of any personally identifiable information or protected health information from any individuals, (collectively, "**Personal Information**"), Issuer and each of its Subsidiaries are and have been in compliance with all applicable laws in all relevant jurisdictions, including the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act and their implementing regulations (collectively "**HIPAA**"), and with Issuer's and its Subsidiaries' privacy policies and the requirements of any contract or codes of conduct to which Issuer or any Subsidiary is a party.

(b) Issuer and each of its Subsidiaries have commercially reasonable physical, technical, organizational and administrative security measures and policies in place to protect all Personal Information collected by it or on its behalf from and against unauthorized access, use and/or disclosure. Issuer and each of its Subsidiaries take commercially reasonable measures to ensure compliance, in all material respects, with all laws relating to HIPAA obligations and the security and confidentiality of protected health information, by all employees or other personnel under Issuer's or such Subsidiaries' direction and control with access to Personal Information in connection with their service to Issuer or such Subsidiary. Issuer and its Subsidiaries provide periodic training to their workforce with respect to such measures and policies to the extent required for compliance with HIPAA.

(c) To the knowledge of Issuer and its Subsidiaries, there has been no occurrence of (x) unlawful or unauthorized destruction, access, acquisition, loss, use, modification or disclosure of Personal Information processed by Issuer or any Subsidiary in the operation of the business of Issuer or such Subsidiary that is owned, stored, used, maintained or controlled by or on behalf of Issuer or such Subsidiary, (y) unauthorized access to or disclosure of Issuer's or any Subsidiary's material confidential information or trade secrets, or (z) any unauthorized intrusions or breaches of security into any information technology and computer system (including software, information technology and telecommunication hardware, network and other equipment) owned or controlled by Issuer or such Subsidiary relating to the transmission, storage, maintenance, organization, presentation, generation, processing or analysis of data and information and any support, disaster recovery or online service whether in hard copy or electronic format, used in or necessary to the conduct of the business. To the knowledge of Issuer and its Subsidiaries, Issuer and each Subsidiary is and has been in compliance in all material respects with all laws relating to data loss, theft and breach of security notification obligations.

(d) Issuer and each of its Subsidiaries have entered into a business associate agreement with each subcontractor or vendor to which it has provided access to protected health information (as defined by HIPAA), in each case to the extent required by, and in conformity with, HIPAA. Issuer and each of its Subsidiaries have performed a HIPAA security rule risk assessment that meets the standards set forth at 45 C.F.R. §§ 164.306 and 164.308(a)(1)(ii)(A), taking into account the factors set forth in 45 C.F.R. § 164.306(b)(2)(i)-(iv), and created and maintained documentation in accordance with 45 C.F.R. § 164.316, and has addressed and remediated all threats and deficiencies identified in each case to the extent required by, and in conformity with, HIPAA. During the past six (6) years, to the knowledge of Issuer and its Subsidiaries, no breach has occurred with respect to any unsecured protected health information (as such terms are defined by HIPAA) maintained by or for Issuer or any Subsidiary that is subject to the notification requirements of 45 C.F.R. §§ 164.404, 164.406 or 164.408.

5.12 Environmental Condition. None of Issuer's or any Subsidiary's properties or assets has ever been used by Issuer or any Subsidiary or, to the best of the Obligors' knowledge, by previous owners or operators, in the disposal of, or to produce, store, handle, treat, release, or transport, any hazardous waste or hazardous substance other than in accordance with applicable law; to the best of the Obligors' knowledge, none of the Obligors' properties or assets has ever been designated or identified in any manner pursuant to any environmental protection statute as a hazardous waste or hazardous substance disposal site, or a candidate for closure pursuant to any environmental protection statute; no lien arising under any environmental protection statute has attached to any revenues or to any real or personal property owned by Issuer or any Subsidiary; and neither Issuer nor any Subsidiary has received a written summons, citation, notice, or directive from the Environmental Protection Agency or any other federal, state or other governmental agency concerning any action or omission by Issuer or any Subsidiary resulting in the releasing, or otherwise disposing of hazardous waste or hazardous substances into the environment.

5.13 Taxes. Issuer and each Subsidiary have filed or caused to be filed, or submitted extensions for, all material Tax returns required to be filed, and have paid, or have made adequate provision for the payment of, all Taxes reflected therein except (a) to the extent such Taxes are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as such reserve or other appropriate provision, if any, as shall be required in conformity with GAAP shall have been made therefor, or (b) if such taxes, assessments, deposits and contributions do not, individually or in the aggregate, exceed \$1,000,000.

5.14 Subsidiaries. Issuer does not own any stock, partnership interest or other equity securities of any Person, except for Permitted Investments and Subsidiaries existing as of the date hereof.

5.15 Government Consents. Issuer and each Subsidiary have obtained all material consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary for the continued operation of Issuer's business as currently conducted.

5.16 Shares. Each Obligor has full power and authority to create a first lien on the Shares in its possession and no disability or contractual obligations exists that would prohibit such Obligor from pledging the Shares pursuant to this Agreement. To the Obligors' knowledge, there are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the Shares. The Shares have been and will remain duly authorized and validly issued, and are fully paid and non-assessable. To the Obligors' knowledge, the Shares are not the subject of any present or threatened suit, action, arbitration, administrative or other proceeding, and no Obligor knows of no reasonable grounds for the institution of any such proceedings.

5.17 Material Contracts. The Obligors have made available to Purchasers correct and complete copies of all Material Contracts. Neither Issuer nor its Affiliates is in material breach of any Material Contract or in material default under any Material Contract. There is no event or circumstance that with notice or lapse of time, or both, would reasonably be expected to (a) constitute a material breach or default by Issuer and/or its Affiliates or (to the knowledge of Issuer) any other party under any Material Contract, (b) give any Person the right to receive or require a material rebate, chargeback, penalty or change in delivery schedule under any Material Contract, (c) give any Person the right to accelerate the maturity or performance of any Material Contract or (d) give any Person the right to cancel, terminate or materially modify any Material Contract. To the knowledge of the Obligors, nothing has occurred and no condition exists that would permit any other party

thereto to terminate any Material Contract. Neither Issuer nor its Affiliates has received any notice or, to the knowledge of the Obligor, any threat of termination of any such Material Contract. To the knowledge of the Obligor, no other party to a Material Contract is in material breach of or in default under such Material Contract. All Material Contracts are valid and binding on Issuer and its Affiliates and, to the knowledge of the Obligor, on each other party thereto, and are in full force and effect.

5.18 Series D SPA. As of the Effective Date, the representations and warranties contained in Section 2 of the Preferred Stock Purchase Agreement, dated as of May 14, 2024, by and between Issuer and the investors listed on Schedule A thereto, shall be true, accurate and complete in all material respects. For the avoidance of doubt, in no event shall any “bring down” of such representations and warranties imply that such representations and warranties are true and correct as of, or for, any period of time other than the Effective Date.

5.19 Full Disclosure. No representation, warranty or other statement made by Issuer or any Subsidiary in any certificate or written statement furnished to Purchaser Agent or the Purchasers contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading.

6. AFFIRMATIVE COVENANTS.

Each Obligor shall, and shall cause each of its Subsidiaries, to do all of the following:

6.1 Good Standing. Maintain its corporate existence and good standing in its jurisdiction of incorporation or formation, as applicable, and maintain qualification in its state or jurisdiction of incorporation or formation, as applicable, and the state or jurisdiction where its chief executive office is located, and in each other jurisdiction in which it is required under applicable law, in the case of such other jurisdictions, in which the failure to so qualify would reasonably be expected to have a material adverse effect on such Obligor’s business or operations. Each Obligor shall maintain, and shall cause each of its Subsidiaries to maintain, in force all licenses, approvals and agreements, the loss of which could reasonably be expected to have a Material Adverse Effect.

6.2 Government Compliance. Meet the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. Each Obligor shall comply, and shall cause each Subsidiary to comply, with all statutes, laws, ordinances and government rules and regulations to which it is subject, noncompliance with which could reasonably be expected to have a Material Adverse Effect.

6.3 Financial Statements, Reports, Certificates. Deliver the following to Purchaser Agent and each Purchaser:

(a) as soon as available, but no later than forty-five (45) days after the last day of each fiscal quarter, a company prepared unaudited consolidated and consolidating balance sheet, income statement and cash flow statement covering the consolidated operations of Issuer and its Subsidiaries for such quarter certified by a Responsible Officer of Issuer, all prepared in accordance with GAAP, subject to normal year-end audit adjustments and the absence of disclosures normally made in footnotes, together with (A) a duly completed Compliance Certificate signed by a Responsible Officer of Issuer, (B) reports detailing the Obligor’s unit sales volume, cash collections from product sales and account statements from all of the Obligor’s depository, operating, and investment accounts, and (C) schedules of the Obligor’s Intellectual Property and deposit accounts, securities accounts and commodity accounts (including balances of all such accounts), updated as of such date;

(b) as soon as available, but in any event within one hundred eighty (180) days after the end of Issuer’s fiscal year, annual audited consolidated financial statements of Issuer prepared in accordance with GAAP, consistently applied, together with a report and opinion on the financial statements and on internal controls and procedures, if available, from PwC, any other “Big 4” accounting firm or any other independent certified public accounting firm reasonably acceptable to Purchaser Agent (which report and opinion shall be prepared in accordance with GAAP and shall not be subject to any qualification, emphasis of matter or statement as to “going concern” or scope of audit, except for qualifications relating to changes in accounting principles or practices reflecting changes in GAAP and required or approved by Issuer’s independent certified public accountants), together with a duly completed Compliance Certificate signed by a Responsible Officer of Issuer;

(c) no later than ten (10) days after each regularly-scheduled quarterly meeting of the board of directors (or equivalent governing body) of Issuer or any Subsidiary, the board kit and other materials delivered to the directors in connection with any such meeting; provided that, (1) such materials may be redacted to omit information relating to the potential refinancing of the obligations under this Agreement or repurchase of the Notes, and (2) if the Obligors, upon the advice of counsel, reasonably determine that any such information constitutes attorney-client privileged information and the disclosure thereof, even after the entry into a common interest agreement with the Purchasers, would adversely impair the attorney-client privilege between the Obligors and such counsel with respect to such information, then the Obligors shall be entitled to withhold delivery of any such information from the Purchaser Agent and the Purchasers; provided further that (x) Issuer shall deliver to Purchaser Agent concurrently with board materials containing any redactions a summary of any information so redacted and the basis for such redaction and (y) in no event shall any financial information (including, but not limited to, budget, forecasts and cash flow, balance sheet and income statement information) be regarded as constituting attorney-client privileged information for purposes of this clause;

(d) copies of all statements, reports (including any quarterly updates or reports) and notices sent or made available generally by Issuer or any Subsidiary to its security holders or to any holders of Subordinated Debt and, if applicable, copies of the Form 10-K Annual Report, Form 10-Q Quarterly Report and Form 8-K Current Report for Issuer concurrent with the date of filing with the Securities and Exchange Commission;

(e) promptly upon receipt of notice thereof, a report of any legal actions pending or threatened in writing against Issuer or any Subsidiary that could reasonably likely result in damages or costs to Issuer or any Subsidiary of \$2,500,000 or more;

(f) such budgets, sales projections, operating plans or other financial information as Purchaser Agent or any Purchaser may reasonably request from time to time;

(g) financial projections in form and substance approved by Issuer's board of directors and reasonably acceptable to Purchaser Agent and the Purchasers specifying the assumptions used in creating the projections. Annual projections shall in any case be provided to Purchaser Agent and the Purchasers no later than sixty (60) days after the end of each fiscal year;

(h) promptly, upon sending or receipt, copies of any management letters and correspondence relating to management letters, sent or received by Issuer or any Subsidiary to or from its auditor. If no management letter is prepared, Issuer shall, upon Purchaser Agent's request, obtain a letter from such auditor stating that no deficiencies were noted that would otherwise be addressed in a management letter;

(i) within one hundred eighty (180) days of each fiscal year end, copies of all business Tax returns, which must be prepared by a regionally recognized Certified Public Accountant acceptable to the Purchasers (Purchasers hereby affirm each of the "big four" accounting firms is deemed acceptable); provided that if an Obligor receives and extension for the filing of such Tax returns, then such Tax returns shall be delivered to Purchaser Agent and the Purchasers promptly after filing;

(j) promptly upon receipt of written notice thereof, or otherwise obtaining knowledge, any material default or event of default under, or any termination (other than expiration in accordance with its terms) of, any Material Contract;

(k) as soon as possible, and in any event within two (2) Business Days, notice of the occurrence of any default or Event of Default;

(l) prompt notice (and in any event no later than five (5) Business Days) of any failure to renew, loss, suspension of a state clinical lab license or permit or related accreditation or certification, or receipt of any warning or threat of such a loss or suspension from any Governmental Authority or recognized accreditation agency;

(m) as soon as possible, and in any event within five (5) Business Days after receipt thereof, true and correct copies of all Form 483s, notices of adverse finding, warning letters, untitled letters, Safety Notices, clinical holds and other written correspondence or written notices from the FDA or any other Governmental Authority having jurisdiction over the facilities or business of Issuer or any of its Subsidiaries;

(n) promptly upon Purchaser Agent's request, such other books, records, statements, lists of property and accounts, budgets, forecasts or reports as to Issuer and as to each Guarantor of the Obligations as Purchaser Agent may reasonably request; and

(o) promptly following the end of each fiscal quarter (but in any event no later than forty-five (45) days after the end of each of the first three fiscal quarters and ninety (90) days after the end of each fiscal year) during the Revenue Participation Period, a reasonably detailed written report (the "**Revenue Report**") setting forth (i) the calculation of the Revenue Participation Payments payable to the Purchasers for such fiscal quarter and each other prior fiscal quarter in the same fiscal year identifying Net Revenue and the calculation of all deductions from gross revenues to determine Net Revenue; (ii) quarterly and the year-to-date Revenue Participation Payments as of the end of such fiscal quarter; and (iii) the difference of (x) the amount the Purchasers have received with respect to such fiscal quarter (and each other prior fiscal quarter in such fiscal year) in payments from Issuer under Section 2.2(c) in respect of the fiscal year, minus (y) the actual Revenue Participation Payments owed to the Purchasers.

6.4 Inventory; Returns. Keep all Inventory in good and marketable condition, free from all material defects except for Inventory for which adequate reserves have been made. Returns and allowances, if any, as between the Obligors and their account debtors shall be on the same basis and in accordance with the usual customary practices of the Obligors, as they exist at the time of the execution and delivery of this Agreement. The Obligors shall promptly notify Purchaser Agent of all returns and recoveries and of all disputes and claims, where the return, recovery, dispute or claim involves more than \$2,500,000.

6.5 Taxes. Make due and timely payment or deposit of all material federal, state, and local Taxes, assessments, or contributions (in each case, unless subject to a valid extension) required of it by law, and will execute and deliver to Purchaser Agent, on demand, appropriate certificates attesting to the payment or deposit thereof; and each Obligor will make, and will cause each Subsidiary to make, timely payment or deposit of all material Tax payments and withholding Taxes (in each case, unless subject to a valid extension) required of it by applicable laws, including, but not limited to, those laws concerning F.I.C.A., F.U.T.A., state disability, and local, state, and federal income Taxes, and will, upon request, furnish Purchaser Agent with proof satisfactory to Purchaser Agent indicating that Issuer or a Subsidiary has made such payments or deposits; provided that no Obligor nor Subsidiary need make any payment if the amount or validity of such payment is contested in good faith by appropriate proceedings and is reserved against (to the extent required by GAAP) by such Obligor or Subsidiary.

6.6 Insurance. Keep the Collateral insured against loss or damage by fire, theft, explosion, sprinklers, and all other hazards and risks, and in such amounts, as ordinarily insured against by other owners in similar businesses conducted in the locations where Issuer's business is conducted on the date hereof. Each Obligor shall also maintain insurance relating to their business, ownership and use of the Collateral in amounts and of a type that are customary to businesses similar to theirs. All such policies of insurance shall be in such form, with such companies, and in such amounts as are reasonably satisfactory to Purchaser Agent. All such policies of property insurance shall contain a lender's loss payable endorsement, in a form satisfactory to Purchaser Agent in its reasonable discretion, showing Purchaser Agent as an additional loss payee thereof, and all liability insurance policies shall show Purchaser Agent as an additional insured and shall specify that the insurer must give at least twenty (20) days' notice to Purchaser Agent before canceling its policy for any reason. Upon Purchaser Agent's request, the Obligors shall deliver to Purchaser Agent certified copies of such policies of insurance and evidence of the payments of all premiums therefor. All proceeds payable under any such policy shall, at the option of Purchaser Agent, be payable to Purchaser Agent to be applied on account of the Obligations.

6.7 Accounts.

(a) Subject to the post-closing period in Section 3.6(b), maintain all of Obligor's Collateral Accounts subject to Control Agreements in accordance with the terms under this Agreement or other Note Documents.

(b) Provide Purchaser Agent five (5) Business Days' prior written notice before any Obligor establishes any Collateral Account at or with any Person other than the institutions identified to Purchaser Agent in the Perfection Certificate delivered by the Obligor as of the Effective Date. In addition, for each Collateral Account that an Obligor at any time establishes after the Effective Date, and for each Collateral Account of any Subsidiary that is acquired or created pursuant to Section 6.11, such Obligor or such Subsidiary shall cause the applicable bank or financial institution at or with which such Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account, to perfect Purchaser Agent's Lien in such Collateral Account in accordance with the terms hereunder prior to the establishment of such Collateral Account, which Control Agreement or other instrument, as applicable, may not be terminated without prior written consent of Purchaser Agent.

(c) Subject to the post-closing period in Section 3.6(b), maintain the Designated Deposit Account at all times as Issuer's primary operating account, subject to a Control Agreement, which pursuant to Section 3.6(b) shall be subject to an ACH authorization in favor of Purchaser Agent, located in the United States.

(d) Promptly upon the reasonable request of Purchaser Agent and, so long as no Default or Event of Default has occurred and is continuing, no more frequently than once weekly, Issuer shall provide current balances of the Obligor's deposit accounts and securities accounts, together with current bank statements or screenshots of the applicable bank accounts reflecting the current balances;

(e) Deliver such bank statements and other information relating to all deposit accounts, securities accounts and commodity accounts of Issuer and its Subsidiaries as Purchaser Agent may reasonably request from time to time.

For the avoidance of doubt, no Obligor shall maintain any accounts except in accordance with Sections 6.7(a) and (b).

6.8 Financial Performance. On the last day of each fiscal quarter commencing with the fiscal quarter ending March 31, 2025, excluding any fiscal quarter with respect to which the Liquidity Condition is satisfied at all times during such fiscal quarter, achieve both of the following ((a) and (b)):

(a) Trailing six-month Net Revenue of not less than the amount shown for each applicable period in the below table:

Period	Minimum Trailing Six-Month Net Revenue Threshold (in millions)
Q1 2025	\$ 56.1
Q2 2025	\$ 65.6
Q3 2025	\$ 74.8
Q4 2025	\$ 82.8
Q1 2026	\$ 87.2
Q2 2026	\$ 101.8
Q3 2026	\$ 117.2
Q4 2026	\$ 120.0
Thereafter	\$ 120.0

(b) Trailing six-month Gross Margin of not less than 30%.

6.9 Use of Proceeds. Issuer shall use the proceeds of the Notes solely as working capital to fund its general business requirements in accordance with the provisions of this Agreement, and for paying off the Existing Indebtedness, and not (i) for personal, family, household or agricultural purposes or (ii) directly or indirectly, for the purpose of purchasing or carrying Margin Stock.

6.10 Landlord Waivers; Bailee Waivers. In the event that Issuer or any of its Subsidiaries, after the Effective Date, intends to add any new offices or business locations, including warehouses, or otherwise store any portion of the Collateral with, or deliver any portion of the Collateral to, a bailee, in each case pursuant to Section 7.2, then Issuer or such Subsidiary will first receive the written consent of Purchaser Agent and, in the event that the Collateral at any new location is valued in excess of \$1,000,000 in the aggregate, such bailee or landlord, as applicable, must execute and deliver a bailee waiver or landlord waiver, as applicable, in form and substance reasonably satisfactory to Purchaser Agent prior to the addition of any new offices or business locations, or any such storage with or delivery to any such bailee, as the case may be.

6.11 Formation or Acquisition of Subsidiaries. Notwithstanding and without limiting the negative covenants contained in Sections 7.3 and 7.7 hereof, at the time that Issuer or any Guarantor forms any direct or indirect Subsidiary or acquires any direct or indirect Subsidiary after the Effective Date (in each case, excluding any Excluded Subsidiary), Issuer and such Guarantor shall promptly, and in any event within 15 days with respect to a Subsidiary organized under the laws of the United States or any state or territory thereof and within 30 days with respect to any Foreign Subsidiary (or, in each case, such later date as specified in writing by the Purchaser Agent in its sole discretion), (a) cause such new Subsidiary to provide to Purchaser Agent a Guarantee Assumption Agreement to become a Guarantor hereunder, together with such appropriate financing statements and/or Control Agreements, all in form and substance reasonably satisfactory to Purchaser Agent (including being sufficient to grant Purchaser Agent, for the benefit of the Secured Parties, a first priority Lien (subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary), (b) provide to Purchaser Agent appropriate certificates and powers and financing statements, pledging all of the direct or beneficial ownership interest in such new Subsidiary, in form and substance reasonably satisfactory to Purchaser Agent; and (c) provide to Purchaser Agent all other documentation in form and substance reasonably satisfactory to Purchaser Agent, which in its opinion is appropriate with respect to the execution and delivery of the applicable documentation referred to above, including, without limitation, a Guarantee Assumption Agreement. Any document, agreement, or instrument executed or issued pursuant to this Section 6.11 shall be a Note Document.

6.12 Material Contracts. Each of Issuer and its Affiliates shall comply with all terms and conditions of and fulfill all of its obligations under all the Material Contracts, except for such noncompliance which would not reasonably be expected to give rise to a material breach thereof or a Material Adverse Effect. Neither Issuer nor any of its Subsidiaries shall, without the prior consent of Purchaser Agent, which shall not be unreasonably withheld, conditioned or delayed, (i) amend, modify, restate, cancel, supplement, terminate or waive any provision of any Material Contract, or grant any consent thereunder, or agree to do any of the foregoing, in each case which would reasonably be expected to have a Material Adverse Effect or be adverse in any material respect to the interests of the Purchasers or (ii) enter into any Restricted License.

6.13 Further Assurances. At any time and from time to time each Obligor shall execute and deliver such further instruments and take such further action as may reasonably be requested by Purchaser Agent to effect the purposes of this Agreement.

7. NEGATIVE COVENANTS.

No Obligor will do any of the following:

7.1 Dispositions. Convey, sell, lease, transfer or otherwise dispose of (collectively, a “Transfer”), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, other than: (i) Transfers of Inventory in the ordinary course of business; (ii) non-exclusive licenses and similar arrangements for the use of the property of Issuer or its Subsidiaries in the ordinary course of business; (iii) Transfers of worn-out or obsolete Equipment; (iv) Transfers consisting of the sale or issuance of any stock of Issuer permitted under Section 7.2 of this Agreement; and (v) Transfers consisting of Issuer’s use or transfer of money or Cash Equivalents in a manner that is not prohibited by the terms of this Agreement or the other Note Documents; and (vi) Transfers in connection with Permitted Liens.

7.2 Change in Business or Executive Office. Engage in any business, or permit any of its Subsidiaries to engage in any business, other than the businesses currently engaged in by Issuer and any business substantially similar or related thereto (or incidental thereto); or cease to conduct business in the manner conducted by Issuer as of the Effective Date; or suffer or permit a Change of Control except in accordance with Section 2.2(d); or without ten (10) Business Days prior written notification to Purchaser Agent, relocate its chief executive office or state of organization or incorporation (as the case may be) or change its legal name; or without Purchaser Agent's prior written consent, change the date on which its fiscal year ends, except that notwithstanding the foregoing, Issuer may suffer or permit a Change of Control so long as all Obligations are satisfied and otherwise paid in full prior to or in connection with such Change of Control.

7.3 Mergers or Acquisitions. Except: (i) as permitted by Section 7.2 above and (ii) with respect to Permitted Acquisitions, merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock, equity securities, or property of another Person.

7.4 Indebtedness. Create, incur, assume or be or remain liable with respect to any Indebtedness, or permit any Subsidiary so to do, other than Permitted Indebtedness.

7.5 Encumbrances. Create, incur, assume or suffer to exist any Lien with respect to any of its property (including without limitation, its Intellectual Property), or assign or otherwise convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, or agree with any Person other than Purchaser Agent and the Purchasers not to grant a security interest in, or otherwise encumber, any of its property (including without limitation, its Intellectual Property), or permit any Subsidiary to do so.

7.6 Distributions. Pay any dividends or make any other distribution or payment on account of or in redemption, retirement or purchase of any capital stock, or pay any management fees, advisory fees or similar fees to any Affiliate (it being understood, for the avoidance of doubt, that this shall not apply to compensation paid to officers or directors of Issuer for their service in such capacity in the ordinary course of Issuer's business), or permit any of its Subsidiaries to do so, except that (a) Issuer may repurchase the stock of former employees, directors, consultants, advisors or other persons performing services for Issuer or any Subsidiary pursuant to agreements under which Issuer has the option to repurchase such shares upon the occurrence of certain events, such as the termination of employment or service, or pursuant to a right of first refusal (i) prior to the Milestone, in an aggregate amount not to exceed, \$15,000,000 and (ii) from and after the Milestone, in any amount so long as, immediately prior to and after giving effect to such repurchase, Issuer is compliant with the Liquidity Condition (and would have been compliant with the Liquidity Condition at all times during the most recent fiscal quarter on a pro forma basis), and (b) any Subsidiary of an Obligor may pay dividends and distributions to such Obligor.

7.7 Investments. Directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries to do, other than Permitted Investments; or suffer or permit any Subsidiary to be a party to, or be bound by, an agreement that restricts such Subsidiary from paying dividends or otherwise distributing property to Issuer.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist, or suffer or permit any Subsidiary to enter into or permit to exist, any transaction with any Affiliate of such Obligor or Subsidiary, as applicable, with a value in excess of (X) prior to the Milestone, \$500,000 and (Y) from and after the Milestone, \$2,500,000 in the aggregate, except for (i) transactions that are in the ordinary course of such Obligor's business, upon fair and reasonable terms that are no less favorable to such Obligor than would be obtained in an arm's length transaction with a non-affiliated Person, and (ii) transactions specifically permitted pursuant to Section 7.6 above.

7.9 Subordinated Debt. Make any payment in respect of any Subordinated Debt, or permit any of its Subsidiaries to make any such payment, except in compliance with the terms of such Subordinated Debt, or amend any provision contained in any documentation relating to the Subordinated Debt without Purchaser Agent's prior written consent. For the abundance of caution, in no event shall any Obligor make any payment under any Subordinated Debt if an Event of Default has occurred and is continuing or would occur as a result of such payment.

7.10 Inventory and Equipment. Store the Inventory or the Equipment with a bailee, warehouseman, or other third party unless the third party has been notified of Purchaser Agent's security interest and Purchaser Agent (a) has received an acknowledgment from the third party that it is holding or will hold the Inventory or Equipment for Purchaser Agent's benefit or (b) is in pledge possession of the warehouse receipt, where negotiable, covering such Inventory or Equipment. Store or maintain any Equipment or Inventory at a location other than the location set forth in Section 10 of this Agreement.

7.11 Compliance with Laws.

(a) Become an "investment company" or be controlled by an "investment company," within the meaning of the Investment Company Act of 1940, or become principally engaged in, or undertake as one of its important activities, the business of extending credit for the purpose of purchasing or carrying Margin Stock, or use the proceeds of any Notes for such purpose. Fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, fail to comply with the Federal Fair Labor Standards Act or violate any law or regulation, which violation could have a Material Adverse Effect, or a material adverse effect on the Collateral or the priority of Purchaser Agents' Lien on the Collateral, or permit any of its Subsidiaries to do any of the foregoing.

(b) Use, or permit any of their Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement to use, any proceeds of the Notes for the purposes of financing the activities of any Sanctioned Person, or permit any Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Sanctioned Person or any other Person that is debarred, excluded, suspended or otherwise limited from participation in U.S. state or federal health care program or any federal health care program. Issuer and each of its Subsidiaries shall immediately notify Purchaser Agent if Issuer or such Subsidiary has knowledge that Issuer, or any Subsidiary or Affiliate of Issuer, is a Sanctioned Person or (a) is convicted on, (b) pleads *nobo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering. Neither Issuer nor any of its Subsidiaries shall, nor shall Issuer or any of its Subsidiaries, permit any Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Sanctioned Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Sanctioned Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked or sanctioned pursuant to any Sanctions (including Executive Order No. 13224 or any similar executive order), other Anti-Terrorism Law or other Anti-Corruption Laws, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in any Sanctions (including Executive Order No. 13224 or any similar executive order), other Anti-Terrorism Law or other Anti-Corruption Laws.

7.12 Subsidiary Assets. Permit (i) the aggregate value of cash, Cash Equivalents and other assets held by Subsidiaries which are not Obligor to exceed (X) prior to the Milestone, \$1,000,000 and (Y) from and after the Milestone, \$2,500,000 (or the equivalent in other currencies) at any time and (ii) Subsidiaries which are not an Obligor to own or hold any Intellectual Property at any time.

8. EVENTS OF DEFAULT.

Any one or more of the following events shall constitute an "Event of Default" under this Agreement:

8.1 Payment Default. If Issuer fails to pay, when due, any of the Obligations;

8.2 Covenant Default.

(a) If Issuer or any of its Subsidiaries fails to perform any obligation under Section 3.6, Article 6 (other than Sections 6.1 (other than with respect to maintenance of existence), 6.4 or 6.11) or violates any of the covenants contained in Article 7 of this Agreement; or

(b) If Issuer or any of its Subsidiaries fails or neglects to perform or observe any other material term, provision, condition, covenant contained in this Agreement, in any of the Note Documents, and as to any default under such other term, provision, condition or covenant that can be cured, has failed to cure such default within ten (10) days after Issuer or such Subsidiary receives notice thereof or any officer of Issuer or such Subsidiary becomes aware thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Issuer or such Subsidiary be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Issuer or such Subsidiary, as applicable, shall have an additional reasonable period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to have cured such default shall not be deemed an Event of Default but Purchasers will not be obligated to purchase any Notes.

8.3 Material Adverse Effect. If there occurs any circumstance or circumstances that could reasonably likely have a Material Adverse Effect;

8.4 Attachment. If any portion of any Obligor's assets is attached, seized, subjected to a writ or distress warrant, or is levied upon, or comes into the possession of any trustee, receiver or person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within ten (10) days, or if any Obligor is enjoined, restrained, or in any way prevented by court order from continuing to conduct all or any material part of its business affairs, or if a judgment or other claim becomes a lien or encumbrance upon any material portion of such Obligor's assets, or if a notice of lien, levy, or assessment is filed of record with respect to any of such Obligor's assets by the United States Government, or any department, agency, or instrumentality thereof, or by any state, county, municipal, or governmental agency, and the same is not paid within forty five (45) days after such Obligor receives notice thereof, provided that none of the foregoing shall constitute an Event of Default where such action or event is stayed or an adequate bond has been posted pending a good faith contest by such Obligor (provided that the Commitments will be suspended during such cure period);

8.5 Insolvency. If any Obligor becomes insolvent, or if an Insolvency Proceeding is commenced by any Obligor, or if an Insolvency Proceeding is commenced against any Obligor and is not dismissed or stayed within forty five (45) days (provided that the Commitments will be suspended until such Insolvency Proceeding is dismissed);

8.6 Other Agreements. If there is a default or other failure to perform in any agreement to which Issuer or any Guarantor is a party or by which it is bound resulting in a right by a third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of (X) prior to the Milestone, \$2,500,000 and (Y) from and after the Milestone, \$5,000,000, or which could reasonably be expected to have a Material Adverse Effect;

8.7 Judgments. If a judgment or judgments for the payment of money in an amount, individually or in the aggregate, of at least (X) prior to the Milestone, \$2,500,000 and (Y) from and after the Milestone, \$5,000,000 (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Issuer or any Subsidiary and shall remain unsatisfied and unstayed for a period of forty five (45) days (provided that the Commitments will be suspended until such judgment is satisfied or stayed); or

8.8 Misrepresentations. If any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth herein or in any certificate delivered to Purchaser Agent or any Purchaser by any Responsible Officer of an Obligor or any Subsidiary pursuant to this Agreement or to induce Purchaser Agent or any Purchaser to enter into this Agreement or any other Note Document, as determined when made.

8.9 Subordinated Debt. Any document, instrument, or agreement evidencing the subordination of any Subordinated Debt shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect, any Person (other than Purchaser Agent) shall be in breach thereof or contest in any manner the validity or enforceability thereof or deny that it has any further liability or obligation thereunder, or the Obligations shall for any reason be subordinated or shall not have the priority contemplated by this Agreement or any applicable subordination or intercreditor agreement;

8.10 Governmental Approvals; FDA Action. (a) Any Governmental Approval shall have been revoked, rescinded, suspended, modified in an adverse manner, or not renewed in the ordinary course for a full term and such revocation, rescission, suspension, modification or non-renewal has resulted in or could reasonably be expected to result in a Material Adverse Effect; or (b) (i) the FDA, DOJ or other Governmental Authority initiates a Regulatory Action or any other enforcement action against Issuer or any of its Subsidiaries or any supplier of Issuer or any of its Subsidiaries that causes Issuer or any of its Subsidiaries to recall, withdraw, remove or discontinue manufacturing, distributing, and/or marketing any of its products or services, which recall, withdraw, removal, or discontinuation has resulted in or could reasonably be expected to result in a Material Adverse Effect, even if such Regulatory Action or other action is based on previously disclosed conduct; (ii) the FDA issues a warning letter or similar notice to Issuer or any of its Subsidiaries with respect to any of its activities or products which could reasonably be expected to result in a Material Adverse Effect; (iii) Issuer or any of its Subsidiaries conducts a mandatory or voluntary recall which could reasonably be expected to result in a Material Adverse Effect; (iv) Issuer or any of its Subsidiaries enters into a settlement agreement with the FDA, DOJ or other Governmental Authority that results in aggregate liability as to any single or related series of transactions, incidents or conditions that could reasonably be expected to result in a Material Adverse Effect, even if such settlement agreement is based on previously disclosed conduct; or (v) the FDA revokes any authorization or permission or certification granted under any Registration, or Issuer or any of its Subsidiaries withdraws any Registration, that could reasonably be expected to result in a Material Adverse Effect.

8.11 Guaranty. (a) Any Guaranty terminates or ceases for any reason to be in full force and effect (other than a release thereof in accordance with the Note Documents); or (b) the liquidation, winding up, or termination of existence of any Guarantor (except as expressly permitted by Section 7.3).

For the avoidance of doubt, a Default or Event of Default shall be deemed to exist at all times during the period commencing on the date that such Default or Event of Default occurs to the date on which such Default or Event of Default is waived in writing pursuant to this Agreement or, in the case of a Default, is cured within any period of cure expressly set forth in this Article 8; and an Event of Default shall “continue” or be “continuing” until such Event of Default has been waived in writing by the Required Purchasers.

9. RIGHTS AND REMEDIES.

9.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Purchaser Agent and the Purchasers may, at their election (and at the request of the Required Purchasers, Purchaser Agent shall), without notice of its election and without demand, do any one or more of the following, all of which are authorized by the Obligors:

(a) Deliver notice of the Event of Default to Issuer;

(b) Declare the Repayment Amount and all other Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs the Repayment Amount and all other Obligations shall be immediately due and payable without any action by Purchaser Agent or the Purchasers);

(c) Suspend or terminate the Commitments (but if an Event of Default described in Section 8.5 occurs all Commitments shall be immediately terminated without any action by Purchaser Agent or the Purchasers);

(d) Settle or adjust disputes and claims directly with account debtors for amounts, upon terms and in whatever order that the Secured Parties reasonably consider advisable;

(e) Make such payments and do such acts as Purchaser Agent consider necessary or reasonable to protect its security interest in the Collateral. Each Obligor agrees to assemble the Collateral if Purchaser Agent so requires, and to make the Collateral available to Purchaser Agent as Purchaser Agent may designate. Each Obligor authorizes Purchaser Agent to enter the premises where the Collateral is located, to take and maintain possession of the Collateral, or any part of it, and to pay, purchase, contest, or compromise any encumbrance, charge, or lien which in Purchaser Agent's determination appears to be prior or superior to its security interest and to pay all expenses incurred in connection therewith. With respect to any of the Obligors' owned premises, Obligors hereby grant Purchaser Agent a license to enter into possession of such premises and to occupy the same, without charge, in order to exercise any of Purchaser Agent's rights or remedies provided herein, at law, in equity, or otherwise;

(f) Set off and apply to the Obligations any and all indebtedness at any time owing to or for the credit or the account of any Obligor held by Purchaser Agent or any Purchaser;

(g) Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell (in the manner provided for herein) the Collateral. Purchaser Agent is hereby granted a license or other right, solely pursuant to the provisions of this Section 9.1, to use, without charge, each Obligor's labels, patents, copyrights, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any property of a similar nature, as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Purchaser Agent's exercise of its rights under this Section 9.1, each Obligor's rights under all licenses and all franchise agreements shall inure to Purchaser Agent's benefit;

(h) Dispose of the Collateral by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including any Obligor's premises) as Purchaser Agent determines is commercially reasonable, and apply any proceeds to the Obligations in whatever manner or order Purchaser Agent deems appropriate;

(i) Purchaser Agent and any Purchaser may credit bid and purchase at any public sale; and

(j) Any deficiency that exists after disposition of the Collateral as provided above will be paid immediately by the Obligors.

For the avoidance of doubt the Repayment Amount shall be due and payable at any time the Obligations become due and payable or are otherwise accelerated hereunder for any reason, whether due to acceleration pursuant to the terms of this Agreement (in which case it shall be due immediately, upon the giving of notice to Issuer in accordance with Section 9.1(b), or automatically, in accordance with the parenthetical to Section 9.1(b)), by operation of law or otherwise (including where bankruptcy filings or the exercise of any bankruptcy right or power, whether in any plan of reorganization or otherwise, results or would result in a payment, discharge, modification or other treatment of the Notes or Note Documents that would otherwise evade, avoid, or otherwise disappoint the expectations of the Purchasers in receiving the full benefit of their bargained-for Repayment Amount). The Obligors acknowledge and agree that none of the Repayment Amount shall constitute unmatured interest, whether under Section 502(b) (2) of the United States Bankruptcy Code or otherwise, but instead is reasonably calculated to ensure that the Purchasers receive the benefit of their bargain under the terms of this Agreement. Upon becoming due and payable pursuant to the terms of this Agreement, the Repayment Amount shall be deemed to be principal of the Notes and interest shall accrue thereon from and after the applicable triggering event. In the event the Obligations are reinstated in connection with or following any applicable triggering event (whether pursuant to Section 1124 of the United States Bankruptcy Code or otherwise), it is understood and agreed that the Obligations shall include any Repayment Amount payable in accordance with the Note Documents. The Obligors acknowledge and agree that the Purchasers shall be entitled to recover the full amount of the Repayment Amount in each and every circumstance such amount is due pursuant to or in connection with this Agreement, including in the case of any Insolvency Proceeding affecting Issuer or any of its Subsidiaries, so that the Purchasers shall receive the benefit of their bargain hereunder and otherwise receive full recovery as agreed under every possible circumstance. EACH OBLIGOR HEREBY WAIVES THE PROVISIONS OF ANY PRESENT OR FUTURE STATUTE OR LAW THAT PROHIBITS OR MAY PROHIBIT THE

COLLECTION OF ANY PORTION OF THE FULL REPAYMENT AMOUNT AND ANY DEFENSE TO PAYMENT OF THE FULL REPAYMENT AMOUNT, WHETHER SUCH DEFENSE MAY BE BASED IN PUBLIC POLICY, AMBIGUITY, OR OTHERWISE. The Obligors further acknowledge and agree, and waive any argument to the contrary, that payment of such amounts does not constitute a penalty or an otherwise unenforceable or invalid obligation. Each Obligor acknowledges and agrees that, prior to executing this Agreement, it has had the opportunity to review and negotiate the Repayment Amount with its advisors, and that (i) the Repayment Amount is reasonable and is the product of an arm's-length transaction between sophisticated business people, ably represented by counsel, (ii) the Repayment Amount shall be payable notwithstanding the then prevailing market rates at the time payment is made, (iii) each Obligor shall be estopped hereafter from claiming differently than as agreed to in this Section 9.1, (iv) the Issuer's agreement to pay the Repayment Amount is a material inducement to the Purchaser's agreement to purchase the Notes, and (v) the Repayment Amount represents a good faith, reasonable estimate and calculation of the lost profits, losses or other damages of the Purchasers and that it would be impractical and extremely difficult to ascertain the actual amount of damages to the Purchasers or profits lost by the Purchasers as a result of such an applicable triggering event. Any damages that the Purchasers may suffer or incur resulting from or arising in connection with any breach hereof or thereof by any Obligor shall constitute Obligations owing to the Purchasers.

9.2 Power of Attorney. Effective only upon the occurrence and during the continuance of an Event of Default, each Obligor hereby irrevocably appoints Purchaser Agent (and any of Purchaser Agent's designated officers, or employees) as such Obligor's true and lawful attorney to: (a) send requests for verification of Accounts or notify account debtors of the Secured Parties' security interest in the Accounts; (b) endorse such Obligor's name on any checks or other forms of payment or security that may come into Purchaser Agent's possession; (c) sign such Obligor's name on any invoice or bill of lading relating to any Account, drafts against account debtors, schedules and assignments of Accounts, verifications of Accounts, and notices to account debtors; (d) dispose of any Collateral; (e) make, settle, and adjust all claims under and decisions with respect to the Obligors' policies of insurance; (f) settle and adjust disputes and claims respecting the accounts directly with account debtors, for amounts and upon terms which Purchaser Agent determines to be reasonable; and (g) to file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Collateral. The appointment of Purchaser Agent as each Obligor's attorney in fact, and each and every one of Purchaser Agent's rights and powers, being coupled with an interest, is irrevocable until, and shall be automatically revoked when, all of the Obligations have been fully repaid and performed and the commitments are terminated.

9.3 Accounts Collection. At any time after the occurrence and during the continuance of an Event of Default, Purchaser Agent may notify any Person owing funds to any Obligor of the Secured Parties' security interest in such funds and verify the amount of such Account. Each Obligor shall collect all amounts owing to such Obligor for the Secured Parties, receive in trust all payments as Purchaser Agent's trustee, and immediately deliver such payments to Purchaser Agent, for the benefit of the Secured Parties, in their original form as received from the account debtor, with proper endorsements for deposit.

9.4 Protective Payments. If any Obligor fails to pay any amounts or furnish any required proof of payment due to third persons or entities, as required under the terms of this Agreement, then Purchaser Agent, on behalf of the Secured Parties, may do any or all of the following after reasonable notice to Issuer: (a) make payment of the same or any part thereof; (b) [reserved]; or (c) obtain and maintain insurance policies of the type discussed in Section 6.6 of this Agreement, and take any action with respect to such policies as Purchaser Agent deems prudent. Any amounts so paid or deposited by Purchaser Agent shall constitute Reimbursable Expenses, shall be immediately due and payable, and shall bear interest at the Applicable Rate (or, subject to Section 2.3(c), the Default Rate), and shall be secured by the Collateral. Any payments made by Purchaser Agent shall not constitute an agreement by Purchaser Agent, any Purchaser or any of their respective Affiliates to make similar payments in the future or a waiver by the Purchasers of any Event of Default under this Agreement.

9.5 Liability for Collateral. Absent gross negligence or willful misconduct, neither Purchaser Agent, any Purchaser nor any of their respective Affiliates shall in any way or manner be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage thereto occurring or arising in any manner or fashion from any cause; (c) any diminution in the value thereof; or (d) any act or default of any carrier, warehouseman, bailee, forwarding agency, or other person whomsoever. All risk of loss, damage or destruction of the Collateral shall be borne by the Obligors.

9.6 Remedies Cumulative. Secured Parties' rights and remedies under this Agreement, the Note Documents, and all other agreements shall be cumulative. The Secured Parties shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No exercise by Purchaser Agent or any Purchaser of one right or remedy shall be deemed an election, and no waiver by Purchaser Agent and the Purchasers of any Event of Default on the part of Issuer or any Subsidiary shall be deemed a continuing waiver. No delay by Purchaser Agent and the Purchasers shall constitute a waiver, election, or acquiescence by them. No waiver by Purchaser Agent and the Purchasers shall be effective unless made in a written document signed on behalf of Purchaser Agent and the Required Purchasers and then shall be effective only in the specific instance and for the specific purpose for which it was given.

9.7 Demand; Protest. Each Obligor waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees at any time held by Purchaser Agent or a Purchaser on which such Obligor may in any way be liable.

9.8 Licenses Related to Products. For the purpose of enabling Purchaser Agent and Purchasers to exercise rights and remedies under this Article 9 and the other Note Documents (including in order to take possession of, collect, receive, assemble, process, appropriate, remove, realize upon, sell, assign, license out, convey, transfer or grant options to purchase any Collateral), each Obligor hereby grants to Purchaser Agent an irrevocable, nonexclusive, assignable license (which license may be exercised only upon the occurrence and during the continuance of an Event of Default and for the purposes of, or in connection with, the exercise of remedies under this Article 9 and the other Note Documents), without payment of royalty, return on net sales, revenue share or other compensation to Issuer or any of its Subsidiaries or Affiliates, including the right to practice, use, sublicense or otherwise exploit, solely in connection with all of such Person's products or services or other items in the Collateral, any Intellectual Property owned or controlled by such Person, wherever the same may be located, and including in such license reasonable access to all media in which any of the licensed items may be recorded or stored and to all computer software and programs used for the compilation or printout thereof to the extent that such non-exclusive license is not prohibited by any applicable law. Any license, sublicense or other transaction entered into by Purchaser Agent in accordance with the provisions of this Section 9.8 will be binding upon any applicable Obligor, notwithstanding any subsequent cure of an Event of Default.

9.9 Application of Payments and Proceeds. Notwithstanding anything to the contrary contained in this Agreement, upon the occurrence and during the continuance of an Event of Default, (a) each Obligor irrevocably waives the right to direct the application of any and all payments at any time or times thereafter received by Purchaser Agent from or on behalf of any Obligor or any of its Subsidiaries of all or any part of the Obligations, and, as between the Obligors on the one hand and Purchaser Agent and Purchasers on the other, Purchaser Agent shall have the continuing and exclusive right to apply and to reapply any and all payments received against the Obligations in such manner as Purchaser Agent may deem advisable notwithstanding any previous application by Purchaser Agent, and (b) the proceeds of any sale of, or other realization upon all or any part of the Collateral shall be applied: first, to the Reimbursable Expenses; second, to accrued and unpaid interest on the Obligations (including any interest which, but for the provisions of the United States Bankruptcy Code, would have accrued on such amounts); third, to the principal amount of the Obligations outstanding; and fourth, to any other indebtedness or obligations of the Obligors owing to Purchaser Agent or any Purchaser under the Note Documents. Any balance remaining shall be delivered to applicable Obligor or to whoever may be lawfully entitled to receive such balance or as a court of competent jurisdiction may direct. In carrying out the foregoing, (x) amounts received shall be applied in the numerical order provided until exhausted prior to the application to the next succeeding category, and (y) each of the Persons entitled to receive a payment in any particular category shall receive an amount equal to its Pro Rata Share of amounts available to be applied

pursuant thereto for such category. Any reference in this Agreement to an allocation between or sharing by the Purchasers of any right, interest or obligation "ratably," "proportionally" or in similar terms shall refer to Pro Rata Share unless expressly provided otherwise. Purchaser Agent, or if applicable, each Purchaser, shall promptly remit to the other Purchasers such sums as may be necessary to ensure the ratable repayment of each Purchaser's portion of any Note and the ratable distribution of interest, fees and reimbursements paid or made by any Obligor. Notwithstanding the foregoing, a Purchaser receiving a scheduled payment shall not be responsible for determining whether the other Purchasers also received their scheduled payment on such date; provided that, if it is later determined that a Purchaser received more than its ratable share of scheduled payments made on any date or dates, then such Purchaser shall remit to Purchaser Agent or other Purchasers such sums as may be necessary to ensure the ratable payment of such scheduled payments, as instructed by Purchaser Agent. If any payment or distribution of any kind or character, whether in cash, properties or securities, shall be received by a Purchaser in excess of its ratable share, then the portion of such payment or distribution in excess of such Purchaser's ratable share shall be received by such Purchaser in trust for and shall be promptly paid over to the other Purchaser for application to the payments of amounts due on the other Purchasers' claims. To the extent any payment for the account of an Obligor is required to be returned as a voidable transfer or otherwise, the Purchasers shall contribute to one another as is necessary to ensure that such return of payment is on a pro rata basis. If any Purchaser shall obtain possession of any Collateral, it shall hold such Collateral for itself and as agent and bailee for Purchaser Agent and other Purchasers for purposes of perfecting Purchaser Agent's security interest therein.

10. NOTICES.

All notices, consents, requests, approvals, demands, or other communication (collectively, "Communication") by any party to this Agreement or any other Note Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by email transmission as evidenced by a transmission confirmation sheet or server delivery confirmation notice, as applicable; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, or email address indicated below. Any of Purchaser Agent, the Purchasers or Issuer may change its mailing address or electronic mail address by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to any Obligor:

BillionToOne, Inc.
1035 O'Brien Dr.
Menlo Park, CA 94025
Attn: Tom Lynch, General Counsel & Chief Compliance Officer
Telephone: [***]
E-mail: [***]

with a copy (which shall not constitute notice) to:

Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP
201 South Main Street
Suite 400
Ann Arbor, MI 48104
Attn: Nicholas B. Harley
Telephone: [***]
E-mail: [***]

If to Purchaser Agent:

BWCB SA LLC
c/o Oberland Capital Management LLC
1700 Broadway, 37th Floor
New York, NY 10019
Attn: Kristian Wiggert
Telephone: [***]
E-mail: [***]

with a copy (which shall not constitute notice) to:

Cooley LLP
3 Embarcadero Center, 20th Floor
San Francisco, CA 94111
Attention: Gian-Michele a Marca
Fax:
Email:

If to any Purchaser

As specified on the applicable signature page hereto.

Each party hereto irrevocably consents to service of process in any action or proceeding arising out of or relating to any Note Document, in the manner provided for notices in this Article 10. Nothing in this Agreement or any other Note Document will affect the right of any party hereto to serve process in any other manner permitted by applicable laws. Each Obligor that is not an entity organized under the laws of the United States or any territory thereof hereby irrevocably appoints Issuer as its agent for service of process with respect to all of the Note Documents and all other related agreements to which it is a party (the “**Process Agent**”) and Issuer hereby accepts such appointment as the Process Agent and hereby agrees to forward promptly to such foreign Obligor, as applicable, all legal process addressed to such foreign Obligor, as applicable, received by the Process Agent.

11. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER.

This Agreement and the other Note Documents and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement or any other Note Document (except as may be expressly otherwise provided in any Note Document) shall be governed by, and construed in accordance with, the law of the State of New York (including Sections 5-1401 and 5-1402 of the New York General Obligations Law, but excluding all other choice of law and conflicts of law rules).

Each Obligor, Purchaser Agent and each Purchaser each submit to the exclusive jurisdiction of the courts of the State of New York sitting in the City and County of New York and of the United States District Court of the Southern District of New York and any appellate court thereof and agrees that all claims in respect of any such action, litigation or proceeding shall be heard and determined in such state court or, to the fullest extent permitted by applicable law, in such federal court; provided that the foregoing shall not preclude Purchaser Agent from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral. Each of the parties hereto agrees that a final judgment in any such action, litigation or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER NOTE DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER NOTE DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS ARTICLE 11.

12. GUARANTY.

12.1 The Guaranty. Each Guarantor hereby jointly and severally with each other Guarantor guarantees to Purchaser Agent and the Purchasers, and their successors and assigns, (i) the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of the principal of and interest on the Notes, all fees and other amounts and Obligations from time to time owing to Purchaser Agent and the Purchasers by Issuer and each other Obligor under the Notes, this Agreement or any other Note Document and (ii) the full and prompt performance and observance by Issuer and the other Guarantors of each and all of the covenants, liabilities, obligations and agreements required to be performed or observed by such Obligor under the Notes,

this Agreement or any other Note Document, in each case strictly in accordance with the terms hereof and thereof (such obligations being herein collectively called the “**Guaranteed Obligations**”). Each Guarantor hereby further jointly and severally with each other Guarantor agrees that if Issuer or any other Obligor shall fail to pay in full when due (whether at stated maturity, by acceleration or otherwise) any of the Guaranteed Obligations, such Guarantor will promptly pay the same, without any demand or notice whatsoever, and that in the case of any extension of time of payment or renewal of any of the Guaranteed Obligations, the same will be promptly paid in full when due (whether at extended maturity, by acceleration or otherwise) in accordance with the terms of such extension or renewal.

12.2 Obligations Unconditional. The Guaranteed Obligations are absolute and unconditional, joint and several, independent and irrespective of the value, genuineness, validity, regularity or enforceability of the obligations of Issuer under the Notes, this Agreement or any other agreement or instrument referred to herein, or any substitution, release or exchange of any other guarantee of or security for any of the Guaranteed Obligations, and, to the fullest extent permitted by law, irrespective of any other circumstance whatsoever that might otherwise constitute a legal or equitable discharge or defense of a surety or guarantor, it being the intent of this Section 12.2 that the obligations of the Guarantors hereunder shall be absolute and unconditional, joint and several, under any and all circumstances. Without limiting the generality of the foregoing, it is agreed that the occurrence of any one or more of the following shall not alter or impair the liability of the Guarantors hereunder, which shall remain absolute and unconditional as described above:

(a) at any time or from time to time, without notice to the Guarantors, the manner, place, time for any payment, performance of or compliance with any of the Guaranteed Obligations shall be extended, amended, modified or waived;

(b) any of the acts mentioned in any of the provisions of this Agreement or any other agreement or instrument referred to herein shall be done or omitted or any failure, lack of diligence, omission or delay on the part of Purchaser Agent or any Purchaser to enforce, assert or exercise any right, power or remedy conferred on it thereunder;

(c) the maturity of any of the Guaranteed Obligations shall be accelerated, or any of the Guaranteed Obligations shall be modified, supplemented or amended in any respect, or any right under this Agreement or any other agreement or instrument referred to herein shall be waived or any other guarantee of any of the Guaranteed Obligations or any security therefor shall be released or exchanged in whole or in part or otherwise dealt with; or

(d) any Lien or security interest granted to, or in favor of, Purchaser Agent as security for any of the Guaranteed Obligations shall fail to be perfected or any manner of sale, disposition or application of proceeds of any collateral or other assets to all or part of the Guaranteed Obligations;

(e) any voluntary or involuntary bankruptcy, insolvency, reorganization, arrangement, readjustment, assignment for the benefit of creditors, composition, receivership, examinership, liquidation, marshalling of assets and liabilities or similar events or proceedings with respect to any Obligor or any other guarantor of the Guaranteed Obligations, as applicable, or any of their respective property or creditors, or any action taken by any trustee or receiver or by any court in any such proceeding;

(f) any merger or consolidation of any Obligor into or with any entity, or any sale, lease or transfer of any of the assets of any Obligor or any other guarantor of the Guaranteed Obligations to any other person or entity;

(g) any change in the ownership of any Obligor or any change in the relationship between any Obligor or any other guarantor of the Guaranteed Obligations, or any termination of any such relationship;

(h) the existence of any claim, set-off or other right which any Guarantor may have at any time against any Obligor, Purchaser Agent, any Purchaser or any other Person;

- (i) any failure by Purchaser Agent or any Purchaser to disclose to the Guarantors any information relating to the business, condition (financial or otherwise), operations, performance, properties or prospects of any Obligor now or hereafter known to Purchaser Agent or any Purchaser;
- (j) any obligations or liabilities the Obligors or any other guarantor of the Guaranteed Obligations owed to any Guarantor;
- (k) the acceptance or the availability of any other security, collateral or guarantee, or other assurance of payment, for all or any part of the Guaranteed Obligations;
- (l) any default, act or omission to act or delay of any kind (willful or otherwise) by any Obligor, Purchaser Agent, any Purchaser or any other Person or any other circumstance whatsoever which might, but for the provisions of this clause, constitute a legal or equitable discharge of the Guarantors' obligations hereunder (except that the Guarantors may assert the defense of payment in full of the Guaranteed Obligations); or
- (m) any notice of any sale, transfer or other disposition of any right, title or interest of Purchaser Agent or any Purchasers under the Notes, this Agreement or any other Note Document.

The Guarantors hereby expressly waive diligence, presentment, demand of payment, notice of acceptance, notice of non-performance, nonpayment, default, acceleration, dishonor, protest and any other notices whatsoever, which may be required by statute, rule of law or otherwise, now or hereafter in effect, to preserve any rights against the Guarantors with respect to or under the Notes, this Agreement or any other Note Document or any failure on the part of any Obligor, Guarantors or any other guarantor of the Guaranteed Obligations to perform or comply with any covenant, agreement, term or condition of the Notes, this Agreement or any other Note Document. The Guarantors further expressly waive any requirement that Purchaser Agent or any Purchaser exhaust any right, power or remedy or proceed against Issuer under this Agreement or any other agreement or instrument referred to herein, or against any other Person under any other guarantee of, or against or exhaust any security or collateral for, any of the Guaranteed Obligations.

12.3 Reinstatement. The obligations of the Guarantors under this Article 12 shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of Issuer in respect of the Guaranteed Obligations is rescinded or must be otherwise restored by any holder of any of the Guaranteed Obligations, whether as a result of any proceedings in bankruptcy or reorganization or otherwise, and the Guarantors jointly and severally agree that they will indemnify Purchaser Agent and the Purchasers on demand for all reasonable costs and expenses (including fees of counsel) incurred by such Persons in connection with such rescission or restoration, including any such costs and expenses incurred in defending against any claim alleging that such payment constituted a preference, fraudulent transfer or similar payment under any bankruptcy, insolvency or similar law.

12.4 Subrogation. The Guarantors hereby jointly and severally agree that, until Payment in Full, they shall not exercise any right or remedy arising by reason of any performance by them of their guarantee in Section 12.1, whether by subrogation or otherwise, against Issuer or any other guarantor of any of the Guaranteed Obligations or any security for any of the Guaranteed Obligations.

12.5 Remedies. The Guarantors jointly and severally agree that, as between the Guarantors, on one hand, and Purchaser Agent and the Purchasers, on the other hand, the obligations of Issuer under the Notes, this Agreement and under the other Note Documents may be declared to be forthwith due and payable as provided in Section 9.1 (and shall be deemed to have become automatically due and payable in the circumstances provided in Section 9.1) for purposes of Section 12.1 notwithstanding any stay, injunction or other prohibition preventing such declaration (or such obligations from becoming automatically due and payable) as against Issuer and that, in the event of such declaration (or such obligations being deemed to have become automatically due and payable), such obligations (whether or not due and payable by Issuer) shall forthwith become due and payable by the Guarantors for purposes of Section 12.1.

12.6 Instrument for the Payment of Money. Each Guarantor hereby acknowledges that the guarantee in this Article 12 constitutes an instrument for the payment of money, and consents and agrees that Purchaser Agent and the Purchasers, at their sole option, in the event of a dispute by such Guarantor in the payment of any moneys due hereunder, shall have the right to proceed by motion for summary judgment in lieu of complaint pursuant to N.Y. Civ. Prac. L&R § 3213.

12.7 Continuing Guarantee. The guarantee in this Article 12 is a continuing guarantee, and shall apply to all Guaranteed Obligations whenever arising.

12.8 Rights of Contribution. The Guarantors hereby agree, as between themselves, that if any Guarantor shall become an Excess Funding Guarantor (as defined below) by reason of the payment by such Guarantor of any Guaranteed Obligations, each other Guarantor shall, on demand of such Excess Funding Guarantor (but subject to the next sentence), pay to such Excess Funding Guarantor an amount equal to such Guarantor's Fair Share (as defined below and determined, for this purpose, without reference to the properties, debts and liabilities of such Excess Funding Guarantor) of the Excess Payment (as defined below) in respect of such Guaranteed Obligations. The payment obligation of a Guarantor to any Excess Funding Guarantor under this Section 12.8 shall be subordinate and subject in right of payment to the prior payment in full of the obligations of such Guarantor under the other provisions of this Article 12 and such Excess Funding Guarantor shall not exercise any right or remedy with respect to such excess until payment and satisfaction in full of all of such obligations. For purposes of this Section 12.8, (i) "**Excess Funding Guarantor**" means, in respect of any Guaranteed Obligations, a Guarantor that has paid an amount in excess of its Fair Share of such Guaranteed Obligations, (ii) "**Excess Payment**" means, in respect of any Guaranteed Obligations, the amount paid by an Excess Funding Guarantor in excess of its Fair Share of such Guaranteed Obligations and (iii) "**Fair Share**" means, for any Guarantor, the ratio (expressed as a percentage) of (x) the amount by which the aggregate present fair saleable value of all properties of such Guarantor (excluding any shares of stock of any other Guarantor) exceeds the amount of all the debts and liabilities of such Guarantor (including contingent, subordinated, unmatured and unliquidated liabilities, but excluding the obligations of such Guarantor hereunder and any obligations of any other Guarantor that have been guaranteed by such Guarantor) to (y) the amount by which the aggregate fair saleable value of all properties of all of the Guarantors exceeds the amount of all the debts and liabilities (including contingent, subordinated, unmatured and unliquidated liabilities, but excluding the obligations of Issuer and the Guarantors hereunder and under the other Note Documents) of all of the Guarantors, determined (A) with respect to any Guarantor that is a party hereto on the Effective Date, as of the Effective Date, and (B) with respect to any other Guarantor, as of the date such Guarantor becomes a Guarantor hereunder.

12.9 General Limitation on Guarantee Obligations. In any action or proceeding involving any provincial, territorial or state corporate law, or any state or federal bankruptcy, insolvency, reorganization or other law affecting the rights of creditors generally, if the obligations of any Guarantor under Section 12.1 would otherwise, taking into account the provisions of Section 12.8, be held or determined to be void, invalid or unenforceable, or subordinated to the claims of any other creditors, on account of the amount of its liability under Section 12.1, then, notwithstanding any other provision hereof to the contrary, the amount of such liability shall, without any further action by such Guarantor, Purchaser Agent, any Purchaser or any other Person, be automatically limited and reduced to the highest amount that is valid and enforceable and not subordinated to the claims of other creditors as determined in such action or proceeding.

13. GENERAL PROVISIONS.

13.1 Successors and Assigns.

(a) This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Issuer may not transfer, pledge or assign this Agreement or any rights or obligations under it without Purchaser Agent's and each Purchaser's prior written consent (which may be granted or withheld in Purchaser Agent's and each Purchaser's sole discretion, subject to Section 13.6). The Purchasers have the right, without the consent of or notice to Issuer, to sell, transfer, assign, pledge, negotiate, or grant participation in (any such sale, transfer, assignment, negotiation or grant of a participation, a "**Purchaser Transfer**") all or any part of, or any interest in, the

Notes and the Purchasers' obligations, rights, and benefits under this Agreement and the other Note Documents; provided that any such Purchaser Transfer (other than a transfer, pledge, sale or assignment to an Eligible Assignee) of its obligations, rights, and benefits under this Agreement and the other Note Documents shall require the prior written consent of the Required Purchasers (such approved assignee, an "**Approved Purchaser**"). Issuer and Purchaser Agent shall be entitled to continue to deal solely and directly with such Purchaser in connection with the interests so assigned until Purchaser Agent shall have received and accepted an effective assignment or transfer agreement in form satisfactory to Purchaser Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee or Approved Purchaser as Purchaser Agent reasonably shall require. Notwithstanding anything to the contrary contained herein, so long as no Default or Event of Default has occurred and is continuing, no Purchaser Transfer (other than a Purchaser Transfer in connection with (x) assignments by a Purchaser due to a forced divestiture at the request of any regulatory agency; or (y) upon the occurrence of a default, event of default or similar occurrence with respect to a Purchaser's own financing or securitization transactions) shall be permitted, without Issuer's consent, to any Person (i) that is not an Eligible Assignee (except for the grant of any participation, which, for the avoidance of doubt, may be made to any Person) or (ii) which has been identified in writing by Issuer to Purchaser Agent as an Affiliate or Subsidiary of Issuer or a direct competitor of Issuer.

(b) Purchaser Agent, acting solely for this purpose as a non-fiduciary agent of Issuer, shall maintain at its office referred to in Article 10 a copy of each assignment and assumption delivered to it and a register for the recordation of the names and addresses of the Purchasers, and the commitments of, and principal amounts (and stated interest) of the Obligations owing to, each Purchaser pursuant to the terms hereof from time to time (the "**Register**"). The entries in the Register shall be conclusive absent manifest error, and Issuer, Purchaser Agent and each Purchaser shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Purchaser hereunder for all purposes of the Note Documents. The Register shall be available for inspection by Issuer and each Purchaser, at any reasonable time and from time to time upon reasonable prior notice. For the avoidance of doubt, (i) each Note issued pursuant to this Agreement is a registered obligation, (ii) the right, title and interest of each Purchaser and its assignees in and to such Notes shall be transferable only upon notation of such transfer in the Register and (iii) no assignment thereof or participation therein shall be effective until recorded therein. This Section 13.1(b) shall be construed so that each Note is at all times maintained in "registered form" within the meaning of Sections 163(f), 871(h)(2) and 881(c)(2) of the IRC and Section 5f.103-1(c) of the United States Treasury Regulations.

13.2 Indemnification. Each Obligor agrees to indemnify, defend and hold Purchaser Agent and the Purchasers and their respective directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Purchaser Agent or the Purchasers (each, an "**Indemnified Person**") harmless against: (a) all obligations, demands, claims, and liabilities (collectively, "**Claims**") asserted by any other party (including Issuer or any of its Subsidiaries) in connection with, related to, following, or arising from, out of or under, (i) the transactions contemplated by the Note Documents, (ii) any Notes or the use or proposed use of the proceeds therefrom or (iii) any actual or alleged presence or release of hazardous materials on or from any property owned or operated by any Obligor or any of its Subsidiaries, or any environmental liability related in any way to any Obligor or any of its Subsidiaries; and (b) all losses or Reimbursable Expenses incurred, or paid by Indemnified Person in connection with, related to, following, or arising from, out of or under, the transactions contemplated by the Note Documents between Purchaser Agent, and/or the Purchasers and Issuer (including reasonable attorneys' fees and expenses), except for Claims and/or losses are determined by a court of competent jurisdiction by final and nonappealable judgment to have directly resulted from such Indemnified Person's gross negligence or willful misconduct. Issuer hereby further indemnifies, defends and holds each Indemnified Person harmless from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, documented out-of-pocket expenses and disbursements of any kind or nature whatsoever (including the documented out-of-pocket fees and disbursements of counsel for such Indemnified Person) in connection with any investigative, response, remedial, administrative or judicial matter or proceeding, whether or not such Indemnified Person shall be designated a party thereto and including any such proceeding initiated by or on behalf of Issuer or any of its Subsidiaries, and the reasonable expenses of investigation by engineers, environmental consultants and similar technical personnel and any commission, fee or compensation claimed by any broker (other than any broker retained by Purchaser Agent or Purchasers) asserting any right to payment for the transactions contemplated hereby which may be imposed on, incurred by or asserted against such

Indemnified Person as a result of or in connection with the transactions contemplated hereby and the use or intended use of the proceeds of the Notes except for liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements directly caused by such Indemnified Person's gross negligence or willful misconduct. For the avoidance of doubt this Section 13.2 shall not apply to Tax matters subject to Article 14. All amounts due under this Section 13.2 shall be payable not later than five (5) Business Days after demand therefor together with an invoice with respect thereto.

13.3 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

13.4 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

13.5 Correction of Note Documents. Purchaser Agent and the Purchasers may correct patent errors and fill in any blanks in this Agreement and the other Note Documents consistent with the agreement of the parties.

13.6 Amendments in Writing; Integration. (a) No amendment, modification, termination or waiver of any provision of this Agreement or any other Note Document, no approval or consent thereunder, or any consent to any departure by Issuer or any of its Subsidiaries therefrom, shall in any event be effective unless the same shall be in writing and signed by Issuer, Purchaser Agent and the Required Purchasers provided that:

(i) no such amendment, waiver or other modification that would have the effect of increasing or reducing a Purchaser's Commitment or Commitment Percentage shall be effective as to such Purchaser without such Purchaser's written consent;

(ii) no such amendment, waiver or modification that would affect the rights and duties of Purchaser Agent shall be effective without Purchaser Agent's written consent or signature; and

(iii) no such amendment, waiver or other modification shall, unless signed by all the Purchasers directly affected thereby, (A) reduce the principal of, rate of interest on or any fees with respect to any Note or forgive any principal, interest (other than default interest) or fees (other than late charges) with respect to any Note; (B) postpone the date fixed for, or waive, any payment of principal of any Note or of interest on any Note (other than default interest) or any fees provided for hereunder (other than late charges or for any termination of any commitment); (C) reduce the applicable Revenue Participation Payments or Repayment Amount; (D) change the definition of the term "**Required Purchasers**" or the percentage of Purchasers which shall be required for the Purchasers to take any action hereunder; (E) release all or substantially all of the Collateral, authorize the Obligors to sell or otherwise dispose of all or substantially all or any material portion of the Collateral or release any Guarantor of all or any portion of the Obligations or its guaranty obligations with respect thereto, except, in each case with respect to this clause (E), as otherwise may be expressly permitted under this Agreement or the other Note Documents (including in connection with any disposition permitted hereunder); (F) amend, waive or otherwise modify this Section 13.6 or the definitions of the terms used in this Section 13.6 insofar as the definitions affect the substance of this Section 13.6; (G) consent to the assignment, delegation or other transfer by Issuer of any of its rights and obligations under any Note Document or release Issuer of its payment obligations under any Note Document, except, in each case with respect to this clause (G), pursuant to a merger or consolidation permitted pursuant to this Agreement; (H) amend any of the provisions of Section 9.4 or amend any of the definitions of Pro Rata Share, Commitment, Commitment Percentage or that provide for the Purchasers to receive their Pro Rata Shares of any fees, payments, setoffs or proceeds of Collateral hereunder; (I) subordinate the Liens granted in favor of Purchaser Agent securing the Obligations; or (J) amend any of the provisions of Section 13.11.

(b) Other than as expressly provided for in Sections 13.6(a)(i), (ii) and (iii), Purchaser Agent may, if requested by the Required Purchasers, from time to time designate covenants in this Agreement less restrictive by notification to a representative of Issuer.

(c) This Agreement and the Note Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Agreement and the Note Documents merge into this Agreement and the Note Documents.

13.7 Counterparts; Effectiveness; Electronic Signature. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement. This Agreement shall become effective when each party hereto shall have received a counterpart hereof signed by the other parties hereto. Any counterpart may be executed by facsimile or pdf signature and such facsimile or pdf signature shall be deemed an original. The words ‘execution’, ‘signed’, ‘signature’, ‘delivery’ and words of like import in or relating to any document to be signed in connection with this Agreement or any other Note Document and the transactions contemplated hereby shall be deemed to include Electronic Signatures, deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar State laws based on the Uniform Electronic Transactions Act; provided, that nothing herein shall require any Person to accept electronic signatures in any form or format without its prior written consent. Without limiting the generality of the foregoing, the parties hereto hereby (a) agree that, for all purposes, including in connection with any workout, restructuring, enforcement of remedies, bankruptcy proceedings or litigation among the Purchasers and the Obligors, electronic images of this Agreement or any other Note Document (in each case, including with respect to any signature pages thereto) shall have the same legal effect, validity and enforceability as any paper original, and (b) waive any argument, defense or right to contest the validity or enforceability of the Note Documents based solely on the lack of paper original copies of any Note Documents, including with respect to any signature pages thereto.

13.8 Survival. All covenants, representations and warranties made in this Agreement continue in full force and effect until Payment in Full. The obligation of the Obligors in Section 13.2 to indemnify each Purchaser and Purchaser Agent, as well as the confidentiality provisions in Section 13.9 and the obligations under Section 2.5 and under Article 14, shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

13.9 Confidentiality.

(a) In handling any Confidential Information of (i) the Obligors, in the case of the Purchaser Agent and the Purchasers and (ii) the Purchaser Agent and the Purchasers, in the case of the Obligors (in either case, as applicable, the party receiving Confidential Information, the “**Receiving Party**” and, the party disclosing such Confidential Information, the “**Disclosing Party**”) shall, in each case, exercise the same degree of care that they exercise for their own proprietary information (but in no event less than a reasonable standard of care). The Receiving Party agrees to: (x) hold any Confidential Information received in confidence; (y) use or permit the use of the Confidential Information solely in connection with preparing, amending, executing, negotiating, administering, defending and enforcing the Note Documents (the “**Permitted Purpose**”); and (z) except as otherwise permitted herein, not disclose the Confidential Information to any Person not a party to this Agreement.

(b) Subject to the terms and conditions of this Agreement: (i) either Receiving Party may disclose such Confidential Information (A) to its Affiliates and to the Receiving Party’s and its Affiliates’ directors, officers (including managing members or partners), limited partners, employees, accountants, attorneys, financial advisors or consultants (together, “**Representatives**”) who (1) have a need to know the Confidential Information for the Permitted Purpose, (2) are apprised of the confidential nature of the Confidential Information and (3) are under written or professional obligations of confidentiality, non-disclosure and non-use in respect of Confidential Information at least as stringent as those contained herein or (B) as required by law, regulation, subpoena or court order or otherwise in connection with a judicial, administrative or governmental proceeding, provided that, in the event that the Receiving Party is required or requested to make such disclosure, the Receiving Party shall, to the extent legally permissible, notify the Disclosing Party in advance of the disclosure so as to allow the Disclosing Party an opportunity to seek (at the Disclosing Party’s sole expense) a protective order or other appropriate remedy;

provided, further, that such notice and opportunity shall not be required in respect of (x) disclosures required pursuant to the Securities Act, the Exchange Act, or the listing rules of the Nasdaq Capital Market, the Nasdaq Global Select Market, the Nasdaq Global Market or the New York Stock Exchange (or any nationally recognized securities exchange that is a successor to any of the foregoing) on which Issuer's common stock is listed or (y) disclosures to any regulatory or self-regulatory authority as required by applicable law in connection with an examination, audit, inspection, inquiry, request or general supervisory oversight, and (ii) the Purchaser and Purchaser Agent may disclose such Confidential Information (A) so long as any Persons receiving Confidential Information pursuant to this clause (A) are subject to customary confidentiality obligations, in connection with a Purchaser's own financing or securitization transactions and upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction, (B) to prospective transferees (other than those identified in the immediately preceding clause (A)) or purchasers of any interest in the Notes (provided that the Purchasers and Purchaser Agent shall obtain such prospective transferee's or purchaser's agreement to the terms of this provision or to similar confidentiality terms), (C) as Purchaser Agent reasonably considers appropriate in exercising remedies under the Note Documents or (D) to any actual or potential investors, co-investors, members, and partners (including limited partners) of Purchaser Agent or any Purchaser or any of their Affiliates so long as such Persons are subject to customary confidentiality obligations. The Receiving Party shall be responsible for any breaches of this Section by its Representatives. For the avoidance of doubt, any disclosure of Confidential Information in compliance with this clause (b) shall not alter the confidential nature of such Confidential Information, or the confidentiality, non-disclosure and non-use obligations applicable thereto, for all other purposes.

(c) Notwithstanding the foregoing, the prohibitions on disclosure in this Section shall not apply to information that the Receiving Party can demonstrate by competent evidence: (i) was in the public domain prior to disclosure to the Receiving Party by the Disclosing Party, or becomes part of the public domain after such, in each case through no act or failure to act by the Receiving Party or its Representatives; (ii) was in the Receiving Party's rightful possession prior to disclosure to the Receiving Party by the Disclosing Party; or (iii) is disclosed to the Receiving Party by a third party who is known by Receiving Party to be in rightful possession thereof and not prohibited from disclosing the information.

(d) Notwithstanding anything herein to the contrary, (i) the Purchasers and Purchaser Agent may use Confidential Information for the development of client databases, reporting purposes and market analysis, (ii) after the First Purchase Date, Purchaser Agent and any Purchaser may disclose the transaction contemplated by the Note Documents on its or its investment manager's website and in its or its investment manager's marketing materials (which may include use of names and logos of one or more of the Obligors) and (iii) within thirty (30) days of the First Purchase Date, the Obligors shall issue the Press Release. Except as otherwise provided in this [Section 13.9](#), a party may not use the name, likeness or trademarks of the other party or its Representatives for any purpose, including without limitation, to express or imply any relationship or affiliation between the parties, or any endorsement of any product or service, without the other party's prior written consent.

(e) The agreements provided under this Section supersede all prior agreements, understanding, representations, warranties, and negotiations between the parties about the subject matter of this Section. For the avoidance of doubt the parties' obligations with respect to Confidential Information received prior to the Effective Date shall continue to be defined by the terms of any prior agreements with respect thereto, but effective as of the Effective Date, obligations in respect of all Confidential Information will be governed by this [Section 13.9](#).

13.10 [Reserved].

13.11 Right of Set Off. Each Obligor hereby grants to Purchaser Agent and to each Purchaser, a lien, security interest and right of set off as security for all Obligations to Purchaser Agent and each Purchaser hereunder, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Purchaser Agent or the Purchasers or any entity under the control of Purchaser Agent or the Purchasers (including an Affiliate of Purchaser Agent) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Purchaser Agent or the Purchasers may set off the same or any part thereof and apply the same to any liability or obligation of Issuer even though unmaturing and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE PURCHASER AGENT TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF ANY OBLIGOR ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

13.12 Cooperation of the Obligor. If necessary, each Obligor agrees to (i) execute any documents (including new Notes) reasonably required to effectuate and acknowledge each assignment of a Commitment or Note to an assignee in accordance with Section 13.1, (ii) make its management available to meet with Purchaser Agent and prospective participants and assignees of Commitments or Notes (which meetings shall be conducted no more often than twice every twelve months unless an Event of Default has occurred and is continuing), and (iii) assist Purchaser Agent or the Purchasers in the preparation of information relating to the financial affairs of Issuer and its Subsidiaries as any prospective participant or assignee of a Commitment or Note reasonably may request. Subject to the provisions of Section 13.9, each Obligor authorizes each Purchaser to disclose to any prospective participant or assignee of a Commitment, any and all information in such Purchaser's possession concerning Issuer and its Subsidiaries and their financial affairs which has been delivered to such Purchaser by or on behalf of any Obligor pursuant to this Agreement, or which has been delivered to such Purchaser by or on behalf of such Obligor in connection with such Purchaser's credit evaluation of such Obligor prior to entering into this Agreement.

13.13 Representations and Warranties of the Purchasers. Each Purchaser, severally and not jointly, represents and warrants to Issuer as of the date such Person becomes a Purchaser and as of each Purchase Date, that:

(a) Each of the Notes to be received by such Purchaser hereunder will be acquired for such Purchaser's own account, and not with a view to the resale or distribution of any part thereof in violation of the Securities Act, except pursuant to sales registered or exempted under the Securities Act, and such Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the same in violation of the Securities Act without prejudice, however, to such Purchaser's right at all times to sell or otherwise dispose of all or any part of such Notes in compliance with applicable federal and state securities laws.

(b) Such Purchaser can bear the economic risk and complete loss of its investment in the Notes and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment contemplated hereby.

(c) Such Purchaser has had an opportunity to receive, review and understand all information related to Issuer requested by it and to ask questions of and receive answers from Issuer regarding Issuer, its Subsidiaries, its business and the terms and conditions of the offering of the Notes, and has conducted and completed its own independent due diligence.

(d) Based on the information such Purchaser has deemed appropriate, it has independently made its own analysis and decision to enter into the Note Documents.

(e) Such Purchaser understands that the Notes are characterized as "restricted securities" under the U.S. federal securities laws inasmuch as they are being acquired from Issuer in a transaction not involving a public offering and that under such laws and applicable regulations such securities may be resold without registration under the Securities Act only in certain limited circumstances. Such Purchaser understands that no United States federal or state agency, or similar agency of any other country, has reviewed, approved, passed upon, or made any recommendation or endorsement of Issuer or the purchase of the Notes.

(f) Such Purchaser is an "accredited investor" as defined in Regulation D promulgated under the Securities Act.

(g) Such Purchaser did not learn of the investment in the Notes as a result of any general solicitation or general advertising.

13.14 Agency.

(a) Each Purchaser hereby irrevocably appoints Purchaser Agent to act on its behalf as Purchaser Agent hereunder and under the other Note Documents and authorizes Purchaser Agent to take such actions on its behalf, to exercise such powers as are delegated to Purchaser Agent by the terms hereof or thereof and to act as agent of such Purchaser for purposes of acquiring, holding, enforcing and perfecting all Liens granted by the Obligors on the Collateral to secure any of the Obligations, in each case together with such actions and powers as are reasonably incidental thereto.

(b) Each Purchaser agrees to indemnify Purchaser Agent in its capacity as such (to the extent not reimbursed by the Obligors and without limiting the obligation of the Obligors to do so), according to its respective Pro Rata Share (in effect on the date on which indemnification is sought under this Section 13.14), from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time be imposed on, incurred by or asserted against Purchaser Agent in any way relating to or arising out of, the Notes, this Agreement, any of the other Note Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by Purchaser Agent under or in connection with any of the foregoing. The agreements in this Section 13.14 shall survive the payment of the Repayment Amount and all other amounts payable hereunder.

(c) The Person serving as Purchaser Agent hereunder shall have the same rights and powers in its capacity as Purchaser as any other Purchaser and may exercise the same as though it were not Purchaser Agent and the term "Purchaser" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each such Person serving as Purchaser Agent hereunder in its individual capacity.

(d) Purchaser Agent shall have no duties or obligations except those expressly set forth herein and in the other Note Documents. Without limiting the generality of the foregoing, Purchaser Agent shall not:

(i) be subject to any fiduciary or other implied duties, regardless of whether any Default or any Event of Default has occurred and is continuing;

(ii) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Note Documents that Purchaser Agent is required to exercise as directed in writing by any Purchaser; provided that Purchaser Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose Purchaser Agent to liability or that is contrary to any Note Document or applicable law; and

(iii) except as expressly set forth herein and in the other Note Documents, have any duty to disclose, and Purchaser Agent shall not be liable for the failure to disclose, any information relating to Issuer or any of its Affiliates that is communicated to or obtained by any Person serving as Purchaser Agent or any of its Affiliates in any capacity.

(e) Purchaser Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Required Purchasers or as Purchaser Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.

(f) Purchaser Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Note Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Note Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Article 3 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to Purchaser Agent.

(g) Purchaser Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, telecopies and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Purchaser Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Purchaser Agent and conforming to the requirements of this Agreement or any of the other Note Documents. Purchaser Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Purchaser Agent hereunder or under any Note Documents in accordance therewith. Purchaser Agent shall have the right at any time to seek instructions concerning the administration of the Collateral from any court of competent jurisdiction. Purchaser Agent shall not be under any obligation to exercise any of the rights or powers granted to Purchaser Agent by this Agreement and the other Note Documents at the request or direction of the Required Purchasers unless Purchaser Agent shall have been provided by the Purchasers with adequate security and indemnity against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

(h) Purchaser Agent may resign at any time by delivering notice of such resignation to the Purchasers and Issuer, effective on the date set forth in such notice or, if no such date is set forth therein, upon the thirtieth (30th) day following the date such notice is delivered. If Purchaser Agent delivers any such notice, or if Purchaser Agent becomes insolvent or bankrupt, the Required Purchasers shall have the right to appoint a successor Purchaser Agent. If, within thirty (30) days after the retiring Purchaser Agent having given notice of resignation, no successor Purchaser Agent has been appointed by the Required Purchasers that has accepted such appointment, then the retiring Purchaser Agent may, on behalf of the Purchasers, appoint a successor Purchaser Agent from among the Purchasers. Each appointment under this Section 13.14(h) shall be subject to the prior consent of Issuer, which may not be unreasonably withheld, delayed or conditioned but shall not be required during the continuance of an Event of Default. Effective immediately upon its resignation, (i) the retiring Purchaser Agent shall be discharged from its duties and obligations under the Note Documents, (ii) the Purchasers shall assume and perform all of the duties of Purchaser Agent until a successor Purchaser Agent shall have accepted a valid appointment hereunder, (iii) the retiring Purchaser Agent shall no longer have the benefit of any provision of any Note Document other than with respect to any actions taken or omitted to be taken while such retiring Purchaser Agent was, or because such Purchaser Agent had been, validly acting as Purchaser Agent under the Note Documents and (iv) subject to its rights under Section 13.14, the retiring Purchaser Agent shall take such action as may be reasonably necessary to assign to the successor Purchaser Agent its rights as Purchaser Agent under the Note Documents. Effective immediately upon its acceptance of a valid appointment as Purchaser Agent, a successor Purchaser Agent shall succeed to, and become vested with, all the rights, powers, privileges and duties of the retiring Purchaser Agent under the Note Documents.

(i) The Purchasers irrevocably authorize the Purchaser Agent, at its option and in its discretion,

(i) to release any Lien on any Collateral granted to or held by the Purchaser Agent under any Note Document (i) upon Payment in Full, (ii) that is sold or otherwise disposed of or to be sold or otherwise disposed of as part of or in connection with any sale or other Transfer permitted hereunder, or (iii) as approved in accordance with Section 13.6;

(ii) to subordinate or release any Lien on any property granted to or held by the Purchaser Agent under any Note Document to the holder of any Lien on such property that is permitted by clauses (b) and (d) of the definition of "Permitted Liens"

(iii) to enter into a subordination agreement in connection with any Subordinated Debt, and each Purchaser agrees to be bound by the terms of any such subordination agreement and directs the Purchaser Agent to enter into any such subordination agreement, in each case, on behalf of the Purchasers and agrees that the Purchaser Agent may take such actions on its behalf as is contemplated by the terms of any such subordination agreement; and

(iv) to release any Guarantor from its obligations under the Guaranty (i) if such Person ceases to be a Subsidiary as a result of a transaction permitted under the Note Documents or (ii) upon Payment in Full.

13.15 Original Issue Discount. Issuer (i) acknowledges that the Purchasers intend to treat the Notes as indebtedness issued with original issue discount within the meaning of Section 1273(a) of the IRC for U.S. federal income Tax purposes, and not as a “contingent payment debt instruments” for U.S. federal income Tax purposes, (ii) shall make available to the Purchasers the issue price, the amount of original issue discount, if any, the issue date and the yield to maturity for each Note issued that is treated as a separate “issue” for Tax purposes in accordance with the requirements set forth in Treasury Regulation Section 1.1275-3(b) (provided that Issuer shall consult with the Purchasers in the determination thereof and such determinations shall be reasonably acceptable to the Purchasers) and (iii) shall not take any position inconsistent with such treatment of the Notes in any communication or agreement with any Taxing authority unless required by a final “determination” within the meaning of Section 1313(a) of the IRC.

13.16 Tax Treatment. Purchasers and Issuer agree that for United States federal income Tax purposes, (a) the Notes shall be treated as debt; and (b) the payments of interest under such debt instrument qualify as “portfolio interest” within the meaning of Section 871(h)(2) of the IRC or are exempt from withholding under Article 11 of the income Tax treaty between the United States and Ireland. None of the Purchasers nor any Obligor shall not take any position inconsistent with such Tax treatment of the Notes in any communication or agreement with any Taxing authority unless required by a final “determination” within the meaning of Section 1313 of the IRC.

14. TAX.

14.1 Withholding and Gross-Up. Notwithstanding anything to the contrary in this Agreement, if any Governmental Authority and/or requirement of law requires any Obligor to deduct or withhold any amount from, or any Purchaser to pay any present or future Tax, assessment, or other governmental charge on, any payment to any Purchaser (“**Withholding Payment**”), the Obligors will, in addition to paying the applicable Purchaser such reduced payment, simultaneously pay such Purchaser such additional amounts such that such Purchaser receives the full contractual amount of the applicable payment from the Obligors as if no such Withholding Payment had occurred; provided that, the Obligors shall not be required to pay such additional amounts to a particular Purchaser with respect to any Withholding Payment that is attributable to any Excluded Taxes for the Purchaser. The parties to this Agreement shall discuss and cooperate regarding applicable mechanisms for minimizing such Taxes to the extent possible in compliance with all applicable requirements of law. The Obligors shall deliver to such Purchaser the original or a certified copy of a receipt issued by any Governmental Authority or other document reasonably evidencing the payment of any withholding Tax on such Purchaser’s behalf.

14.2 Reporting and Documentation. If any Purchaser is entitled to an exemption from or reduction of a Withholding Payment with respect to payments made under this Agreement, it shall deliver to Issuer, at the time or times reasonably requested by Issuer, such properly completed and executed documentation reasonably requested by Issuer as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, each Purchaser, if reasonably requested by Issuer, shall deliver such other documentation prescribed by applicable requirements of law as will enable the Obligors to determine whether or not such Purchaser is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation shall not be required if in such Purchaser’s reasonable judgment such completion, execution or submission would subject the Purchaser to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Purchaser and, for clarity, such Purchaser shall be deemed to have complied with its obligations under this Section 14.2 if it has so exercised its reasonable judgment. Each Purchaser agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or notify Issuer in writing of its legal inability to do so, in either case within a reasonable amount of time following Issuer’s request for an update.

BY SIGNING THIS DOCUMENT EACH PARTY REPRESENTS AND AGREES THAT: (A) THIS WRITTEN AGREEMENT REPRESENTS THE FINAL AGREEMENT BETWEEN THE PARTIES, (B) THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES, AND (C) THIS WRITTEN AGREEMENT MAY NOT BE CONTRADICTED BY EVIDENCE OF ANY PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OR UNDERSTANDINGS OF THE PARTIES.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

BILLIONTOONE, INC.

By: /s/ Oguzhan Atay
Name: Oguzhan Atay
Title: Chief Executive Officer

Signature Page to
Note Purchase Agreement

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

PURCHASER AGENT:

BWCB SA LLC

By: /s/ David Dubinsky
Name: David Dubinsky
Title: Authorized Signatory

PURCHASER:

TPC INVESTMENTS III LLC

By: /s/ David Dubinsky
Name: David Dubinsky
Title: Authorized Signatory

SCHEDULE 1.1

Purchasers and Commitments

SCHEDULE 4.1

Perfection Actions

SCHEDULE 5.5
Intellectual Property

SCHEDULE 5.10

Regulatory Compliance

EXHIBIT A

DESCRIPTION OF COLLATERAL

The Collateral consists of all of each Obligor's right, title and interest in and to the following personal property:

(a) all of each Obligor's goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, general intangibles (including Intellectual Property), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, securities accounts and other Collateral Accounts, all certificates of deposit, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), Shares, securities and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located;

(b) the following commercial tort claim:

Cigna has placed a hold on the processing of claims for reimbursement for testing services provided to its members since February 27, 2024, resulting in a claim by Issuer for overdue payments with respect to such insurance claims. Issuer reasonably estimates that, as of the date hereof, such claims could equal an amount in the range of approximately \$1,250,000 to an amount in excess of \$2,000,000. Cigna has placed such hold while it determines the amount of overpayment on past claims following completion of an audit conducted by Cigna in the first quarter of 2024, which amount of overpayment Issuer estimates to be no more than \$475,000. Issuer believes that the hold on processing claims is in violation of Issuer's agreement with Cigna and state law, has notified Cigna regarding such violation and continues to pursue resolution of the outstanding claims with Cigna; and

(b) all of each Obligor's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral does not include (i) any Excluded Account, (ii) any rights or interest in any contract, lease, permit, license, or license agreement covering real or personal property if under the terms of such contract, lease, permit, license, or license agreement, or applicable law with respect thereto, the grant of a security interest or lien therein would result in the abandonment, invalidation, unlawfulness or unenforceability of any right or interest of any Obligor therein or is prohibited as a matter of law or under the terms of such contract, lease, permit, license, or license agreement and such prohibition or restriction has not been waived or the consent of the other party to such contract, lease, permit, license, or license agreement has not been obtained (provided that the foregoing exclusions of this clause (ii) shall in no way be construed to apply to the extent that any described prohibition or restriction is ineffective under Section 9-406, 9-407, 9-408, or 9-409 of the UCC or other applicable law, to apply to the extent that any consent or waiver has been obtained that would permit Purchaser Agent's security interest or lien to attach notwithstanding the prohibition or restriction on the pledge of such contract, lease, permit, license, or license agreement, or to apply to any proceeds or receivables thereof); (iii) any United States intent-to-use trademark applications to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use trademark applications under applicable federal law, provided that upon submission and acceptance by the United States Patent and Trademark Office of an amendment to allege use pursuant to 15 U.S.C. Section 1060(a) (or any successor provision), such intent-to-use trademark application shall be considered Collateral; (iv) any Margin Stock; and (v) property (other than Intellectual Property) that is subject to Liens described in clause (c) of the definition of "Permitted Liens", in each case solely to the extent the agreement(s) governing such Liens prohibit the granting of a Lien to Purchaser Agent and such prohibition has not been waived.

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EXHIBIT B

FORM OF PURCHASE NOTICE

EXHIBIT C

COMPLIANCE CERTIFICATE

EXHIBIT D

FORM OF NOTE

[see attached]

[THIS NOTE MAY BE ISSUED WITH ORIGINAL ISSUE DISCOUNT ("OID") FOR U.S. FEDERAL INCOME TAX PURPOSES. THE ISSUE PRICE, AMOUNT OF OID, ISSUE DATE AND YIELD TO MATURITY WITH RESPECT TO THIS NOTE MAY BE OBTAINED BY WRITING TO ISSUER AT THE FOLLOWING ADDRESS: [], ATTENTION: [], FAX NUMBER: [].]

NOTE

\$[]

Dated: [], 202[]

FOR VALUE RECEIVED, **BillionToOne, Inc.**, a Delaware corporation ("**Issuer**"), hereby promises to pay to [], a [] (the "**Purchaser**"), at its offices located at [] (or at such other place or places as the Purchaser may designate), at the times and in the manner provided in the Note Purchase Agreement, dated as of August 2, 2024 (as amended, modified, restated or supplemented from time to time, the "**Note Purchase Agreement**"), among Issuer, the other Obligors from time to time parties thereto, the Purchasers from time to time parties thereto, and BWCB SA LLC, a Delaware limited liability company, as Purchaser Agent and a Purchaser, the Repayment Amount in respect of the principal sum of [] (\$[]), under the terms and conditions of this senior secured note (this "**Note**") and the Note Purchase Agreement. If not sooner paid, the entire principal amount under this Note shall be due and payable on the Maturity Date (as defined in the Note Purchase Agreement). The defined terms in the Note Purchase Agreement are used herein with the same meaning. Issuer also promises to pay interest on the aggregate unpaid principal amount of this Note at the rates applicable thereto and Revenue Participation Payments from time to time as provided in the Note Purchase Agreement.

This Note is one of the Notes referred to in the Note Purchase Agreement and is issued to evidence the purchase thereof by the Purchaser pursuant to the Note Purchase Agreement. All of the terms, conditions and covenants of the Note Purchase Agreement are expressly made a part of this Note by reference in the same manner and with the same effect as if set forth herein at length, and any holder of this Note is entitled to the benefits of and remedies provided in the Note Purchase Agreement and the other Note Documents. Reference is made to the Note Purchase Agreement for provisions relating to transfer and assignments, the interest rate, maturity, payment, prepayment, redemption and acceleration of this Note.

In the event of an acceleration of the maturity of this Note pursuant to the Note Purchase Agreement, this Note (and the Repayment Amount in respect thereof) shall become immediately due and payable, without presentation, demand, protest or notice of any kind, all of which are hereby waived by Issuer. In the event this Note is not paid when due at any stated or accelerated maturity, Issuer agrees to pay, in addition to the principal and interest, all costs of collection, including reasonable attorneys' fees.

This Note and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Note shall be governed by, and construed in accordance with, the law of the State of New York. Issuer hereby submits to the nonexclusive jurisdiction and venue of the courts of the State of New York sitting in the City and County of New York and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, although the Purchaser shall not be limited to bringing an action in such courts.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Purchaser or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, Repayment Amount and Revenue Participation Payments in respect of, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation whereby such transfer shall only be registered if carried out pursuant to Section 14.1 of the Note Purchase Agreement. Issuer shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

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IN WITNESS WHEREOF, Issuer has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

ISSUER:

BillionToOne, Inc.

By _____
Name:
Title:

EXHIBIT E

FORM OF GUARANTEE ASSUMPTION AGREEMENT

AMENDMENT TO NOTE PURCHASE AGREEMENT

September 4, 2025

This Amendment to Note Purchase Agreement (this “**Amendment**”), dated as of the date first set forth above, is entered into by and among BillionToOne, Inc., a Delaware corporation (“**Issuer**”), the Persons listed on the signature pages hereof under the heading “**PURCHASERS**” (each a “**Purchaser**” and, collectively, the “**Purchasers**”), and BWCB SA LLC, a Delaware limited liability company (“**Purchaser Agent**”).

Reference is hereby made to the Note Purchase Agreement, dated as of August 2, 2024 (as amended, restated, amended and restated, supplemented or otherwise modified prior to the date hereof, the “**Existing Purchase Agreement**”; and as amended pursuant to this Amendment, the “**Purchase Agreement**”), by and among Issuer, the Purchasers party thereto from time to time and Purchaser Agent. Capitalized terms not otherwise defined in this Amendment shall have the meanings set forth in the Purchase Agreement. Issuer, the Purchasers and Purchaser Agent are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**.”

WHEREAS, the conditions precedent to the Third Purchase Date set forth in Section 3.3 of the Existing Purchase Agreement have been satisfied;

WHEREAS, Issuer has requested to defer the making of any Third Purchase until March 31, 2026, and, without waiving or altering any other previously agreed conditions, requirements, or representations made in any prior agreement between the Parties, the Purchasers have agreed to amend the Existing Purchase Agreement to grant the Issuer’s request, all on the terms and subject to the conditions set forth herein;

NOW, THEREFORE, for good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the Parties intending to be legally bound do hereby agree as follows:

1. **Amendments.** Subject to Section 2 of this Amendment, the Existing Purchase Agreement is hereby amended as follows:
 - 1.1 Section 1.1 is hereby amended by adding a new definition of “First Amendment Effective Date”, in appropriate alphabetical order, which reads as follows:

“First Amendment Effective Date” means September 4, 2025.”
 - 1.2 Section 2.1(c) is hereby amended and restated in its entirety as follows:

“(c) Subject to the terms and conditions of this Agreement (including the conditions precedent set forth in Sections 3.1, 3.3 and 3.5), on the Third Purchase Date, which shall be March 31, 2026 (or such earlier date to which the Purchasers and Issuer may agree), each Purchaser will, severally and not jointly, purchase Notes from Issuer, and Issuer agrees to issue and sell Notes to each Purchaser, in an aggregate principal amount of \$30,000,000 in one (1) purchase according to each Purchaser’s Commitment as set forth on Schedule 1.1 hereto for a purchase price equal to 100% of the principal amount thereof (the “**Third Purchase**”); provided no Third Purchase shall occur or be required if a repurchase of the Notes occurs pursuant to Section 2.2(b) of the Purchase Agreement.”

- 1.3 A new Section 2.6 is added, which reads as follows:
- “2.6 Additional Payment in Lieu of Third Purchase.** Issuer shall make a one-time payment of \$9,000,000 (the **“Third Purchase Payment”**) in immediately available funds to the Purchasers in accordance with each Purchaser’s Pro Rata Share upon the earliest to occur of the following, in each case solely to the extent the Third Purchase Date has not first occurred: (i) March 31, 2026 (unless the Third Purchase is consummated on such date), (ii) the occurrence of any Change of Control, (iii) the date that all Obligations are accelerated and become due and payable pursuant to Section 9.1 and (iv) any voluntary repurchase of Notes pursuant to Section 2.2(b). The Third Purchase Payment is fully earned on the First Amendment Effective Date.”
- 1.4 Section 3.8 is hereby amended by:
- 1.4.1 adding an additional proviso at the end of the first sentence thereof which reads:
- “; provided, further, that with respect to the Third Purchase, Issuer will deliver an executed Purchase Notice 15 Business Days prior to March 31, 2026 (or such earlier Third Purchase Date to which the Purchasers and Issuer may agree pursuant to Section 2.1(c)); provided no notice shall be required to be delivered with respect to the Third Purchase if a notice of repayment of the Notes has been delivered or is being concurrently delivered pursuant to Section 2.2(b) of the Purchase Agreement.”
- 1.4.2 adding a sentence at the end of such Section which reads:
- “On the Third Purchase Date, Issuer shall deliver a duly executed physical Note, substantially in the form attached as Exhibit D hereto, in the principal amount of \$30,000,000.00 dated as of such date and issued to the Purchaser.”
2. **Condition Precedent to Effectiveness.** The effectiveness of this Amendment shall be subject to Purchaser Agent’s receipt of this Amendment, duly executed by Issuer, Purchaser Agent and the Purchasers as required by Section 13.6(a) of the Purchase Agreement.
3. **Representations and Warranties.**
- 3.1 The execution, delivery and performance by Issuer of this Amendment have been duly authorized by all necessary corporate or other organizational action. This Amendment and the Purchase Agreement constitute Issuer’s legal, valid and binding obligation, enforceable against it in accordance with its terms.
- 3.2 Each of the representations and warranties in Section 5 of the Purchase Agreement are true, accurate and complete in all material respects as of the date hereof; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; provided further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date.
- 3.3 No Event of Default or Default has occurred and is continuing as of the date hereof.

4. Release of Claims.

- 4.1** Issuer hereby absolutely and unconditionally releases and forever discharges Purchaser Agent and each Purchaser, and any and all parent corporations, subsidiary corporations, affiliated corporations, successors and assigns thereof, together with all of the present and former directors, officers, agents, attorneys and employees of any of the foregoing (each, a “**Releasee**” and collectively, the “**Releasees**”), from any and all claims, demands or causes of action of any kind, nature or description, whether arising in law or equity or upon contract or tort or under any state or federal law or otherwise arising under or with respect to the Note Documents (each, a “**Claim**” and collectively, the “**Claims**”), which Issuer has had, now has or has made claim to have against any such person for or by reason of any act, omission, matter, cause or thing whatsoever arising from the beginning of time to and including the date of this Amendment, whether such claims, demands and causes of action are matured or unmatured or known or unknown. Issuer understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense to any Claim and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release. Issuer agrees that no fact, event, circumstance, evidence or Note Document which could now be asserted or which may hereafter be discovered will affect in any manner the final, absolute and unconditional nature of the release set forth above.
- 4.2** Issuer hereby absolutely, unconditionally and irrevocably covenants and agrees with and in favor of each Releasee that it will not sue (at law, in equity, in any regulatory proceeding or otherwise) any Releasee on the basis of any Claim released, remised and discharged by Issuer pursuant to Section 4.1 above. If Issuer violates the foregoing covenant, Issuer for itself and its successors and assigns, agrees to pay, in addition to such other damages as any Releasee may sustain as a result of such violation, all Reimbursable Expenses incurred by any Releasee as a result of such violation.

5. General.

- 5.1** Issuer hereby (i) acknowledges and agrees that all of its obligations under the Purchase Agreement and each other Note Document and under any other document or instrument executed and delivered or furnished in connection with such Note Documents are reaffirmed and remain in full force and effect on a continuous basis, including, for the avoidance of doubt, after giving effect to this Amendment, (ii) acknowledges, agrees and reaffirms that each Lien granted by it to Purchaser Agent under the Note Documents for the ratable benefit of the Purchasers is and shall remain in full force and effect after giving effect to this Amendment, (iii) agrees that the Obligations secured by the Note Document to which it is a party shall include all Obligations arising after giving effect to this Amendment and (iv) agrees that the Guaranteed Obligations guaranteed by the Guaranty to which it is a party shall include all Obligations arising after giving effect to this Amendment.
- 5.2** (i) Except as expressly set forth in Section 1 above, the execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any rights, power or remedy of the Purchasers or Purchaser Agent under the Purchase Agreement or any other documents executed in connection with the Purchase Agreement or constitute a waiver of any provision of the Purchase Agreement or any other document executed in connection therewith including, without limitation, any Event of Default and (ii) this Amendment shall not by implication, course of dealing or otherwise limit, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements in the Note Documents, in each case, except to the extent limited, modified, amended or affected by this Amendment.

- 5.3 Except as expressly modified by this Amendment, the terms and provisions of the Purchase Agreement shall remain unchanged and in full force and effect in accordance with its terms. In the event of any inconsistencies between the provisions of this Amendment and the provisions of Purchase Agreement or any other Note Document, the provisions of this Amendment shall govern and prevail. This Amendment is a Note Document.
- 5.4 This Amendment shall be governed by, and construed, interpreted and enforced in accordance with, the laws of the state of New York, without giving effect to the principles of conflicts of law thereof.
- 5.5 The provisions of Section 10 (Notices), Section 11 (Choice of Law and Venue; Jury Trial Waiver), Section 13.4 (Severability of Provisions), Section 13.6 (Amendments in Writing; Integration) and Section 13.7 (Counterparts; Effectiveness; Electronic Signature) of the Purchase Agreement are hereby incorporated by reference into this Amendment, *mutatis mutandis*.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed by their respective duly authorized officers as of the date first written above.

ISSUER:

BILLIONTOONE, INC.

By: /s/ Oguzhan Atay

Name: Oguzhan Atay, PhD

Title: Chief Executive Officer

[Signature Page to Amendment to Note Purchase Agreement]

PURCHASER AGENT:

BWCB SA LLC

By: /s/ David Dubinsky

Name: David Dubinsky

Title: Authorized Signatory

PURCHASERS:

TPC INVESTMENTS III LLC

By: /s/ David Dubinsky

Name: David Dubinsky

Title: Authorized Signatory

[Signature Page to Amendment to Note Purchase Agreement]

LEASE

BY AND BETWEEN

WHIPPLE ROAD PORTFOLIO, LLC, LANDLORD

AND

BILLIONTOONE, INC., TENANT

Union City Labs

3200 Whipple Road,

Union City, California

April 10, 2022

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Exhibits

- A. Legal Description
- B. Union City Labs
- C. Floor Plan of Premises
- D. Commencement Memorandum
- E. Tenant's Hazardous Materials
- F-1. Description of Landlord Improvements/Warm-Shell Improvements
- F-2. Preliminary Budget
- F-3. Preliminary Schedule
- G. Hazardous Materials Disclosure Certificate

LEASE

Union City Labs
3200 Whipple Road
Union City, California

THIS LEASE, referred to herein as this "**Lease**," is made and entered into as of April 10, 2022, by and between **WHIPPLE ROAD PORTFOLIO, LLC**, a Delaware limited liability company, hereafter referred to as "**Landlord**," and **BILLIONTOONE, INC.**, a Delaware corporation, hereafter referred to as "**Tenant**."

RECITALS

A. Landlord is the owner of the real property located at 3180, 3200, 3240, 3242, 3250 and 3260, 3280 and 3292 Whipple Road, Union City, California, commonly referred to as Union City Labs, more particularly described on Exhibit A attached hereto and incorporated by reference herein, together with all easements and appurtenances thereto (collectively, the "**Land**") and the existing buildings thereon, containing approximately 336,632 square feet and all other improvements located thereon (collectively, the "**Improvements**"). The Land and Improvements are referred to herein collectively as the "**Property**." The Union City Labs description is attached hereto as Exhibit B and incorporated by reference herein, and identifies the properties that comprise Union City Labs (the "**Park**"). The building at 3200 Whipple Road is referred to herein as the "**Building**." Those areas and facilities of the Park (excluding any portion of the Building) which is for the common use of tenant or other occupants of the Property is referred to herein as the "**Common Area**." The floor plan of the Building is attached hereto as Exhibit C and incorporated by reference herein.

B. Landlord and Tenant wish to enter into this Lease of the Premises defined in Paragraph 1 upon the terms and conditions set forth herein.

NOW, THEREFORE, the parties agree as follows:

1. Lease.

(a) Beginning on the Commencement Date (as defined in Paragraph 2(a)), Landlord hereby leases to Tenant, and Tenant leases from Landlord, at the rental rate and upon the terms and conditions set forth herein, the portion of the Property consisting of approximately Eighty-Nine Thousand Nine Hundred Sixty-Nine (89,969) rentable square feet, as shown on the floor plan of the Building attached hereto as Exhibit C (the "**Premises**"), together with the right to use Tenant's share of the on-site parking spaces pursuant to Paragraph 28, and the non-exclusive right to use the common areas of the Property and the other Improvements on the Property intended for use in common by the tenants of the Property. Tenant's Pro Rata Share of the Building shall mean 100% (89,969/89,969).

(b) Except hereinafter provided, Landlord shall retain absolute dominion and control over the Common Area and shall operate and maintain the Common Area in good order and condition; provided, however, such exclusive right shall not materially adversely affect Tenant's access to the Premises nor shall it operate to materially adversely affect Tenant's benefit and enjoyment of the Premises for Tenant's permitted Use. Notwithstanding anything to the contrary herein, Landlord grants Tenant, its employees, invitees, licensees, and other visitors a non-exclusive license to use the Common Area for the Term hereof. Tenant acknowledges that, without advance notice to Tenant, and without any liability to Tenant in any respect, Landlord shall have the right to (provided, such right shall not materially adversely affect Tenant's access to the Premises nor shall it operate to materially adversely affect Tenant's use of the Premises for Tenant's permitted Use):

(i) Close off any of the Common Area to whatever extent required, in the opinion of Landlord, to prevent a dedication of any of the Common Area or the accrual of any rights by any person or the public to the Common Area, provided such closure does not materially deprive Tenant of the benefit and enjoyment of the Premises for its Permitted Use;

(ii) Temporarily close any of the Common Area for maintenance, alteration or improvement purposes;

(iii) Select, appoint or contract with any person for the purpose of operating and maintaining the Common Area, on such terms and conditions as Landlord deems reasonable;

(iv) Change the size, use, shape or nature of any portion of the Common Area, without incurring any liability to Tenant or entitling Tenant to any abatement of Rent;

(v) Expand any buildings (other than the Building) within the Property to cover a portion of the Common Area, convert the Common Area to a portion of other buildings within the Property, or convert any portion of any other buildings within the Property to Common Area. Upon erection of any buildings or change in Common Area, the portion of the other buildings upon which such structures have been erected will no longer be deemed to be a part of the Common Area; and

(vi) In addition to the other rights of Landlord under this Lease, Landlord reserves to itself and its respective successors and assigns the right to: (i) change the street address and/or name of the Building and/or Property; (ii) grant to anyone the exclusive right to conduct any particular business or undertaking in the Property; (iii) grant to anyone the exclusive use of portions of any storage areas to tenants; (iv) control the use of the roof and exterior walls of the Building or other buildings in the Property; provided, however, if such proposed use of the roof would materially adversely affect Tenant's use of the Premises for Tenant's permitted Use, then Landlord shall be required to obtain Tenant's prior approval of such use; (v) change the boundary lines of the lot on which the Building stands and/or Property is located and to make other reasonable changes therein and grant other rights thereto, including, without limitation, the granting of easements, servitudes, rights of way and rights of ingress and egress and similar rights to users of adjacent parcels, utility companies, governmental agencies or other tenants; and

(vii) make alterations, repairs or replacements within other premises within the Property. Landlord may exercise any or all of the foregoing rights without being deemed to be guilty of an eviction or disturbance or interruption of the business of Tenant or Tenant's use or occupancy of the Premises.

2. Term.

(a) The term of this Lease (the “**Term**”) shall commence on the earlier of (i) the date that Landlord delivers the Premises to Tenant with the Landlord Improvements summarized on Exhibit “E-1” and the Tenant Improvements (exclusive of the Excluded Work) Substantially Completed (as both terms are defined in the Work Letter attached hereto as Exhibit E) (the “**Commencement Date**”), and (ii) the date such work would have been Substantially Completed but for the occurrence of Tenant Delays (as defined in the Work Letter). Upon the Commencement Date, the Premises shall be in good condition with the existing Building systems serving the Premises in good working condition, including the roof in watertight condition, HVAC, mechanical, electrical, plumbing in good working condition and operable. Tenant hereby agrees that the Premises is in satisfactory operating order, condition and repair, subject to Landlord’s obligations relating to the Tenant Improvements, and that, except as otherwise expressly set forth in this Lease, there are no representations or warranties of any kind, express or implied, by Landlord regarding the Premises, the Building or the Park. The Commencement Date shall be confirmed in writing by Landlord and Tenant by the execution and delivery of the Commencement Memorandum in the form attached hereto as Exhibit D. Notwithstanding anything to the contrary, if the Commencement Date does not occur on or before December 31, 2022 with respect to the Tenant Improvements exclusive of the Excluded Work (as hereinafter defined) (the “**Outside Delivery Date**”), the Monthly Base Rent shall abate one day for every day between the Outside Delivery Date and the Commencement Date to the extent not caused by any Tenant’s Delays or force majeure. Tenant shall not be entitled to the Monthly Base Rent abatement set forth in the immediately preceding sentence if the Tenant Improvements (other than the Excluded Work) are delivered Substantially Completed prior to the Outside Delivery Date. The parties anticipate the Excluded Work will be Substantially Completed by March 15, 2023. The term “**Excluded Work**” shall mean the portion of the Tenant Improvements consisting of (a) work exterior to the Premises; (b) power upgrades to the extent such power upgrades work does not require the shutdown of electricity or interfere with Tenant’s use of the Premises; (c) the portion of the office space not part of the approximately 10,000 rentable square foot portion of the office space delivered to Tenant on the Commencement Date; (d) permanently installed casework in the lab area; and (e) work to the lobby beyond the “vanilla-shell” condition of the lobby that was delivered by the Outside Delivery Date. Notwithstanding anything to the contrary, if the Excluded Work is not Substantially Completed on or before March 15, 2023 with respect to the Excluded Work (the “**Outside Excluded Work Completion Date**”), the Monthly Base Rent shall abate one day for every day between the Outside Excluded Work Completion Date and the date the Excluded Work is Substantially Completed to the extent not caused by any Tenant’s Delays or force majeure.

(b) The Term of this Lease shall expire, unless sooner terminated in accordance with the provisions hereof or as permitted by law, on the last day of the one hundred twenty-six (126) full calendar month after the Commencement Date.

(c) Extension Option. Tenant shall have one (1) option to extend the Term of this Lease (“**Extension Option**”) for an additional period of five (5) years (“**Extended Term**”) by giving Landlord written notice of such election (“**Option Exercise Notice**”) not earlier than twelve (12) months nor later than nine (9) months prior to the Expiration Date. If Tenant does not timely deliver the Option Exercise Notice, Tenant’s right to exercise the Extension Option shall terminate. Tenant shall have no right to exercise the Extension Option notwithstanding any provision in the grant to

the contrary if Tenant does not occupy at least fifty percent (50%) of the Premises or is in default of this Lease after expiration of any applicable notice and cure period. The Extension Option may be exercised by the originally-named tenant or a Permitted Transferee that has taken an assignment of this Lease and may not be exercised or assigned, voluntarily or involuntarily, by or to any person or entity or exercised for the occupancy of any other person or entity. The Extended Term shall be on the same terms and conditions as contained in this Lease except that (i) there shall be no further right to extend the Lease beyond the Extended Term, (ii) there shall be no obligation to pre-pay monthly base rent, initial rent concessions or abatements or obligation of Landlord to construct tenant improvements or pay a tenant improvement allowance, and (iii) Monthly Base Rent during the Extended Term shall equal to the Fair Market Rental Rate determined in accordance with this Paragraph.

As used herein, the term "**Fair Market Rental Rate**" means the rental rate that Landlord could obtain during the Extended Term from a third party desiring to lease the Premises, based upon the permitted Use, by rents then being obtained for new leases of space comparable in age, build-out and quality to the Premises in the locality of the Premises.

If Tenant delivers the Option Exercise Notice, Landlord shall, within thirty (30) days of receipt thereof, send Tenant a written notice setting forth the Fair Market Rental Rate for the Extended Term. If Tenant disputes Landlord's determination, Tenant shall, within thirty (30) days of Landlord's notice setting forth Landlord's determination of the Fair Market Rental Rate, send to Landlord a notice stating that Tenant disagrees with Landlord's determination and elects to resolve the disagreement as set forth herein. If Tenant does not send Landlord a notice as provided in the previous sentence, Landlord's determination of Fair Market Rental Rate shall be the Monthly Base Rent payable by Tenant during the Extended Term. If Tenant elects to resolve the disagreement as provided below and such procedures are not concluded prior to the commencement date of the Extended Term, Tenant shall pay to Landlord as Monthly Base Rent the Fair Market Rental Rate set forth in Landlord's notice. If the Fair Market Rental Rate as finally determined pursuant to the provisions set forth below is greater than Landlord's determination, Tenant shall pay Landlord the difference between the amount paid by Tenant and the Fair Market Rental Rate as so determined within thirty (30) days after said determination. If the Fair Market Rental Rate as finally determined is less than Landlord's determination, the difference between the amount paid by Tenant and the Fair Market Rental Rate as so determined shall be credited against the next installments of Monthly Base Rent due from Tenant to Landlord hereunder.

Any disagreement regarding the Fair Market Rental Rate shall be resolved as follows:

(i) If within thirty (30) days of Tenant's notice of disagreement with Landlord's determination of Fair Market Rental Rate, Landlord and Tenant cannot reach agreement as to Fair Market Rental Rate, Landlord and Tenant shall each select one appraiser to determine the Fair Market Rental Rate. Each such appraiser shall arrive at a determination of the Fair Market Rental Rate and submit their conclusions to Landlord and Tenant within sixty (60) days of Tenant's notice of disagreement of Landlord's determination of the Fair Market Rental Rate.

(ii) If only one appraisal is submitted within the requisite time period, it shall be deemed as the Fair Market Rental Rate. If both appraisals are submitted within such time period and the two appraisals so submitted differ by less than ten percent (10%), the average of the two shall be deemed as the Fair Market Rental Rate. If the two appraisals differ by more than ten percent (10%), the appraisers shall immediately select a third appraiser who shall, within fifteen (15) days after his/her selection, determine which of the two appraisals most closely represents the Fair Market Rental Rate.

(iii) All appraisers specified pursuant to this Paragraph shall be either members of the American Institute of Real Estate Appraisers or a licensed California Real Estate Broker with not less than ten (10) years' experience appraising office properties in the immediate geographic area of the Building. Each party shall pay the cost of the appraiser selected by such party and one-half of the cost of the third appraiser. The "immediate geographic area of the Building" shall mean the city of Union City.

3. **Early Access.** Landlord shall permit Tenant may enter the Premises on the date Landlord reasonably determines to be approximately ninety (90) days prior to the Commencement Date (the "**Early Access Period**") for the sole purpose of inspecting the Premises and installing wiring, cabling, furniture, fixture, equipment (including IT infrastructure), tenant art, and acoustic treatments ("**Early Entry**"); provided that such Early Entry is conducted in a manner as to not interfere with Landlord's Substantial Completion of the Tenant Improvements (as defined in **Exhibit E**, the "**Work Letter**") or the Landlord Improvements (defined in **Paragraph 13(a)** below). If Tenant's Early Entry interferes with Landlord's Substantial Completion of the Tenant Improvements or the Landlord Improvements, it shall be a Tenant's Delay and Landlord may terminate Tenant's Early Entry. Such Early Entry shall at Tenant's sole risk and subject to all of the terms and conditions contained in this Lease (other than the payment of Monthly Base Rent and Tenant's Pro Rata Share of the Operating Expenses), including without limitation, Tenant's prior delivery to Landlord of insurance certificates evidencing that Tenant has obtained the insurance required pursuant to this Lease. Tenant shall not conduct its business in the Premises at any time during the Early Access Period. In addition to the foregoing, Landlord shall have the right to impose such reasonable additional conditions on Tenant's Early Entry as Landlord shall reasonably deem appropriate.

4. **Monthly Base Rent.**

(a) Commencing on the Commencement Date and continuing on the first day of each calendar month thereafter until the end of the Term, Tenant shall pay to Landlord in monthly installments in advance the Monthly Base Rent for the Premises in lawful money of the United States as follows:

Months	Square Feet	\$/SF/Mo./NNN	Monthly Base Rent
1-8*	22,500	\$ 4.95	\$ 111,375.00
9-12*	45,000	\$ 4.95	\$ 222,750.00
13-24	89,969	\$ 5.12	\$ 460,933.68
25-36	89,969	\$ 5.30	\$ 477,066.36
37-48	89,969	\$ 5.49	\$ 493,763.68
49-60	89,969	\$ 5.68	\$ 511,045.41
61-72	89,969	\$ 5.88	\$ 528,932.00
73-84	89,969	\$ 6.08	\$ 547,444.62
85-96	89,969	\$ 6.30	\$ 566,605.18
97-108	89,969	\$ 6.52	\$ 586,436.36
109-120	89,969	\$ 6.75	\$ 606,961.63
121-126	89,969	\$ 6.98	\$ 628,205.29

Subject to Paragraph 22(d) of this Lease, Landlord shall abate a portion of Tenant's obligation to pay Monthly Base Rent with respect to the entire Premises for the first (1st) month through and including the twelve (12th) month following the Commencement Date in accordance with the schedule set forth above. During such reduced Monthly Base Rent period, Tenant shall still be responsible for the payment of all of its other monetary obligations under the Lease, relative to Tenant's use and occupancy of the Premises, including Tenant's Pro Rata Share of the Building and the Park as set forth in the Lease.

Upon the execution and delivery of this Lease by Tenant, Tenant shall pay to Landlord (1) the cash sum of One Hundred Eleven Thousand Three Hundred Seventy-Five and 00/100 Dollars (\$111,375.00) representing the installment of Monthly Base Rent due for the first month following the Commencement Date. If the Commencement Date falls on any date other than the first day of a calendar month, then the pre-paid rent shall be credited to the partial first calendar month of the term and partially to the following month's rent. Thereafter, Monthly Base Rent shall be paid monthly in advance on the first day of each calendar month. Tenant shall also pay to Landlord upon execution and delivery of this Lease, the amount of Seventeen Thousand Seven Hundred Seventy-Nine and 00/100 Dollars (\$17,779.00), which amount shall be applied to the Additional Rent (as hereinafter defined) for the first calendar month of the Term. Tenant shall also pay to Landlord upon the execution and delivery of this Lease the additional amount Two Million Dollars (\$2,000,000.00) representing the Security Deposit (as defined in Paragraph 7 below).

5. Additional Rent; Operating Expenses and Taxes.

(a) In addition to the Monthly Base Rent payable by Tenant pursuant to Paragraph 4, commencing on the Commencement Date Tenant shall pay to Landlord, as "**Additional Rent**," (1) Tenant's Pro Rata Share of the Operating Expenses of the Property, (2) Tenant's pro rata share of the operating expenses for Union City Labs of which the Property is a part (the "**Park Expenses**"), and (3) Tenant's Pro Rata Share of the Taxes (as defined in Paragraph 5(c) below). Tenant's pro rata share of the operating expenses of Park Expenses is 27.83% based upon the ratio of the number of square feet of the Land allocable to the Property to the total number of square feet of land in Union City Labs. The Park Expenses, of which the Property is a part, currently include, but is not limited to, maintenance of the common areas of Union City Labs, parking lot lighting (cost of electricity and maintenance of the fixtures), maintenance of the network conduit, all landscape maintenance and irrigation of the Union City Labs, Landlord's insurance coverages of Union City Labs, and security patrol. The Park Expenses may include other commercially reasonable and customary items from time to time during the term of this Lease. Monthly Base Rent and Additional Rent are referred to herein collectively as "rent."

(b) "Operating Expenses," as used herein, shall include all costs incurred by Landlord in the ownership, management, operation, administration (including concierge services) maintenance, repair and replacement of the Property, including the cost of all maintenance, repairs, and restoration of the Property performed by Landlord pursuant to Paragraphs 14(b) and 14(c) hereof, including, but not limited to:

Personal property taxes related to the Premises; any parking taxes or parking levies imposed on the Premises in the future by any governmental agency; a management fee (including administration fees) charged for the management and operation of Union City Labs, in an amount equal to three percent (3%) of the total gross income received by Landlord from the Tenant (including Monthly Base Rent and Additional Rent), and not just Tenant's Pro Rata Share of this fee; water and sewer charges; waste disposal; insurance premiums for insurance coverages maintained by Landlord pursuant to Paragraph 11(b) hereof; license, permit, and inspection fees; charges for electricity, heating, air conditioning, gas, and any other utilities (including, without limitation, any temporary or permanent utility surcharge or other exaction); security; maintenance, repair, and replacement of the roof membrane; painting and repairing, interior and exterior; maintenance and replacement of floor and window coverings; repair, maintenance, and replacement of air-conditioning, heating, mechanical and electrical systems, elevators, plumbing and sewage systems; janitorial service; landscaping, gardening, and tree trimming; glazing; repair, maintenance, cleaning, sweeping, striping, and resurfacing of the parking area; exterior Building lighting and parking lot lighting; supplies, materials, equipment and tools in the maintenance of the Property; costs for accounting services incurred in the calculation of Operating Expenses and Taxes; and the cost of any capital expenditures for any (a) new improvements or changes to the Building, Common Area, and Park which are (i) required by laws, ordinances, or other governmental regulations adopted or effective after the Commencement Date, (ii) for costs to construct or install any amenities for all tenants (including, without limitation, a café) or (iii) for any items or capital expenditures voluntarily made by Landlord which are intended to reduce Operating Expenses (including, without limitation, utility costs) or (iv) for life/safety reasons; and (b) capital repairs and replacements required to maintain the Property in good condition (collectively, the "**Permitted Capital Costs**"), provided, except for capital expenses required because of Tenant's specific use of the Property, if Landlord is required to or voluntarily incurs any capital expenses, Landlord shall amortize such expenses over the useful life of the capital repairs, replacements or improvements as reasonably determined by Landlord (together with interest on the unamortized balance at the rate equal to the effective rate of interest on Landlord's bank line of credit at the time of completion of said repairs, replacements or improvements) as an Operating Expense, except that with respect to item (a)(iii) of the Permitted Capital Costs made to save Operating Expenses such amortization shall not be at a rate greater than the actual savings in Operating Expenses. Operating Expenses shall also include any other expense or charge, whether or not described herein but which is not specifically excluded by other provisions of this Lease, which would be considered an expense of managing, operating, maintaining, and repairing the Property. Notwithstanding anything to the contrary, any earthquake insurance deductible in excess of One Hundred Thousand Dollars (\$100,000) shall be amortized over the remainder of the Term.

(c) Real property taxes and assessments upon the Property, during each lease year or partial lease year during the term of this Lease are referred to herein as "**Taxes**."

As used herein, Taxes shall mean:

(1) all real estate taxes, assessments, charges and any other taxes which are levied or assessed against the Property including the Land, the Building, and all improvements located thereon, including any increase in Taxes resulting from a reassessment following any transfer of ownership of the Property or any interest therein or following any improvements to the Property or improvements to Union City Labs which are for the benefit of all occupants of Union City Labs; and

(2) all other taxes which may be levied in lieu of real estate taxes, assessments, and other fees, charges, and levies, general and special, ordinary and extraordinary, unforeseen as well as foreseen, of any kind and nature by any authority having the direct or indirect power to tax, including without limitation any governmental authority or any improvement or other district or division thereof, for public improvements, services, or benefits which are assessed, levied, confirmed, imposed, or become a lien (1) upon the Property, and/or any legal or equitable interest of Landlord in any part thereof; or (2) upon this transaction or any document to which Tenant is a party creating or transferring any interest in the Property; and (3) any tax or excise, however described, imposed in addition to, or in substitution partially or totally of, any tax previously included within the definition of Taxes or any tax the nature of which was previously included in the definition Taxes.

Not included within the definition of Taxes are any net income, profits, transfer, franchise, estate, gift, rental income, inheritance taxes imposed by any governmental authority, or any taxes paid by Tenant under Paragraph 10 below. Taxes also shall not include penalties or interest charges assessed on delinquent Taxes as a result of Landlord's failure to pay Taxes when due.

With respect to any assessments which may be levied against or upon the Property, which under the laws then in force may be evidenced by improvement or other bonds, or may be paid in annual installments, only the amount of such annual installment (with appropriate proration of any partial year) and statutory interest shall be included within the computation of the annual Taxes levied against the Property.

(d) The following costs ("Costs") shall be excluded from the definition of Operating Expenses:

- (1) Costs for which Landlord receives reimbursement from others, including reimbursement from insurance;
- (2) Interest, charges and fees incurred on debt or payments on any deed of trust or ground lease on the Property or Union City Labs;
- (3) Costs incurred in repairing, maintaining or replacing any structural elements of the Building for which Landlord is responsible pursuant to Paragraph 14(a), hereof and for any other buildings in the Property;
- (4) Any wages, bonuses or other compensation of employees above the grade of building manager and any executive salary of any officer or employee of Landlord and any employees performing services not in connection with the management, operation, repair or maintenance of the Property or Union City Labs, or any fee, profit or compensation retained by Landlord or its affiliates for management and administration of the Property in excess of the management fee referred to in Paragraph 5(b) of this Lease;

- (5) General office overhead and general and administrative expenses of Landlord except as specifically provided herein;
- (6) Leasing expenses, legal fees, advertising costs, tenant improvement costs and broker commissions payable by Landlord in connection with the leasing of space to tenants of the Property;
- (7) Costs and expenses which would be capitalized under generally accepted accounting principles, except for Permitted Capital Costs;
- (8) The cost of special services, goods, or material provided to any other tenant of the Property and not provided to Tenant;
- (9) Repairs for which Landlord is reimbursed by proceeds of insurance or from funds provided by Tenant or any other tenant of the Property (or where any other tenant of the Property is obligated to make such repairs or pay the cost of same);
- (10) Repairs, alterations, additions, improvements, or replacements needed to rectify or correct any defects in the Building or Property or common areas existing on the Commencement Date;
- (11) Damage or repairs necessitated by the negligence or willful misconduct of Landlord, Landlord's employees, contractors, or agents;
- (12) Legal fees, accountants' fees, and other expenses incurred in connection with disputes of tenants or other occupants of the Property or associated with the enforcement of the terms of any leases with tenants or the defense of Landlord's title to or interest in the Property or any part thereof;
- (13) Cost incurred due to a violation by Landlord or any other tenant of the Property of the terms and conditions of a lease;
- (14) Costs of any renovation, improvement, painting or redecorating of any portion of the Property or the Union City Labs not part of the Common Area or made available for Tenant's use and/or benefit;
- (15) Costs incurred in connection with the presence of any Hazardous Materials on the Property or on other property in the Union City Labs that do not arise from or are not related to the intentional or negligent act or omission of Tenant or Tenant's representatives;
- (16) Expense reserves;
- (17) Costs and expenses relating solely to another building or to the interior portions of any other building or other structures except the Building (excluding, however, such costs and expenses relating to interior portions of such other building or structures that are used as Common Areas); and

- (18) Repairs or maintenance of areas of the Union City Labs leasable exclusively to other tenants;
- (19) Costs associated with any Green Energy Programs (as defined below) except to the extent considered a Permitted Capital Cost pursuant to Paragraph 5(b) above; and
- (20) Any costs incurred to make any alterations or improvements to the Property necessary for any certification as “green” or sustainable, or other similar certifications, and any costs for such certification except the extent resulting in a reduction in Operating Expenses or Park Expenses or considered a Permitted Capital Cost pursuant to Paragraph 5(b) above.

Landlord shall at all times use its best efforts to operate the Property in an economically reasonable manner at costs not disproportionately higher than those experienced by other comparable premises in the market area in which the Property is located.

(e) Prior to the execution of this Lease, Landlord has delivered to Tenant Landlord’s estimate of 2022 Operating Expenses, Taxes and Park Expenses. Throughout the term of this Lease, as close as reasonably possible after the end of each calendar year thereafter but no later than April 1 of the following year, Landlord shall notify Tenant of the Operating Expenses, Taxes and Park Expenses estimated by Landlord for each following calendar year. Concurrently with such notice, Landlord shall provide a description of such Operating Expenses, Taxes and Park Expenses. Commencing on the Commencement Date, and on the first (1st) day of each calendar month thereafter, Tenant shall pay to Landlord, as Additional Rent, one-twelfth (1/12th) of the estimated Operating Expenses, Taxes and Park Expenses; provided, that the pre-paid Additional Rent (see Paragraph 4) shall be credited toward the payment due on the Commencement Date, and if the Commencement Date falls on any date other than the first day of a calendar month, then the pre-paid Additional Rent shall be credited to the partial first calendar month of the term and partially to the following month’s Additional Rent payment. If at any time during any such calendar year, it appears to Landlord that the Operating Expenses, Taxes and Park Expenses for such year will vary from Landlord’s estimate, Landlord may, by written notice to Tenant, revise Landlord’s estimate for such year and the Additional Rent payments by Tenant for such year shall thereafter be based upon such revised estimate. Landlord shall furnish to Tenant with such revised estimate written verification showing that the actual Operating Expenses, Taxes and Park Expenses are greater than or equal to Landlord’s estimate. The increase in the monthly installments of Additional Rent resulting from Landlord’s revised estimate shall not be retroactive, but the Additional Rent for each calendar year shall be subject to adjustment between Landlord and Tenant after the close of the calendar year, as provided below.

Within approximately one hundred twenty (120) days after the expiration of each calendar year of the term, Landlord shall furnish Tenant a statement certified by a responsible employee or agent of Landlord (the “**Operating Statement**”) with respect to such year, prepared by an employee or agent of Landlord, showing the actual Operating Expenses, Taxes and Park Expenses for such year broken down by component expenses, and the total payments made by Tenant for such year on the basis of any previous estimate of such Operating Expenses, Taxes and Park

Expenses, all in sufficient detail for verification by Tenant. Unless Tenant raises any objections to the Operating Statement within ninety (90) days after receipt of the same, such statement shall conclusively be deemed correct and Tenant shall have no right thereafter to dispute such statement or any item therein or the computation of Operating Expenses and/or Taxes and/or Park Expenses. Upon giving Landlord five (5) days advance written notice, Tenant's certified public accountant shall have the right to inspect and audit Landlord's books and records with respect to the Operating Statement in an office of Landlord, or Landlord's agent, during normal business hours, once each calendar year to verify actual Operating Expenses and Taxes. Tenant's accountant or accounting firm shall be one of national standing and retained on an hourly rate basis or based upon a fixed fee and shall not be paid on a contingency basis. Landlord's books and records shall be kept in accord with generally accepted accounting principles. If Tenant's audit of the Operating Expenses, Taxes and Park Expenses for any year reveals a net overcharge of more than five percent (5%), Landlord shall promptly reimburse Tenant for the cost of the audit; otherwise, Tenant shall bear the cost of Tenant's audit. If Tenant reasonably objects to Landlord's Operating Statement, Tenant shall nonetheless continue to pay on a monthly basis the Operating Expenses, Taxes and Operating Expenses based upon the Landlord's most current estimate until such dispute is resolved.

If Tenant's Pro Rata Share of the Operating Expenses and Taxes and Tenant's pro rata share of Park Expenses for any year as finally determined exceed the total payments made by Tenant for such year based on Landlord's estimates, Tenant shall pay to Landlord the deficiency, within thirty (30) days after the receipt of Landlord's Operating Statement. If the total payments made by Tenant based on Landlord's estimate of the Operating Expenses and/or Taxes and/or Park Expenses exceed the Tenant's Pro Rata Share of Operating Expenses and/or Taxes and/or Tenant's pro rata share of Park Expenses, Tenant's extra payment, plus the cost of an audit which is the responsibility of Landlord as set forth herein, if any, shall be credited against payments of Monthly Base Rent and Additional Rent next due hereunder or returned within thirty (30) days if the term has expired or this Lease has been terminated.

Notwithstanding the expiration or termination of this Lease, within thirty (30) days after Tenant's receipt of Landlord's Operating Statement or the completion of Tenant's audit regarding the Operating Expenses and/or Taxes and/or Park Expenses for the calendar year in which this Lease terminates, Tenant shall pay to Landlord or shall receive from Landlord, as the case may be, an amount equal to the difference between the Operating Expenses and/or Taxes and/or Park Expenses, as finally determined, and the amount previously paid by Tenant on account thereof (prorated to the expiration date or the termination date of this Lease).

6. Payment of Rent.

(a) All rent shall be due and payable in lawful money of the United States of America at the address of Landlord set forth below Landlord's signature without deduction or offset and without prior demand or notice, unless otherwise specified herein. Monthly Base Rent and Additional Rent shall be payable monthly, in advance, on the first day of each month. Additional Rent shall be payable monthly, in advance, on the first day of each month for the entire Premises for the entire term of his Lease. Tenant's obligation to pay rent for any partial month at the commencement of the term, for any partial month immediately prior to a rental adjustment date (if the rental adjustment date is other than the first day of the calendar month), and for any partial month at the expiration or termination of the term shall be based upon the number of days in such month.

(b) If any installment of Monthly Base Rent, Additional Rent or any other sum due from Tenant is not received by Landlord within five (5) days after the same is due, Tenant shall pay to Landlord an additional sum equal to five percent (5%) of the amount overdue as a late charge. The parties agree that this late charge represents a fair and reasonable estimate of the costs that Landlord will incur by reason of the late payment by Tenant. Acceptance of any late charge shall not constitute a waiver of Tenant's default with respect to the overdue amount. Any amount not paid within ten (10) days after Tenant's receipt of written notice that such amount is due shall bear interest from the date due until paid at the lesser rate of (1) the prime rate of interest as published in the "Wall Street Journal," plus two percent (2%) or (2) the maximum rate allowed by law (the "Interest Rate"), in addition to the late payment charge.

Initials: Landlord _____ Tenant __OA__

7. Security Deposit.

(a) Tenant shall deposit with Landlord upon execution hereof the sum of Two Million Dollars (\$2,000,000.00) (the "**Security Deposit**"), as security for Tenant's faithful performance of Tenant's obligations under this Lease. If Tenant fails to pay Monthly Base Rent or Additional Rent or charges due hereunder within applicable notice and cure periods, or otherwise defaults under this Lease (as defined in Paragraph 22), Landlord may use, apply or retain all or any portion of said Security Deposit to the extent reasonably necessary to cure the default, for the payment of any amount due Landlord, and to reimburse or compensate Landlord for any liability, cost, expense, loss or damage (including reasonable attorneys' fees) which Landlord may suffer or incur by reason thereof. If Landlord uses or applies all or any portion of the Security Deposit, Tenant shall within ten (10) days after written request therefor deposit with Landlord the amount sufficient to restore the Security Deposit to the original amount required by this Lease. Landlord shall not be required to keep all or any part of the Security Deposit separate from its general accounts. In no event or circumstance shall Tenant have the right to any use of the Security Deposit and, specifically, Tenant may not use the Security Deposit as a credit or to otherwise offset any payments required hereunder, including, but not limited to, rent or any portion thereof. Tenant waives (i) California Civil Code Section 1950.7 and any and all other laws, rules and regulations applicable to security deposits in the commercial context ("**Security Deposit Laws**"), and (ii) any and all rights, duties and obligations either party may now have, or in the future will have, relating to or arising from the Security Deposit Laws. Notwithstanding anything to the contrary herein, the Security Deposit may be retained and applied by Landlord (a) to offset rent which is unpaid either before or after termination of this Lease, and (b) against other damages suffered by Landlord before or after termination of this Lease. No part of the Security Deposit shall be considered to be held in trust, to bear interest or other increment for its use, or to be prepayment for any moneys to be paid by Tenant under this Lease.

(b) Subject to the remaining terms of this Section 7, and provided that (i) Tenant has not been in default of this Lease beyond the applicable notice and cure period and (ii) no amount of Security Deposit has previously been applied to cure any default of Tenant under this Lease (the conditions set forth in (i) and (ii) being referred to as the “**Conditions**”), then (y) upon the expiration of the thirty-sixth (36th) month of the Term, the then-current Security Deposit shall be reduced such that the Security Deposit shall be equal to One Million Five Hundred Thousand and 00/100 Dollars (\$1,500,000.00) and (z) upon the expiration of the forty-eighth (48th) month of the Term, the then-current Security Deposit shall be reduced such that the Security Deposit shall be equal to Seven Hundred Fifty Thousand and 00/100 Dollars (\$750,000.00). If Tenant is entitled to a reduction in the Security Deposit, Tenant shall provide Landlord with written notice requesting that the Security Deposit be reduced as provided above (the “**Security Reduction Notice**”). If Tenant provides Landlord with a Security Reduction Notice, and Tenant is entitled to reduce the Security Deposit as provided herein, Landlord shall refund the applicable portion of the Security Deposit to Tenant within thirty (30) days after the later to occur of the date upon which Tenant is entitled to a reduction in the Security Deposit as provided above or Landlord’s receipt of the Security Reduction Notice.

(c) Provided the Conditions and the Financial Condition (as hereinafter defined) are satisfied, upon written request of Tenant given at any time after the satisfaction of the Financial Condition, the then-current Security Deposit shall be reduced such that the new Security Deposit amount will be equal to Seven Hundred Fifty Thousand and 00/100 Dollars (\$750,000.00). The “**Financial Condition**” shall mean that Tenant is traded on a public exchange and has maintained a market capitalization in excess of One Billion Dollars for a period of one (1) quarter (i.e. three (3) months) prior to the date Tenant requests a reduction in the Security Deposit and as of the effective date of any such reduction.

8. Use. Tenant may only use and occupy the Premises for office, laboratory (including but not limited to CLIA laboratories), research and development, manufacture and development of pharmaceutical and biotechnology products and ancillary administrative uses directly related thereto to the extent permitted by applicable zoning ordinances, the covenants, conditions, and restrictions for Union City Labs and which are approved by Landlord in writing, and for no other use or purpose without Landlord’s prior written consent; provided, that the use of the Premises for the manufacture of integrated circuits is expressly prohibited. Any use of the Premises by Tenant or by any sublessee or assignee approved by Landlord pursuant to Paragraph 17 shall comply with the provisions of this Paragraph 8.

9. Hazardous Materials.

(a) The term “**Hazardous Materials**” as used in this Lease shall include any substance defined or regulated as radioactive, flammable, toxic, a biohazard, medical waste, “hazardous material”, “extremely hazardous material”, “hazardous waste”, “hazardous substance”, “toxic substance,” “industrial process waste,” or “special waste” in any Environmental Laws as hereafter defined. Hazardous Materials shall include, but not be limited to, petroleum, gasoline, natural gas, natural gas liquids, liquefied natural gas, synthetic gas, and/or crude oil or any products, by-products or fractions thereof.

(b) Tenant shall not engage in any activity in or on the Premises or the Property without the express prior written consent of Landlord, as provided below and timely compliance (at Tenant’s expense) with all Environmental Laws. “**Reportable Use**” shall mean (i) the installation or use of any above or below ground storage tank, (ii) the generation, possession, storage, use, transportation, or disposal of Hazardous Materials that require a permit from, or with respect to

which a report, notice, registration or business plan is required to be filed with, any governmental authority, and/or (iii) the presence at the Premises or the Property of Hazardous Materials with respect to which any Environmental Law requires that a notice be given to persons entering or occupying the Premises, or the Property, or neighboring properties. Notwithstanding the foregoing, Tenant may use the Hazardous Materials on the Premises that are listed on Exhibit E attached hereto and incorporated by reference herein, and any ordinary and customary office supplies and cleaning materials so long as such use is in compliance with all Environmental Laws, and does not expose the Premises, or the Property, or neighboring property to any unusual or atypical risk of contamination or damage or expose Landlord to any liability therefor. If Tenant's use of Hazardous Materials changes during the Term of this Lease, Tenant shall complete, execute, and deliver to Landlord, a Hazardous Materials Disclosure Certificate ("**HazMat Certificate**"), a copy of which is attached as Exhibit G, attached hereto and incorporated by reference herein, describing Tenant's present use of the Hazardous Materials on the Premises, and any other reasonably necessary documents as requested by Landlord. The HazMat Certificate required hereunder shall be in substantially the form as that which is attached hereto as Exhibit G. Landlord's consent may be withheld in Landlord's sole and absolute discretion with respect to any changes to the types and/or quantities of Hazardous Materials specified in the most recent HazMat Certificate; provided, however, Landlord's consent shall not be unreasonably withheld with respect to any types and/or quantities of Hazardous Materials as adjusted on a square footage basis that Landlord has approved for use by any other tenant in Union City Labs or has been approved for use by tenants engaged in clinical laboratory uses in other similarly situated development projects in the Bay Area with respect to such proposed types of Hazardous Materials in the same quantity proposed by Tenant (adjusted on a square footage basis) provided that Tenant complies with any requirements satisfied by such other tenants in connection with such use and any requirements under Environmental Laws. In addition, Landlord may condition its consent to any Reportable Use upon receiving such additional assurances as Landlord reasonably deems necessary to protect itself, the public, the Premises and the Property, and/or the environment against damage, contamination, injury and/or liability, including, but not limited to, the installation (and removal on or before Lease expiration or termination) of any protective modifications installed by Tenant (such as concrete encasements).

(c) "**Environmental Laws**" shall mean and include any Federal, State, or local statute, law, ordinance, code, rule, regulation, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, element, compound, mixture or material, as now or at any time hereafter in effect including, without limitation, California Health and Safety Code §§25100 et seq., §§25300 et seq., Sections 25281(f) and 25501 of the California Health and Safety Code, Section 13050 of the Water Code, the Federal Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. §§9601 et seq. ("**CERCLA**"), the Superfund Amendments and Reauthorization Act, 42 U.S.C. §§9601 et seq., the Federal Toxic Substances Control Act, 15 U.S.C. §§2601 et seq., the Federal Resource Conservation and Recovery Act as amended, 42 U.S.C. §§6901 et seq., the Federal Hazardous Material Transportation Act, 49 U.S.C. §§1801 et seq., the Federal Clean Air Act, 42 U.S.C. §7401 et seq., the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq., the River and Harbors Act of 1899, 33 U.S.C. §§401 et seq., and all rules and regulations of the EPA, the California Environmental Protection Agency, or any other state or federal department, board or any other agency or governmental board or entity having jurisdiction over the environment, as any of the foregoing have been, or are hereafter amended.

(d) If Tenant knows, or has reasonable cause to believe, that Hazardous Materials have come to be located in, on, under or about the Premises or the Property that constitutes a Reportable Use, other than as previously consented to by Landlord, Tenant shall immediately give written notice of such fact to Landlord and provide Landlord with a copy of any report, notice, claim or other documentation which it has concerning the presence of such Hazardous Materials.

(e) Tenant and Tenant's agents, employees, and contractors shall not cause any Hazardous Materials to be discharged or released into the Building or into the plumbing or sewage system of the Building or into or onto the Land underlying or adjacent to the Building in violation of any Environmental Laws. Tenant shall promptly, at Tenant's expense, take all investigatory and/or remedial action reasonably recommended, whether or not formally ordered or required, for the cleanup of any contamination in violation of Environmental Laws or the terms of this Lease caused by Tenant or caused by any of Tenant's employees, agents, or contractors, and for the maintenance, security and/or monitoring of the Premises, the Property, or neighboring properties if such contamination is caused by a release or emission of any Hazardous Materials by Tenant or by any of Tenant's employees, agents, or contractors.

(f) Tenant shall indemnify, defend and hold Landlord and its agents, employees, and lenders and the Premises and the Property harmless from any and all claims, damages, fines, judgments, penalties, costs, liabilities or losses (including, without limitation, any and all sums paid for settlement of claims, attorneys' fees, consultant and expert fees) arising during or after the term of this Lease out of or involving any Hazardous Materials brought on to the Premises, the Property, or Union City Labs by or for Tenant or by anyone under Tenant's control in violation of Environmental Laws or the terms of this Lease. Tenant's obligations under this Paragraph 9(f) shall include, but not be limited to, the effects of any contamination or injury to person, property or the environment created or suffered by Tenant, and the cost of investigation (including consultants' and attorneys' fees and testing), removal, remediation, restoration and/or abatement thereof, or of any contamination therein involved, as required by Environmental Laws, and shall survive the expiration or earlier termination of this Lease. No termination, cancellation or release agreement entered into by Landlord and Tenant shall release Tenant from its obligations under this Lease with respect to Hazardous Materials, unless specifically so agreed by Landlord in writing at the time of such agreement.

(g) Notwithstanding anything to the contrary, Tenant shall have no obligation, responsibility or liability with respect to Hazardous Materials on, within, about or under the Premises prior to the earlier of the Commencement Date and any Early Entry, except to the extent disturbed or exacerbated by Tenant.

10. Taxes on Tenant's Property. Tenant shall pay before delinquency any and all taxes, assessments, license fees, and public charges levied, assessed, or imposed and which become payable during the Term and any extension thereof upon Tenant's equipment, fixtures, furniture, and personal property installed or located on the Premises.

11. Insurance.

(a) Types of Insurance: Tenant shall maintain in full force and effect at all times during the Term of this Lease, at Tenant's sole cost and expense, for the protection of Tenant and Landlord, as their interests may appear, policies of insurance issued by a carrier or carriers reasonably acceptable to Landlord and its lender(s) which afford the following coverages:

(i) Commercial general liability insurance naming the Landlord as an additional insured against any and all claims for bodily injury and property damage occurring in, or about the Premises arising out of Tenant's use and occupancy of the Premises. Such insurance shall have a combined single limit of not less than Two Million Dollars (\$2,000,000) per occurrence with a Four Million Dollar (\$4,000,000) aggregate limit and excess umbrella liability insurance in the amount of Five Million Dollars (\$5,000,000). Such liability insurance shall be primary and not contributing to any insurance available to Landlord and Landlord's insurance shall be in excess thereto. In no event shall the limits of such insurance be considered as limiting the liability of Tenant under this Lease.

(ii) Personal property insurance insuring all equipment, trade fixtures, inventory, fixtures, and personal property located on or in the Premises for perils covered by the causes of loss—special form (all risk) and in addition, coverage for earthquake sprinkler leakage, and boiler and machinery (if applicable). Such insurance shall be written on a replacement cost basis in an amount equal to one hundred percent (100%) of the full replacement value of the aggregate of the foregoing. Any coverage not purchased by Tenant to protect its property is done at Tenant's sole risk and Landlord shall not procure any insurance or be responsible for damages to Tenant's property if Tenant decides to not purchase certain levels and types of coverage.

(iii) Business interruption and extra expense insurance in such amounts to reimburse Tenant for direct or indirect loss attributable to all perils commonly insured against by prudent Tenants or attributable to prevention of access to the Premises or the Building as result of such perils.

(iv) Workers' compensation insurance in accordance with statutory law and employers' liability insurance with a limit of not less than \$1,000,000 per accident, \$1,000,000 disease, policy limit and \$1,000,000 disease limit each employee.

(v) Site liability pollution policy insuring the Premises, with a minimum amount limit of \$1,000,000 per occurrence under an annual or multi-year policy.

(vi) Comprehensive automobile liability insurance: a combined single limit of not less than \$2,000,000 per occurrence and insuring Tenant against liability for claims arising out of the ownership, maintenance, or use of any owned, hired or non-owned automobiles;

(vii) Such other insurance as required by Landlord which is consistent with the types of insurance required to be maintained by similar situated tenants, with similar use in the Union City, Newark and Fremont areas or required by Landlord's beneficiaries or mortgagees of any deed of trust or mortgage encumbering the Premises.

(b) Insurance Policies: The policies required to be maintained by Tenant shall be with companies rated A-VIII or better by A.M. Best. Insurers shall be licensed to do business in the state in which the Premises are located and domiciled in the USA. Any deductible amounts under any insurance policies required hereunder shall not exceed \$25,000. Certificates of insurance including any and all endorsements required herein for all insurance maintained by Tenant shall

be delivered to Landlord prior to the commencement date or prior to any early access to the Premises in accordance with Section 3 above and at least ten (10) days prior to the policy expiration date. Tenant shall have the right to provide insurance coverage which it is obligated to carry pursuant to the terms hereof in a blanket policy, provided such blanket policy expressly affords coverage to the Premises and to Landlord as required by this Lease. Each policy of insurance shall provide notification to Landlord at least thirty (30) days prior to any cancellation or modification to reduce the insurance coverage and at least ten (10) days for non-payment of premium.

(c) Additional Insureds and Coverage: Landlord, any property management company and/or agent of Landlord for the Premises, the Building, the Land or the Park, an any lender(s) of Landlord having a lien against the Premises, the Building, the Land or the Park shall be named as additional insureds under all of the liability policies required in Paragraph 11 above. Additionally, such policies shall provide for severability of interest. All insurance to be maintained by Tenant shall, except for workers' compensation and employer's liability insurance, be primary, without right of contribution from insurance maintained by Landlord. Any umbrella/excess liability policy (which shall be in "following form") shall provide that if the underlying aggregate is exhausted, the excess coverage will drop down as primary insurance. The limits of insurance maintained by Tenant shall not limit Tenant's liability under this Lease. It is the parties' intention that the insurance to be procured and maintained by Tenant as required herein shall provide coverage for any and all damage or injury arising from or related to Tenant's operations of its business and/or Tenant's or Tenant's Representatives' use of the Premises and/or any of the areas within the Park, whether such events occur within the Premises (as described in Exhibit A hereto) or in any other areas of the Park. It is not contemplated or anticipated by the parties that the aforementioned risks of loss be borne by Landlord's insurance carriers, rather it is contemplated and anticipated by Landlord and Tenant that such risks of loss be borne by Tenant's insurance carriers pursuant to the insurance policies procured and maintained by Tenant as required herein.

(d) Failure of Tenant to Purchase and Maintain Insurance: In the event Tenant does not purchase the insurance required in this Lease or keep the same in full force and effect throughout the Term of this Lease (including any renewals or extensions), Landlord may, but without obligation to do so, purchase the necessary insurance and pay the premiums therefor. If Landlord so elects to purchase such insurance, Tenant shall promptly pay to Landlord as Additional Rent, the amount so paid by Landlord, upon Landlord's demand therefor. In addition, Landlord may recover from Tenant and Tenant agrees to pay, as Additional Rent, any and all reasonable expenses and damages which Landlord may sustain by reason of Tenant's failure to obtain and maintain such insurance.

(e) Landlord's Insurance: Landlord shall obtain and carry in Landlord's name, as insured, as an Operating Expense of the Property to the extent provided in Paragraph 6, during the Term, "all risk" property insurance coverage (with rental loss insurance coverage for a period of one (1) year), flood insurance, public liability and property damage insurance, and insurance against such other risks or casualties as Landlord shall reasonably determine, including, but not limited to, insurance coverages required of Landlord by the beneficiary of any deed of trust which encumbers the Premises, including earthquake insurance coverage insuring Landlord's interest in the Premises (including any other leasehold improvements to the Premises constructed by Landlord or by Tenant with Landlord's prior written approval) in an amount not less than the full replacement cost of the Building. The proceeds of any such insurance shall be payable solely to Landlord and Tenant shall have no right or interest therein. Landlord shall have no obligation to insure against loss by Tenant to Tenant's equipment, fixtures, furniture, inventory, or other personal property of Tenant in or about the Premises occurring from any cause whatsoever.

(f) Waiver of Subrogation: Notwithstanding anything to the contrary contained in this Lease, the parties release each other, and their respective authorized representatives, employees, officers, directors, shareholders, managers, members, trustees, beneficiaries, assignees, subtenants, invitees, successors, agents, contractors and property managers, from any claims for damage to any person or to the Premises or the Property and to the fixtures, personal property, leasehold improvements and alterations of either Landlord or Tenant in or on the Premises or the Property, to the extent that are caused by or result from risks required by this Lease to be insured against (or actually insured against) under any property insurance policies carried by the parties and such policy is in force at the time of any such damage, whichever is greater. This waiver applies whether or not the loss is due to the negligent acts or omissions of Landlord or Tenant or their respective authorized representatives, employees, officers, directors, shareholders, managers, members, trustees, beneficiaries, assignees, subtenants, invitees, successors, agents, contractors and property managers. Subject to the foregoing, this release and waiver shall be complete and total even if such loss or damage may have been caused by the negligence of the other party, its managers, members, employees, agents, contractors, property managers or invitees. The parties covenant that the insurance policies required to be maintained by each of them under this Lease will contain waiver of subrogation endorsements.

12. Indemnification.

(a) Tenant shall indemnify, defend, and hold harmless Landlord from claims, suits, actions, or liabilities for personal injury, death or for loss or damage to property that arise from (1) any activity, work, or thing done or permitted by Tenant in or about the Premises, the Property or the Park, (2) bodily injury or damage to property which arises in or about the Property to the extent the injury or damage to property results from the negligent acts or omissions of Tenant, its employees, agents or contractors, and (3) based on any event of default by Tenant in the performance of any obligation on Tenant's part to be performed under this Lease. Tenant also waives all claims against Landlord and its employees, agents and contractors for damages to property, or to goods, wares, and merchandise stored in, upon, or about the Premises or the Property, and for injuries to persons in, upon, or about the Premises or the Property from any cause arising at any time, except to the extent covered by an express indemnity provision of this Lease or caused by the active negligence or willful misconduct of Landlord or its employees, agents or contractors.

(b) In the absence of comparative or concurrent negligence on the part of Landlord, their respective agents, affiliates, and subsidiaries, or their respective officers, directors, members, employees or contractors, the foregoing indemnity by Tenant shall also include reasonable costs, expenses and attorneys' fees incurred in connection with any indemnified claim or incurred by the Landlord in successfully establishing the right to indemnity. The Tenant shall have the right to assume the defense of any claim subject to the foregoing indemnities with counsel reasonably satisfactory to the indemnitee.

The foregoing indemnity shall survive the expiration or earlier termination of this Lease.

When the claim is caused by the joint negligence or willful misconduct of Tenant and Landlord or by the Tenant and a third party (except Tenant's agents, officers, employees or invitees), the Tenant's duty to indemnify and defend shall be proportionate to the it's allocable share of joint negligence or willful misconduct.

(c) Landlord shall not be liable to Tenant for any damage because of any act or negligence of any other occupant of the Building or any other owner or occupant of adjoining or contiguous property, nor for overflow, breakage, or leakage of water, steam, gas, or electricity from pipes, wires, or otherwise in the Premises or the Building, except to the extent caused by the gross negligence or willful misconduct of Landlord or Landlord's employees, agents, or contractors. Except as otherwise provided herein, Tenant will pay for damage to the Premises or the Property caused by the misuse or neglect of the Premises or the Property by Tenant or its employees, agents, or contractors, including, but not limited to, the breakage of glass in the Building.

13. Landlord Improvements; Tenant Improvements.

(a) Landlord, at its cost, shall cause to be constructed the improvements and modifications described on Exhibit F-1 attached hereto (the "**Landlord Improvements**").

(b) Landlord shall cause to be constructed the interior tenant improvements and modifications to the Premises described in the Work Letter (the "**Tenant Improvements**") in accordance with the Work Letter attached hereto as Exhibit F.

14. Maintenance and Repairs; Alterations; Surrender and Restoration.

(a) Landlord shall, at Landlord's sole expense, keep in good order, condition, and repair and replace when necessary, the structural elements of the roof (excluding the roof membrane which Landlord shall maintain, but the cost of which shall be included as an Operating Expense as permitted under Paragraph 5), the structural elements of the foundation and exterior walls (except the interior faces thereof) of the Building, and other structural elements of the Building and the Property as "structural elements" are defined in building codes applicable to the Building, excluding any alterations, structural or otherwise, made by Tenant to the Building which are not approved in writing by Landlord prior to the construction or installation thereof by Tenant. Landlord shall perform and construct, and Tenant shall not be responsible for performing or constructing, any repairs, maintenance, or improvements (1) required as a result of any casualty damage, which shall be subject to Paragraph 20 below, or as a result of any taking pursuant to the exercise of the power of eminent domain, or (2) for which Landlord has a right of reimbursement from third parties based on construction or other warranties, contractor guarantees, or insurance claims.

(b) Landlord shall provide or cause to be provided and shall supervise the performance of, as an Operating Expense of the Property to the extent permitted under Paragraph 5 hereof, all services and work relating to the operation, maintenance, repair, and replacement, as needed, of the Property, including the HVAC, mechanical, electrical, and plumbing systems in the Building; the interior of the Building; the roof membrane; the outside areas of the Property; landscaping, tree trimming, resurfacing and restriping of the parking lot, repairing and maintaining the walkways; exterior building painting, exterior building lighting, parking lot lighting, and exterior security patrol. In the event Tenant provides Landlord with written notice of the need for any repairs, Landlord shall commence any such repairs promptly following receipt by Landlord of such notice and Landlord shall diligently prosecute such repairs to completion.

(c) Subject to the foregoing and except as provided elsewhere in this Lease, Tenant shall, at Tenant's sole cost and expense, at all times use, occupy and keep the Premises in a manner which keeps the Premises in as good and safe order, condition, and repair as received, reasonable wear and tear excepted. Without limiting the generality of the foregoing, Tenant shall be solely responsible for maintaining, repairing and replacing (a) all electrical wiring and equipment serving the Premises, (b) all interior lighting (including, without limitation, light bulbs and/or ballasts) and exterior lighting serving the Premises or adjacent to the Premises, (c) all glass, windows, window frames, window casements, skylights, interior and exterior doors, door frames and door closers, (d) all roll-up doors, ramps and dock equipment, including without limitation, dock bumpers, dock plates, dock seals, dock levelers and dock lights serving the Premises, (e) all tenant signage, (f) security systems within the Premises, (g) all partitions, fixtures, equipment, interior painting, and interior walls and floors of the Premises and every part thereof (including, without limitation, any demising walls contiguous to any portion of the Premises). Landlord shall execute and maintain in full force and effect throughout the term as an Operating Expense of the Property to the extent permitted under Paragraph 5 a service contract with a recognized air conditioning service company. Landlord may, if Landlord determines that it is necessary to do so, obtain on a semi-annual basis an inspection report of the HVAC system from a separate HVAC service firm designated by Landlord for the purpose of monitoring the performance of the HVAC maintenance and repair work performed by the HVAC service firm which performs the regular repair and maintenance. The cost of such inspection report shall be an Operating Expense pursuant to Paragraph 5. Subject to the release of claims and waiver of subrogation contained in Paragraphs 11(c) and 11(d), if Landlord is required to make any repairs to the Property by reason of Tenant's negligent acts or omissions, Landlord may add the cost of such repairs to the next installment of rent which shall thereafter become due, and Tenant shall promptly pay the same upon receipt of an invoice therefor.

(d) Tenant may, from time to time, at its own cost and expense and without the consent of Landlord make nonstructural alterations to the interior of the Premises which do not affect the mechanical, electrical, plumbing or other utility systems of the Building, the cost of which in any one instance is Fifty Thousand Dollars (\$50,000) or less, and the aggregate cost of all such work during the Term of this Lease does not exceed Two Hundred Fifty Thousand Dollars (\$250,000), provided Tenant first notifies Landlord in writing of any such nonstructural alterations (collectively, "**Cosmetic Alterations**"). Otherwise, Tenant shall not make any additional alterations, improvements, or additions to the Premises without delivering to Landlord a complete set of plans and specifications for such work, obtaining and delivering copies to Landlord of all permits or other governmental approvals required for such work and obtaining Landlord's prior written consent thereto. All alterations and additions shall be installed by a licensed contractor approved by Landlord, at Tenant's sole expense in compliance with all applicable laws, rules, regulations and ordinances. Tenant shall keep the Premises and the Property on which the Premises are situated free from any liens arising out of any work performed, materials furnished or obligations incurred by or on behalf of Tenant. If any nonstructural alterations to the interior of the Premises exceed Fifty Thousand Dollars (\$50,000) in cost in any one instance, or exceed the aggregate cost of Two Hundred Fifty Thousand Dollars (\$250,000) during the Term of this Lease, Tenant shall employ, at Tenant's expense, Tarlton Properties, Inc. as construction manager for such

alterations at a fee equal to four percent (4%) of the hard construction costs (i.e., the amounts paid to any general contractor, subcontractors, vendors, and suppliers for labor and materials for the construction of the alterations or improvements). Landlord may condition its consent to, among other things, Tenant agreeing in writing to remove any such alterations prior to the expiration of the Lease term and Tenant agreeing to restore the Premises to its condition prior to such alterations at Tenant's expense. Upon Tenant's written request, Landlord shall advise Tenant in writing at the time consent is granted (or with respect to a Cosmetic Alterations within ten (10) days from notice if requested by Tenant in such notice) whether Landlord requires Tenant to remove any alterations from the Premises prior to the expiration or sooner termination of the Lease. Tenant shall have no obligation to remove the Tenant Improvements completed pursuant to the terms of the Work Letter nor the Landlord Improvements.

All alterations, trade fixtures and personal property installed in the Premises solely at Tenant's expense shall during the term of this Lease remain Tenant's property and Tenant shall be entitled to all depreciation, amortization and other tax benefits with respect thereto (excluding the Tenant Improvements).

(e) Tenant shall, at Tenant's sole cost and expense, fully, diligently and in a timely manner, comply with all present and future "**Laws**," which term is used in this Lease to mean all laws, rules, regulations, ordinances, directives, orders, covenants, permits of all governmental agencies and authorities, easements and restrictions of record, the requirements of any applicable fire insurance underwriter or rating bureau or board of fire underwriters, relating in any manner to the Premises and/or Tenant's use or occupancy of the Premises (including but not limited to matters pertaining to industrial hygiene, environmental conditions on, in, under or about the Premises, including soil and groundwater conditions, subject to the provisions of Paragraph 9 hereof, and the use, generation, manufacture, production, installation, maintenance, removal, transportation, storage, spill, or release of any Hazardous Materials (which are addressed in Paragraph 9 hereof)), now in effect or which may hereafter come into effect. Additionally, Tenant shall be solely responsible for the payment of all costs, fees and expenses associated with any modifications, improvements or alterations to the Premises, Building, the Common Areas and/or the Park occasioned by the enactment of, or changes to, any Laws arising from Tenant's particular use of the Premises or alterations, improvements or additions made to the Premises by Tenant or at Tenant's request regardless of when such Laws became effective. Tenant shall, within five (5) days after receipt of Landlord's written request, provide Landlord with copies of all documents and information, including but not limited to permits, registrations, manifests, applications, reports and certificates, evidencing Tenant's compliance with any Laws specified by Landlord, and shall immediately upon receipt, notify Landlord in writing (with copies of any documents involved) of any threatened or actual claim, notice, citation, warning, complaint or report pertaining to or involving failure by Tenant or the Premises to comply with any Laws. Notwithstanding the foregoing, any structural changes or repairs or other changes or repairs to the Property of any nature which would be considered a capital expenditure under generally accepted accounting principles to the Premises shall be made by Landlord at Tenant's expense if such structural repairs or changes are required by reason of the specific nature of the use of the Premises by Tenant or due to alterations by or on behalf of Tenant. If such changes or repairs are not required by reason of the specific nature of Tenant's use of the Premises or alterations by or on behalf of Tenant and are capital expenditures, the cost of such changes or repairs shall be treated as an Operating Expense and amortized in accordance with the provisions of Paragraph 5(b). Notwithstanding anything to the contrary, Tenant shall have no liability or obligation to correct a violation of Laws, which exist in the Premises as of the Commencement Date, except to the extent expressly set forth in this Section.

(f) Subject to Paragraph 31, Landlord, Landlord's agents, employees, contractors and designated representatives, and the holders of any mortgages, deeds of trust or ground leases on the Premises ("**Lenders**") shall have the right to enter the Premises at any time in the case of an emergency, and otherwise at reasonable times after at least one (1) business day prior notice to Tenant, for the purpose of inspecting the condition of the Premises and for verifying compliance by Tenant with this Lease and all Laws, and Landlord shall be entitled to employ experts and/or consultants in connection therewith to advise Landlord with respect to Tenant's activities, including but not limited to Tenant's installation, operation, use, monitoring, maintenance, or removal of any Hazardous Substance on or from the Premises. The costs and expenses of any such inspections shall be paid by the party requesting same, unless a violation of Laws or a contamination, caused, directly or indirectly, by Tenant, is found to exist or to be imminent, or unless the inspection is requested or ordered by a governmental authority as the result of any such existing or imminent violation or contamination. In such case, Tenant shall upon request reimburse Landlord or Landlord's Lender, as the case may be, for the costs and expenses of such inspections.

(g) During the term of this Lease, Tenant shall comply, at Tenant's expense, with all of the covenants, conditions, and restrictions affecting the Premises which are recorded in the Official Records of Alameda County, California, and which are in effect as of the date of this Lease.

(h) Tenant shall surrender the Premises by the last day of the lease Term or any earlier termination date, with all of the improvements to the Premises, parts, and surfaces thereof clean and free of debris and in as good operating order, condition, and state of repair as received, ordinary wear and tear, casualty and condemnation excepted. Tenant's failure to surrender the Premises in accordance with the terms and conditions of this Lease, including, without limitation, this Paragraph 14(h) shall be deemed to be a material default under the Lease. "**Ordinary wear and tear**" shall not include any damage or deterioration that would have been prevented by good maintenance practice or by Tenant performing all of its obligations under this Lease. Notwithstanding the foregoing, prior to the last day of the Term (or earlier termination of the Lease), Tenant shall (i) restore all walls in the Premises to the same condition existing immediately following completion of the Tenant Improvements and Landlord Improvements, including patching and sanding all holes to match the original texture of the walls and painting; (ii) replace any broken, chipped, stained or discolored ceiling tiles in the Premises to match the existing tiles; and (iii) vacuum and steam clean all carpets and remove all stains, or, to the extent any stains cannot be removed, then Tenant shall replace the entire carpet with the same color (if applicable) existing as of the Commencement Date. In addition to the foregoing, the obligations of Tenant shall include the repair of any damage occasioned by the installation, maintenance, or removal of Tenant's trade fixtures, furnishings, equipment, and alterations, and the restoration by Tenant of the Premises to its condition upon completion of the Tenant Improvements and Landlord Improvements (Tenant shall not be required to remove any of the Tenant Improvements nor Landlord Improvements) pursuant to Paragraph 14(d) above. Subject to the foregoing, upon the expiration or sooner termination of this Lease all alterations, fixtures and improvements to the Premises, whether made by Landlord or installed by Tenant at Tenant's expense, shall be surrendered by Tenant with the Premises and shall become the property of Landlord; provided,

however, that Tenant's furniture and other personal property, not provided by or paid for by Landlord and not permanently affixed to the Premises which can be removed without materially damaging the Premises may be removed by Tenant. Tenant shall repair to Landlord's reasonable satisfaction all damage to the Premises occasioned by removal of Tenant's property. Prior to the expiration of the term of this Lease or any earlier termination date, Tenant shall, at Tenant's expense, obtain written closure reports from the Alameda County Department of Environmental Health and comply with any and all other applicable municipal, county, state and federal statutes, laws, ordinances and regulations governing and regulating any Hazardous Materials used, stored, or released by Tenant on or about the Premises ("**Hazardous Materials Authorities**"). Written closure reports shall provide written certification that all Hazardous Materials have been removed from the Premises and that no further action is required in connection with the closure of the Premises. Any removal and remediation of Hazardous Materials by Tenant shall be certified in writing as (1) complete and (2) having been properly performed, by the Alameda County Department of Environmental Health and any other applicable Hazardous Materials Authorities and a copy of such written certifications shall be delivered by Tenant to Landlord no later than the last day of the Term of this Lease.

(i) Tenant waives all right to make repairs at the expense of Landlord, or to deduct the costs thereof from the rent, and Tenant waives all rights under Section 1941 and 1942 of the Civil Code of the State of California.

(j) Compliance with Americans with Disabilities Act: Landlord and Tenant hereby agree and acknowledge that the Premises, the Building and/or the Park may be subject to the requirements of the Americans with Disabilities Act, a federal law codified at 42 U.S.C. 12101 et seq, including, but not limited to Title III thereof, all regulations and guidelines related thereto, together with any and all laws, rules, regulations, ordinances, codes and statutes now or hereafter enacted by local or state agencies having jurisdiction thereof, including all requirements of Title 24 of the State of California, as the same may be in effect on the date of this Lease and may be hereafter modified, amended or supplemented (collectively, the "**ADA**"). Any Tenant Improvements to be constructed hereunder shall be in compliance with the requirements of the ADA, and all costs incurred for purposes of compliance therewith shall be a part of and included in the costs of the Tenant Improvements. Tenant shall be solely responsible for conducting its own independent investigation of this matter and for ensuring that the design of all Tenant Improvements strictly comply with all requirements of the ADA. Subject to reimbursement pursuant to Paragraph 6 of the Lease, if any barrier removal work or other work is required to the Building, the Common Areas or the Park under the ADA, then such work shall be the responsibility of Landlord; provided, if such work is required under the ADA as a result of Tenant's specific use of the Premises or any work or alteration made to the Premises by or on behalf of Tenant, then such work shall be performed by Landlord at the sole cost and expense of Tenant. Except as otherwise expressly provided in this Lease, Tenant shall be responsible at its sole cost and expense for fully and faithfully complying with all applicable requirements of the ADA, including without limitation, not discriminating against any disabled persons in the operation of Tenant's business in or about the Premises, and offering or otherwise providing auxiliary aids and services as, and when, required by the ADA. Within ten (10) days after receipt, Landlord and Tenant shall advise the other party in writing, and provide the other with copies of (as applicable), any notices alleging violation of the ADA relating to any portion of the Premises or the Building; any claims made or threatened in writing regarding noncompliance with the ADA and relating to any portion of the Premises or

the Building; or any governmental or regulatory actions or investigations instituted or threatened regarding noncompliance with the ADA and relating to any portion of the Premises or the Building. Tenant shall and hereby agrees to protect, defend (with counsel acceptable to Landlord) and hold Landlord and the other Indemnitees harmless and indemnify the Indemnitees from and against all liabilities, damages, claims, losses, penalties, judgments, charges and expenses (including reasonable attorneys' fees, costs of court and expenses necessary in the prosecution or defense of any litigation including the enforcement of this provision) arising from or in any way related to, directly or indirectly, Tenant's or Tenant's Representatives' violation or alleged violation of the ADA. Tenant agrees that the obligations of Tenant herein shall survive the expiration or earlier termination of this Lease.

(k) CASp Disclosure: For purposes of Section 1938 of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges, that (check one):

☐ To Landlord's actual knowledge, the Premises have undergone inspection by a Certified Access Specialist (CASp).

If the Premises have undergone inspection by a CASp prior to the execution of this Lease and, to the best of Landlord's knowledge, there have been no modifications or alterations completed or commenced between the date of the inspection and the date of this Lease which have impacted the Premises' compliance with construction-related accessibility standards, Section 1938 requires Landlord to provide to Tenant, prior to execution of this Lease, a copy of any report prepared by the CASp. If, prior to the date of this Lease, the Premises were issued an inspection report by a CASp indicating that it meets applicable standards, as defined in paragraph (4) of subdivision (a) of California Civil Code Section 55.52, Landlord is required to provide a copy of the current disability access inspection certificate and any inspection report to Tenant that was not already provided pursuant to the foregoing sentence, within seven (7) days of the date of the execution of this Lease.

☒ To Landlord's actual knowledge, the Premises have not undergone inspection by a CASp.

or

☐ To Landlord's actual knowledge, the Premises have undergone inspection by a CASp but, to the best of Landlord's knowledge, there have been intervening modifications or alterations completed or commenced which have impacted the Premises compliance with construction related accessibility standards.

California Civil Code Section 1938 states:

"A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or Landlord may not prohibit the Tenant or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the Tenant, if requested by the Tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises."

Notwithstanding anything to the contrary in this Lease, Landlord and Tenant hereby agree that, during the Term of this Lease, as the same may be extended, Tenant shall be responsible for (i) the payment of the fee for any CASp inspection that Tenant desires, and (ii) making, at Tenant's cost, any repairs necessary to correct violations of construction-related accessibility standards within the Premises provided that such repairs shall be in accordance with the terms of the Lease (as amended). Tenant hereby agrees that: any CASp inspecting the Premises shall be selected by Landlord; Tenant shall promptly deliver to Landlord any CASp report regarding the Premises obtained by Tenant; and Tenant shall keep information contained in any CASp report regarding the Premises confidential, except as may be necessary for Tenant or its agents to complete any repairs or correct violations with respect to the Premises that Tenant agrees to undertake. Tenant shall have no right to cancel or terminate the Lease (as amended) due to violations of construction-related accessibility standards within the Premises identified in a CASp report obtained during the Term of the Lease (as may be extended).

(l) Landlord's Failure to Perform Repair and Maintenance Obligations: Tenant has advised Landlord that Tenant must maintain certain CLIA certifications relating to the Permitted Use of the Premises and that if Landlord fails to complete necessary repairs and/or maintenance to the Building that Landlord is obligated to perform under the terms and conditions of this Lease, such failure may invalidate Tenant's certification (the **"Certification"**). Landlord shall have no liability to Tenant arising out of or in connection with Tenant's inability to obtain or maintain such Certification. Notwithstanding any provision set forth in this Lease to the contrary, if Tenant provides written notice to Landlord (the **"First Notice"**) of necessary repair and/or maintenance to the Premises that Landlord is obligated to perform under Section 14 of this Lease which are critical to Tenant's maintenance of the Certification necessary for the Permitted Use of the Premises, and Landlord thereafter fails to perform such repair or maintenance within three (3) days after Landlord's receipt of the First Notice from Tenant, then Tenant may, upon an additional three (3) days' prior written notice to Landlord and opportunity to commence a cure, which notice must state in bold-faced, all capital letters **"FAILURE TO COMMENCE A CURE WITHIN 3 DAYS FOLLOWING RECEIPT OF THIS NOTICE WILL RESULT IN THE EXERCISE OF SELF-HELP RIGHTS"** (the **"Second Notice"**) perform Landlord's repair or maintenance obligations the subject of Tenant's notice. In no event shall Tenant be permitted to complete any maintenance or repair work to the structural portions of the Building or the roof of the Building or complete any replacements of a capital nature. If such action was required under the terms of the Lease to be taken by Landlord and was not taken by Landlord within such three (3) day period following Landlord's receipt of the Second Notice and Tenant elects to perform Landlord's repair or maintenance obligations, then Tenant shall (subject to the below terms and conditions) be entitled to prompt reimbursement by Landlord of Tenant's actual and reasonable costs and expenses in taking such action within thirty (30) days after the date Landlord receives a bill therefor accompanied by invoices or other documentation to substantiate the amount paid by Tenant with a reasonably particularized breakdown of its costs and expenses in connection with taking such action. In the event Tenant takes such action, Tenant shall use only those contractors used by Landlord in the Building. In the event that Tenant exercises its self-help rights under this Section

14(l), Tenant agrees to indemnify, defend and hold Landlord harmless from and against any and all claims, losses, costs, expenses, damages, awards and/or proceedings arising as a result of Tenant's performance of its self-help rights (including, without limitation, personal injuries, damage to property and interference with use or occupancy of the Property by tenants or occupants of the Property or their invitees). The obligations set forth in this Section 14(l) shall survive the expiration of the Term of this Lease or the earlier termination thereof.

15. Utilities and Services.

(a) Tenant shall contract for and pay for directly the cost of all water, sewer use, sewer discharge fees and sewer connection fees, gas, heat, electricity, refuse pickup, janitorial service, telephone and other utilities billed or metered separately to the Premises and/or for any such utility fees or use charges that are not billed or metered separately to Tenant, Tenant shall reimburse Landlord therefor pursuant to Paragraph 5 as an Operating Expense. Tenant further agrees to timely and faithfully pay, prior to delinquency, any amount, tax, charge, surcharge, assessment or imposition levied, assessed or imposed upon the Premises, or Tenant's use and occupancy thereof.

(b) Landlord shall not be liable to Tenant for any interruption or failure of any utility services to the Building or the Premises which is not caused by the active negligence or willful acts of Landlord. Tenant shall not be relieved from the performance of any covenant or agreement in this Lease because of any such failure. Landlord shall make all repairs to the Premises required to restore such services to the Premises and the cost thereof shall be payable by Tenant pursuant to Paragraph 5 as a current Operating Expense, or as a capital expense which is amortized over its useful life (together with interest thereon) as an Operating Expense in accordance with terms and conditions set forth in Paragraph 5(b); provided, however, if such failure is caused by the active negligence or willful acts of Landlord, then Landlord shall bear such costs.

(c) In the event that Tenant is permitted and elects to contract directly for the provision of electricity, gas and/or water services to the Premises with the third-party provider thereof (all in Landlord's reasonable discretion), Tenant shall within ten (10) business days following its receipt of written request from Landlord, provide Landlord with a copy of each requested invoice from the applicable utility provider. Tenant acknowledges that pursuant to California Public Resources Code Section 25402.10 and the regulations adopted pursuant thereto (collectively, the "**Energy Disclosure Requirements**"), Landlord may be required to disclose information concerning Tenant's energy usage at the Building to certain third parties, including without limitation, prospective purchasers, lenders and Tenants of the Building (the "**Tenant Energy Use Disclosure**"). Tenant hereby (A) consents to all such Tenant Energy Use Disclosures, and (B) acknowledges that Landlord shall not be required to notify Tenant of any Tenant Energy Use Disclosure. Further, Tenant hereby releases Landlord from any and all losses, costs, damages, expenses and liabilities relating to, arising out of and/or resulting from any Tenant Energy Use Disclosure. The terms of this Paragraph shall survive the expiration or earlier termination of this Lease.

16. Liens. Tenant agrees to keep the Premises free from all liens arising out of any work performed, materials furnished, or obligations incurred by Tenant. Tenant shall give Landlord at least ten (10) calendar days prior written notice before commencing any work of improvement on the Premises, the contract price for which exceeds Ten Thousand Dollars (\$10,000). Landlord shall have the right to post notices of non-responsibility with respect to any such work. If Tenant shall, in good faith, contest the validity of any such lien, claim or demand, then Tenant shall, at its sole expense, defend and protect itself, Landlord and the Property against the same, and shall pay and satisfy any such adverse judgment that may be rendered thereon before the enforcement thereof against the Landlord or the Property. If Landlord shall require, Tenant shall furnish to Landlord a surety bond satisfactory to Landlord in an amount equal to one and one-half times the amount of such contested claim or demand, indemnifying Landlord against liability for the same, as required by law for the holding of the Property free from the effect of such lien or claim.

17. Assignment and Subletting.

(a) Except as otherwise provided in this Paragraph 17, Tenant shall not assign this Lease, or any interest, voluntarily or involuntarily, and shall not sublet the Premises or any part thereof, or any right or privilege appurtenant thereto, or suffer any other person (the agents and servants of Tenant excepted) to occupy or use the Premises, or any portion thereof, without the prior written consent of Landlord in each instance pursuant to the terms and conditions set forth below, which consent shall not be unreasonably withheld or delayed, subject to the following provisions; provided, however, Tenant shall not assign this Lease, or any interest, voluntarily or involuntarily, and shall not sublet the Premises or any part thereof, or any right or privilege appurtenant thereto, or suffer any other person (the agents and servants of Tenant excepted) to occupy or use the Premises, or any portion thereof, if Tenant shall be in default under this Lease past any applicable cure period.

(b) Prior to any assignment or sublease which Tenant desires to make, other than a Permitted Transfer (as defined in Paragraph 17(f) below), Tenant shall provide to Landlord the name and address of the proposed assignee or sublessee, and true and complete copies of all documents relating to Tenant's prospective agreement to assign or sublease, a copy of a current financial statement for such proposed assignee or sublessee, and any other relevant information requested by Landlord within five (5) days after receipt of notice of the proposed assignment or sublease and Tenant shall specify all consideration to be received by Tenant for such assignment or sublease in the form of lump sum payments, installments of rent, or otherwise. For purposes of this Paragraph 17, the term "consideration" shall include all money or other consideration to be received by Tenant for such assignment or sublease. Within ten (10) days after the receipt of such documentation and other information, Landlord (1) shall notify Tenant in writing that Landlord elects to consent to the proposed assignment or sublease subject to the terms and conditions hereinafter set forth; (2) shall notify Tenant in writing that Landlord refuses such consent, specifying reasonable grounds for such refusal; or (3) except with respect to a Permitted Transferee, if at the time Tenant requests that Landlord consent to an assignment or sublease Tenant has vacated the Premises and is not conducting on-going operations in the Building, Landlord may notify Tenant that Landlord elects to terminate this Lease, provided that with respect to a proposed sublease of a portion of the Premises, Landlord's termination right shall apply only to the proposed sublease space, and specifying the effective date of termination which shall be the same as the commencement date of the proposed sublease. If Landlord elects to terminate this Lease pursuant to the foregoing provision, upon the effective date of termination, Landlord and Tenant shall each be released and discharged from any liability or obligation to the other under this Lease accruing thereafter with respect to the Premises or the portion thereof to which the termination applies, except for any obligations then outstanding and except for any obligations which survive the expiration or termination of this Lease by the express terms hereof, and Tenant agrees that Landlord may enter into a direct lease with such proposed assignee or sublessee without any obligation or liability to Tenant.

In deciding whether to consent to any proposed assignment or sublease, Landlord may take into account whether reasonable conditions have been satisfied, including, but not limited to, the following:

(1) In Landlord's reasonable judgment, the proposed assignee or subtenant is engaged in such a business, that the Premises, or the relevant part thereof, will be used in such a manner which complies with Paragraph 8 hereof entitled "Use" and Tenant or the proposed assignee or sublessee submits to Landlord documentary evidence reasonably satisfactory to Landlord that such proposed use constitutes a permitted use of the Premises pursuant to the ordinances and regulations of the City of Union City;

(2) The proposed assignee or subtenant is a reputable entity or individual with sufficient financial net worth so as to reasonably indicate that it will be able to meet its obligations under this Lease or the sublease in a timely manner;

(3) If at the time of the proposed transfer, Landlord has substantially similar space available for rent in Union City Labs, the proposed assignee or subtenant is not a tenant of the Building or any other building in Union City Labs; and

(4) The proposed assignment or sublease is approved by Landlord's mortgage lender if such lender has the right to approve or disapprove proposed assignments or subleases. Landlord shall use its good faith efforts to obtain such approval from its lender within ten (10) days after receipt by Landlord of Tenant's written request for consent and the documentation and information referred to in the first sentence of Paragraph 17(b) above.

(c) As a condition to Landlord's granting its consent to any assignment or sublease, except with respect to any Permitted Transferees, (1) Landlord may require that Tenant pay to Landlord, as and when received by Tenant, fifty percent (50%) of the amount of any excess of the consideration to be received by Tenant in connection with said assignment or sublease over and above the Monthly Base Rent and Additional Rent fixed by this Lease and payable by Tenant to Landlord, after deducting only (A) a standard leasing commission payable by Tenant in consummating such assignment or sublease, (B) the cost of reasonable tenant improvements performed specifically for the sublease and required to be made to the Premises to effectuate the sublease, provided that such improvements are performed in compliance with Paragraph 14(d) of this Lease, and (C) reasonable attorneys' fees incurred by Landlord in negotiating and reviewing the assignment or sublease documentation; and (2) Tenant and the proposed assignee or sublessee shall demonstrate to Landlord's reasonable satisfaction that each of the criteria referred to in subparagraph (b) above is satisfied.

(d) Each assignment or sublease agreement to which Landlord has consented shall be an instrument in writing in form reasonably satisfactory to Landlord, and shall be executed by both Tenant and the assignee or sublessee, as the case may be. Each such assignment or sublease agreement shall recite that it is and shall be subject and subordinate to the provisions of this Lease, that the assignee or sublessee accepts such assignment or sublease, that Landlord's consent thereto shall not constitute a consent to any subsequent assignment or subletting by Tenant or the assignee or sublessee, and, except as otherwise set forth in a sublease approved by Landlord, agrees to perform all of the obligations of Tenant hereunder (to the extent such obligations relate to the portion of the Premises assigned or subleased), and that the termination of this Lease shall, at Landlord's sole election, constitute a termination of every such assignment or sublease.

(e) In the event Landlord shall consent to an assignment or sublease, Tenant shall nonetheless remain primarily liable for all obligations and liabilities of Tenant under this Lease, including but not limited to the payment of rent.

(f) Notwithstanding the foregoing, Tenant may, without Landlord's prior written consent and without any participation by Landlord in assignment and subletting proceeds, but with prior notice and documentation, as required pursuant to this Paragraph 17(f), provided to Landlord, sublet a portion or the entire Premises or assign this Lease to (i) a subsidiary, affiliate, division or corporation controlled or under common control with Tenant ("affiliate"); or (ii) to a successor corporation related to Tenant by merger, consolidation or reorganization, or to a purchaser of substantially all of Tenant's assets (each such transaction referred to herein as a "**Permitted Transfer**" and each of the foregoing transferees referred to herein as a "**Permitted Transferee**"), provided that any such Permitted Transferee shall have a current verifiable net worth prior to the transfer at least equal to that of Tenant immediately prior to the effective date of the Permitted Transfer, or, if less, financial resources sufficient, in Landlord's reasonable good faith judgment, to perform the obligations under the assignment or sublease, as applicable. Tenant's foregoing rights in this Paragraph 17(f) to assign this Lease or to sublease all or a portion of the entire Premises shall be subject to the following conditions: (1) Tenant shall not be in default hereunder past any applicable cure period; (2) in the case of an assignment or subletting to an affiliate, Tenant shall remain liable to Landlord hereunder if Tenant is a surviving entity; (3) the transferee or successor entity shall expressly assume in writing all of Tenant's obligations hereunder; and (4) Tenant shall provide Landlord with prior notice of such proposed transfer and deliver to Landlord all documents reasonably requested by Landlord relating to such transfer, including but not limited to documentation sufficient to establish such proposed transferee's current verifiable net worth prior to the transfer at least equal to that of Tenant as of the immediately prior to the effective date of the Permitted Transfer, or, if less, financial resources sufficient, in Landlord's reasonable good faith judgment, to perform the obligations under the assignment or sublease, as applicable.

(g) Neither the sale nor transfer of Tenant's capital stock shall be deemed an assignment, subletting, or other transfer of this Lease or the Premises, provided, that in the event of the sale, transfer or issuance of Tenant's securities to an affiliate or in connection with a transaction described in Paragraph 17(f), the conditions set forth in Paragraph 17(f) shall apply.

(h) Subject to the provisions of this Paragraph 17 any assignment or sublease (if such consent is required hereunder) without Landlord's prior written consent shall at Landlord's election be void. The consent by Landlord to any assignment or sublease shall not constitute a waiver of the provisions of this Paragraph 17, including the requirement of Landlord's prior written consent, with respect to any subsequent assignment or sublease. If Tenant shall purport to assign this Lease, or sublease all or any portion of the Premises, or permit any person or persons other than Tenant to occupy the Premises, without Landlord's prior written consent (if such consent is required

hereunder), Landlord may collect rent from the person or persons then or thereafter occupying the Premises and apply the net amount collected to the rent reserved herein, but no such collection shall be deemed a waiver of Landlord's rights and remedies under this Paragraph 17, or the acceptance of any such purported assignee, sublessee, or occupant, or a release of Tenant from the further performance by Tenant of covenants on the part of Tenant herein contained.

(i) Tenant shall not hypothecate or encumber its interest under this Lease or any rights of Tenant hereunder, or enter into any license or concession agreement respecting all or any portion of the Premises, without Landlord's prior written consent which consent Landlord may grant or withhold in Landlord's absolute discretion without any liability to Tenant. Tenant's granting of any such encumbrance, license, or concession agreement shall constitute an assignment for purposes of this Paragraph 17.

(j) In the event of any sale or exchange of the Premises by Landlord and assignment of this Lease by Landlord, Landlord shall, upon providing Tenant with written confirmation that the assignee has assumed all obligations of Landlord under this Lease and Landlord has delivered any Security Deposit held by Landlord to Landlord's successor in interest, be and hereby is entirely relieved of all liability under any and all of Landlord's covenants and obligations contained in or derived from this Lease with respect to the period commencing with the consummation of the sale or exchange and assignment.

(k) Tenant hereby acknowledges that the foregoing terms and conditions are reasonable and, therefore, that Landlord has the remedy described in California Civil Code Section 1951.4 (Landlord may continue the Lease in effect after Tenant's breach and abandonment and recover rent as it becomes due, if Tenant has the right to sublet or assign, subject only to reasonable limitations).

18. Non-Waiver.

(a) No waiver of any provision of this Lease shall be implied by any failure of Landlord to enforce any remedy for the violation of that provision, even if that violation continues or is repeated. Any waiver by Landlord of any provision of this Lease must be in writing.

(b) No receipt of Landlord of a lesser payment than the rent required under this Lease shall be considered to be other than on account of the earliest rent due, and no endorsement or statement on any check or letter accompanying a payment or check shall be considered an accord and satisfaction. Landlord may accept checks or payments without prejudice to Landlord's right to recover all amounts due and pursue all other remedies provided for in this Lease.

Landlord's receipt of any rent or other payment from Tenant after giving notice to Tenant terminating this Lease shall in no way reinstate, continue, or extend the Lease term or affect the termination notice given by Landlord before the receipt of such rent or payment. After serving notice terminating this Lease, filing an action, or obtaining final judgment for possession of the Premises, Landlord may receive and collect any rent, and the payment of that rent shall not waive or affect such prior notice, action, or judgment.

19. Holding Over. Tenant shall vacate the Premises and deliver the same to Landlord upon the expiration or sooner termination of this Lease. In the event of holding over by Tenant after the expiration or termination of this Lease, such holding over shall be on a month-to-month tenancy and all of the terms and provisions of this Lease shall be applicable during such period, except that in addition to the payment of Additional Rent, Tenant shall pay Landlord as Monthly Base Rent during such holdover an amount equal to the greater of (i) one hundred fifty percent (150%) of the Monthly Base Rent in effect at the expiration of the term, or (ii) the then market rent for comparable research and development/office space. If such holdover is without Landlord's written consent, Tenant shall be liable to Landlord for all costs, expenses, and consequential damages incurred by Landlord as a result of such holdover, including but not limited to damages resulting from Landlord's inability to timely deliver possession of the Premises to a new tenant. The rental payable during such holdover period without Landlord's written consent shall be payable to Landlord on demand.

20. Damage or Destruction.

(a) In the event of a total destruction of the Building during the term from any cause, Landlord may elect to terminate this Lease by giving written notice of termination to the Tenant within thirty (30) days after the casualty occurs. A total destruction shall be deemed to have occurred for this purpose if the Building or the Premises that are the subject of this Lease are destroyed to the extent of seventy-five percent (75%) or more of the replacement cost thereof. If the Lease is not terminated, Landlord shall repair and restore the Premises in a diligent manner and this Lease shall continue in full force and effect, except that Monthly Base Rent and Additional Rent of the Premises which are the subject of this Lease shall be abated in accordance with Paragraph 20(d) below.

(b) In the event of a partial destruction of the Building or the Premises to an extent less than seventy-five percent (75%) of the replacement cost thereof, and (i) if Landlord reasonably believes that the damage thereto can be repaired, reconstructed, or restored within a period of two hundred seventy (270) days from the date of such casualty, (ii) there are at least twelve (12) months remaining in the term of this Lease or if there are less than twelve (12) months remaining in the term of this Lease, then Landlord reasonably believes that the damage thereto can be repaired, reconstructed, or restored within a period of ninety (90) days from the date of such casualty, and (iii) the casualty is from a cause which is insured under Landlord's "all risk" property insurance, or is insured under any other coverage then carried by Landlord, then Landlord shall forthwith repair the same, and this Lease shall continue in full force and effect, except that Monthly Base Rent and Additional Rent shall be abated in accordance with Paragraph 20(d) below. If any of the foregoing conditions are not met, Landlord shall have the option of either repairing and restoring the Building and Improvements, or terminating this Lease by giving written notice of termination to Tenant within sixty (60) days after the casualty.

(c) Landlord's election to repair and restore the Building and Improvements or to terminate this Lease, shall be made and written notice thereof shall be given to Tenant within sixty (60) days after the casualty. Notwithstanding the foregoing, (1) Tenant may terminate this Lease by written notice to Landlord if Landlord has not obtained all necessary governmental permits for the restoration and commenced construction of the restoration within ninety (90) days after the casualty; or (2) if Landlord elects to repair and restore the Building and Improvements under Paragraph 20(b) above, but the repairs and restoration are not substantially completed within three hundred sixty-five (365) days after the casualty plus the period of any force majeure delays (as defined in subparagraph (e)), Tenant may terminate this Lease by written notice to Landlord given within thirty (30) days after the expiration of said period of three hundred sixty-five (365) days after the casualty, provided that the repairs and restoration are not substantially completed prior to the receipt by Landlord of such notice of termination.

(d) In the event of repair, reconstruction, or restoration as provided herein, the Monthly Base Rent and Additional Rent shall be abated proportionally in the ratio which the Tenant's use of the Premises is impaired and Tenant does not use such portion of the Premises during the period of such repair, reconstruction, or restoration, from the date of the casualty until such repair, reconstruction or restoration is substantially completed.

(e) With respect to any destruction of the Building and Improvements which Landlord is obligated to repair, or may elect to repair, under the terms of this Paragraph 20, the provisions of Section 1932, Subdivision 2, and of Section 1933, Subdivision 4, of the Civil Code of the State of California are waived by the parties. Landlord's obligation to repair and restore the Building and Improvements shall include the Tenant Improvements referred to in Paragraph 13(b), up to the cost of the Tenant Improvement Allowance. Landlord's time for completion of the repairs and restoration of the Building and Improvements referred to above shall be extended by a period equal to any delays ("force majeure delays") caused by strikes, labor disputes, unavailability of materials, inclement weather, circumstances not within Landlord's control, or acts of God.

(f) In the event of termination of this Lease pursuant to any of the provisions of this Paragraph 20, the Monthly Base Rent and Additional Rent shall be apportioned on a per diem basis and shall be paid to the date of the casualty. In no event shall Landlord be liable to Tenant for any damages resulting to Tenant from the occurrence of such casualty, or from the repairing or restoration of the Building and Improvements, or from the termination of this Lease as provided herein, nor shall Tenant be relieved thereby from any of Tenant's obligations hereunder, except to the extent and upon the conditions expressly set forth in this Paragraph 20.

(g) Notwithstanding anything herein to the contrary, Landlord shall not be obligated to restore the Premises or the Building and shall have the right to terminate this Lease if (a) the holder of any mortgage fails or refuses to make insurance proceeds available for such repair and restoration, (b) zoning or other applicable laws or regulations do not permit such repair and restoration, or (c) the cost of repairing and restoring the Building would exceed fifty percent (50%) of the replacement value of the Building, whether or not the Premises is damaged or destroyed, provided the leases of all other tenants in the Building are similarly terminated.

(h) Notwithstanding anything herein to the contrary, if the Premises are destroyed or damaged and Landlord elects to terminate this Lease by giving written notice of termination to Tenant as permitted under this Paragraph 20, then Tenant may notify Landlord of its desire to repair and restore the Premises and thereafter, the parties agree to enter into good faith negotiations for a reasonable period of time for the repair and restoration of the Premises, at Tenant's sole cost and expense, upon terms and conditions mutually acceptable to Tenant and Landlord. Any such agreement reached by Landlord and Tenant shall be subject to the approval of the holder of any mortgage and compliance with all zoning or other applicable Laws or regulations.

21. Eminent Domain.

(a) If the whole or any substantial part of the Property is taken or condemned by any competent public authority for any public use or purpose, the term of this Lease shall end upon the earlier to occur of the date when the possession of the part so taken shall be required for such use or purpose or the vesting of title in such public authority. Rent shall be apportioned as of the date of such termination. Any award arising from the condemnation of any portion of the Property or the settlement thereof shall belong to and be paid to Landlord. However, Tenant may file a separate claim at Tenant's sole cost and expense for (i) leasehold improvements installed at Tenant's expense or other property owned by Tenant, and (ii) reasonable costs of moving by Tenant to another location in Alameda County or surrounding areas within the San Francisco Bay Area. In all events, Landlord shall be solely entitled to any award with respect to the real property, including the bonus value of the leasehold.

(b) If there is a partial taking of the Property by eminent domain which is not a substantial part of the Property and the Premises remain reasonably suitable for continued use and occupancy by Tenant for the purposes referred to in Paragraph 8, Landlord shall complete any necessary repairs in a diligent manner and this Lease shall remain in full force and effect with a just and proportionate abatement of the Monthly Base Rent and Additional Rent, based on the extent to which Tenant's use of the Premises is completely impaired thereafter (subject to subparagraph (c) below). If after a partial taking, the Premises are not reasonably suitable for Tenant's continued use and occupancy for the uses permitted herein, Tenant may terminate this Lease effective on the earlier of the date title vests in the public authority or the date possession is taken. Subject to the provisions of Paragraph 21(a), the entire award for such taking shall be the property of Landlord.

(c) Notwithstanding anything herein to the contrary, if twenty-five percent (25%) or more of the Property or the Building is taken or condemned, then whether or not any portion of the Premises is taken or condemned, Landlord shall have the right to terminate this Lease as of the date title vests in the public authority.

22. Remedies. If Tenant fails to make any payment of rent or any other sum due under this Lease, and such failure continues for five (5) days after receipt by Tenant of written notice from Landlord; or if Tenant fails to comply with any term, provision or covenant of this Lease and does not cure such failure within fifteen (15) days after receipt by Tenant of written notice from Landlord or such shorter time period specified in this Lease (unless such default is incapable of cure within fifteen (15) days and Tenant commences cure within fifteen (15) days and thereafter diligently prosecutes the cure to completion within a reasonable time, not to exceed sixty (60) days); or if Tenant's interest herein, or any part thereof, is assigned or transferred, either voluntarily or by operation of law (except as expressly permitted by other provisions of this Lease); or if Tenant makes a general assignment for the benefit of its creditors; or if this Lease is rejected (i) by a bankruptcy trustee for Tenant, (ii) by Tenant as debtor in possession, or (iii) by failure of Tenant as a bankrupt debtor to act timely in assuming or rejecting this Lease; then any of such events shall constitute an event of default and breach of this Lease by Tenant and Landlord may, at its option, elect the remedies specified in either subparagraph (a) or (b) below. Any such rejection of this Lease referred to above shall not cause an automatic termination of this Lease. Whenever in this Lease reference is made to a default by Tenant, such reference shall refer to an event of default as defined in this Paragraph 22.

(a) Landlord may repossess the Premises and remove all persons and property therefrom. If Landlord repossesses the Premises because of a breach of this Lease, this Lease shall terminate and Landlord may recover from Tenant:

(1) the worth at the time of award of the unpaid rent which had been earned at the time of termination including interest thereon at a rate equal to the discount rate established by the Federal Reserve Bank of San Francisco for member banks, plus one percent (1%), or the maximum legal rate of interest, whichever is less, from the time of termination until paid;

(2) the worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided, including interest thereon at a rate equal to the Federal discount rate plus one percent (1%) per annum, or the maximum legal rate of interest, whichever is less, from the time of termination until paid;

(3) the worth at the time of award of the amount by which the unpaid rent for the balance of the term after the time of award exceeds the amount of such rental loss for the same period that Tenant proves could be reasonably avoided discounted at the discount rate established by the Federal Reserve Bank of San Francisco for member banks at the time of the award plus one percent (1%); and

(4) any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's breach or by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom.

(b) If Landlord does not repossess the Premises, then this Lease shall continue in effect for so long as Landlord does not terminate Tenant's right to possession and Landlord may enforce all of its rights and remedies under this Lease, including the right to recover the rent and other sums due from Tenant hereunder. For the purposes of this Paragraph 22, the following do not constitute a repossession of the Premises by Landlord or a termination of the Lease by Landlord:

(1) Acts of maintenance or preservation by Landlord or efforts by Landlord to relet the Premises; or

(2) The appointment of a receiver by Landlord to protect Landlord's interests under this Lease.

(c) Landlord's failure to perform or observe any of its obligations under this Lease or to correct a breach of any warranty or representation made in this Lease within thirty (30) days after receipt of written notice from Tenant setting forth in reasonable detail the nature and extent of the failure referencing pertinent Lease provisions or if more than thirty (30) days is required to cure the breach, Landlord's failure to begin curing within the thirty (30) day period and diligently prosecute the cure to completion, shall constitute a default. If Landlord commits a default, Tenant's sole remedy shall be to institute an action against Landlord for damages or for equitable or injunctive relief, but Tenant shall not have the right to punitive damages, consequential damages, rent abatement, offset against rent, or to terminate this Lease in the event of any default by Landlord and Tenant expressly waives the defense of constructive eviction.

(d) If this Lease provides for a postponement of any Monthly Base Rent, Additional Rent, a period of "free" rent, reduced rent, early occupancy, or other rent concession, such postponed rent, "free" rent, reduced rent or other rent concession shall be referred to herein as the "Abated Rent". Tenant acknowledges that its right to receive credit for the Abated Rent is absolutely conditioned upon Tenant's full, faithful and punctual performance of its obligations under this Lease. Accordingly, if an event of default by Tenant shall occur that results in termination of this Lease, then the unamortized portion of the Abated Rent (amortized over the initial Term of this Lease) shall immediately become due and payable in full and this Lease shall be enforced as if there were no such Rent abatement or other Rent concession as to such unamortized portion. In such case the unamortized portion of the Abated Rent shall be calculated by multiplying the total Abated Rent by a fraction, the numerator of which is the number of unexpired months remaining on the initial Lease term as of the date of termination of the Lease and the denominator of which is the total number of months remaining on the initial Term as of the date of termination of the Lease, based on the full initial Rent payable under the Lease. Notwithstanding the foregoing, if Tenant shall cure the default within the applicable cure period as set forth in this Lease and the Lease has not been terminated, the Abated Rent shall be reinstated.

(e) All covenants and agreements to be performed by Tenant under this Lease shall be at its sole cost and expense and without abatement of rent or other sums due under this Lease, unless otherwise specified in this Lease. If Tenant shall fail to pay any sum of money required to be paid by Tenant under this Lease or shall fail to perform any other act on Tenant's part to be performed under this Lease within the time periods described in the first paragraph of Paragraph 22(a), Landlord may, but shall not be obligated so to do and without waiving or releasing Tenant from any obligations of Tenant, make any such payment or perform any such other act on Tenant's part to be made or performed as provided in this Lease. All sums paid by Landlord, whether to fulfill Tenant's unfulfilled payment obligations, to perform Tenant's unfulfilled performance obligations, or to compel Tenant to fulfill or perform its obligations under this Lease, and all incidental costs, including attorneys' fees, plus an administrative fee of five percent (5%) of all amounts so expended by Landlord, shall be deemed additional rent hereunder and shall be payable to Landlord upon demand.

23. Tenant's Personal Property. If any personal property of Tenant remains on the Premises after (1) Landlord terminates this Lease pursuant to Paragraph 22 above following an event of default by Tenant, or (2) after the expiration of the Lease Term or after the termination of this Lease pursuant to any other provisions hereof, Landlord shall give written notice thereof to Tenant pursuant to applicable law. Landlord shall thereafter release, store, and dispose of any such personal property of Tenant in accordance with the provisions of applicable law.

24. Notices. All notices required under the Lease and other information concerning this Lease ("**Communications**") shall be personally delivered or sent by first class mail, postage prepaid, by overnight courier. In addition, the Landlord may, in its sole discretion, send such Communications to the Tenant electronically, or permit Tenant to send such Communications to the Landlord electronically, in the manner described in this Paragraph.

Such Communications sent by personal delivery, mail or overnight courier will be sent to the addresses on the signature page of this Lease, or to such other addresses as the Landlord and Tenant may specify from time to time in writing. Communications shall be effective (i) if mailed, upon the earlier of receipt or five (5) days after deposit in the U.S. mail, first class, postage prepaid, or (ii) if hand-delivered, by courier or otherwise (including telegram, lettergram or mailgram), when delivered.

Such Communications may be sent electronically by the Landlord and Tenant (i) by transmitting the Communication to the electronic address provided by the Tenant or to such other electronic address as the Tenant may specify from time to time in writing, or (ii) by posting the Communication on a website and sending the Tenant a notice to the Tenant's postal address or electronic address telling the Tenant that the Communication has been posted, its location, and providing instructions on how to view it. Communications sent electronically to the Tenant will be effective when the Communication, or a notice advising of its posting to a website, is sent to the Tenant's electronic address.

25. Estoppel Certificate. Tenant shall within ten (10) business days following request by the Landlord, execute and deliver to the Landlord an estoppel certificate (1) certifying that this Lease has not been modified and certifying that this Lease is in full force and effect, or, if modified, stating the nature of such modification and certifying that this Lease, as so modified, is in full force and effect; (2) stating the date to which the rent and other charges are paid in advance, if at all; (3) stating the amount of any Security Deposit held by Landlord; (4) acknowledging that there are not, to the Tenant's knowledge, any uncured defaults on the part of the Landlord hereunder, or if there are uncured defaults on the part of the Landlord, stating the nature of such uncured defaults; and (5) any other provisions reasonably requested by Landlord.

26. Signage. Tenant shall have the use the entire monument sign for the Building for Tenant's sign. If Tenant selects a design option with the main Building entry at the center of the Building, Landlord shall install a new monument sign at such entry for Tenant's exclusive use, but only so long as Tenant occupies the entire Premises. All monument signage at the Building shall be provided by Landlord at Landlord's sole cost and expense. Tenant may place Tenant's vinyl lettering signage on the glass near the front door entrance to the Building and in the interior of the Building, subject to Landlord's reasonable requirements and consent and subject to the requirements of the City of Union City. All of Tenant's signage shall comply with the City of Union City sign ordinances and regulations and shall be subject to Landlord's approval as to the specific location, size and design thereof. The cost of the installation of Tenant's signage on the glass near the front entrance to the Building and within the interior of the Building shall be paid by Tenant. Any additional signage shall be subject to Landlord's prior approval and, if approved, shall be installed at Tenant's expense.

27. Real Estate Brokers. Tenant's broker is Kidder Mathews ("**Tenant's Broker**") and Landlord's broker is Kidder Mathews ("**Landlord's Broker**") and collectively with Tenant's Broker, the "**Brokers**"). Landlord shall pay a leasing commission to the Brokers pursuant to a separate agreement. Each party represents and warrants to the other party that it has not had any dealings with any real estate broker, finder, or other person with respect to this Lease other than Tenant's Broker and Landlord's Broker and each party shall hold harmless the other party from all damages, expenses, and liabilities resulting from any claims that may be asserted against the other party by any broker, finder, or other person with whom the other party has or purportedly has dealt, other than the above named brokers.

28. Parking. Tenant shall have the right to the nonexclusive use of two hundred seventy-nine (279) unreserved on-site vehicular parking spaces on the Land at no additional cost to Tenant in the parking area for the Building and nearby parking areas in Union City Labs, provided that if the City of Union City requires that the number of striped parking spaces located at Union City Labs to be reduced to conform to maximum parking allowances adopted by the City of Union City, and so long as such requirement was not triggered by Landlord, the number of parking spaces identified in the first sentence of this Section shall be proportionately reduced. Parking shall be subject to such reasonable rules and regulations for such parking facilities which may be established or altered by Landlord at any time from time to time during the Lease Term. Vehicles of Tenant or its employees shall not park in driveways or occupy parking spaces or other areas reserved for deliveries, or loading or unloading.

29. Subordination; Attornment.

(a) This Lease, without any further instrument, shall at all times be subject and subordinate to the lien of any and all ground or underlying leases, mortgages and deeds of trust which may now or hereafter be placed on, against or affect Landlord's estate in the real property of which the Premises form a part, and to all advances made or hereafter to be made upon the security thereof, and to all renewals, modifications, consolidations, replacements and extensions thereof. Landlord shall use commercially reasonable efforts to obtain a subordination, non-disturbance and attornment agreement ("**SNDA**") from the beneficiary of any deed of trust executed by Landlord as trustor as of the date of this Lease; such SNDA to be on such beneficiary's form and reasonably satisfactory to Tenant. Landlord's failure to obtain such SNDA shall not be default of Landlord under this Lease.

(b) In confirmation of such subordination, Tenant covenants and agrees to execute and deliver within ten (10) business days of Landlord's request any certificate or other instrument which Landlord may reasonably deem proper to evidence such subordination in commercially reasonable form (which document recognizes Tenant's rights under this Lease), without expense to Tenant; provided, however, that if any person or persons purchasing or otherwise acquiring the real property of which the Premises form a part by any sale, sales and/or other proceedings under such mortgages and/or deeds of trust, shall elect to continue this Lease in full force and effect in the same manner and with like effect as if such person or persons had been named as Landlord herein, then this Lease shall continue in full force and effect as aforesaid, and Tenant hereby attorns and agrees to attorn to such person or persons in writing upon request.

(c) If Tenant is notified in writing of Landlord's default under any deed of trust affecting the Premises and if Tenant is instructed in writing by the party giving notice to make Tenant's rental payments to such beneficiary, Tenant shall comply with such request without liability to Landlord (and with full credit of any amounts paid to such party by Tenant to the corresponding amounts owed to Landlord) until Tenant receives written confirmation that such default has been cured by Landlord and that the deed of trust has been reinstated.

30. No Termination Right. Except in a claim for eviction, Tenant shall not have the right to terminate this Lease as a result of any default by Landlord, and Tenant's remedies in the event of a default by Landlord shall be limited to the remedy set forth in Paragraph 22(c).

31. Landlord's Entry. Except in the case of an emergency and except for permitted entry during Tenant's normal working hours, both of which may occur without prior notice to Tenant, but subject to Tenant's reasonable security/control procedures for its CLIA operations, Landlord and Landlord's agents shall provide Tenant with at least one business day notice prior to entry of the Premises. Landlord may enter the Premises for any reasonable purpose related to Landlord's ownership and operation of the Property. Such entry by Landlord and Landlord's agents shall not impair Tenant's operations more than reasonably necessary. Landlord may enter the Premises at any time without prior notice to Tenant if the Premises are vacant, if Tenant is no longer conducting its ordinary business at the Premises, or if Tenant has made a general assignment for the benefit of creditors.

32. Attorneys' Fees. If any action at law or in equity shall be brought to recover any rent under this Lease, or for or on account of any breach of or to enforce or interpret any of the provisions of this Lease or for recovery of the possession of the Premises (including litigation, or a proceeding in a bankruptcy court), the prevailing party shall be entitled to recover from the other party costs of suit and reasonable attorneys' fees, the amount of which shall be fixed by the court and shall be made a part of any judgment rendered.

33. Quiet Enjoyment. Upon payment by Tenant of the rent for the Premises and the observance and performance of all of the covenants, conditions, and provisions on Tenant's part to be observed and performed under this Lease within applicable notice and cure periods, Tenant shall have quiet enjoyment and possession of the Premises for the entire term hereof subject to all of the provisions of this Lease.

34. Financial Information. Tenant represents and warrants to Landlord that all financial and other information that it has provided to Landlord prior to the date of this Lease is true, correct and complete. Within fourteen (14) days of Landlord's written request therefor (but no more often than once per calendar year), Tenant shall promptly furnish to Landlord an audited financial statement with respect to Tenant for its most recent fiscal year prepared in accordance with generally accepted accounting principles and certified to be true and correct by Tenant; and if no such audited financial statement is available, then Tenant shall instead deliver to Landlord its most currently available balance sheet, income statement and unaudited financial statement and/or such other information, the type and form of which are acceptable to Landlord in Landlord's reasonable discretion, which reflects the financial condition of Tenant. Landlord shall keep Tenant's financial information and statement confidential and use such financial information or statements only for the purpose in connection with this Lease.

35. SDN List. Tenant represents and warrants to Landlord that Tenant is not, and the entities or individuals that constitute Tenant, that may own or control Tenant, or that may be owned or controlled by Tenant (in all cases, other than through the ownership of publicly traded, direct or indirect ownership interests) (each a "Subject Tenant Party") are not, (i) in violation of any laws relating to terrorism or money laundering, or (ii) among the individuals or entities identified on any list compiled pursuant to Executive Order 13224 or published by the Office of Foreign Assets Control, U.S. Department of the Treasury ("OFAC") for the purpose of identifying suspected terrorists or on the most current list published by the OFAC at its official website, <http://www.treas.gov/ofac/tlstdn.pdf> or any replacement website or other replacement official publication of such list which identifies an "Specially Designated National" or "blocked person" (either of which are referred to herein as a "SDN"). If at any time during the Lease Term Landlord discovers that Tenant has breached the foregoing representations and warranties, or Landlord reasonably believes that Tenant or any Subject Tenant Party is in violation of any laws relating to terrorism or money laundering or that Tenant or any Subject Tenant Party is identified as an SDN, Tenant shall be deemed in default under this Lease following three (3) days written notice from Landlord to Tenant unless, within such three day period, Tenant delivers written evidence, reasonably acceptable to Landlord, that Tenant is not in violation of such laws or that Tenant (or the Subject Tenant Party, as applicable) is not a person or entity identified as an SDN. Except as otherwise expressly provided in the foregoing sentence, and without further notice, any default by Tenant under this Paragraph 35 shall be deemed an incurable default by Tenant and, in addition to any other rights and remedies that Landlord may have upon such default, Landlord shall also have the right to immediately terminate this Lease upon written notice to Tenant and recover possession of the Premises.

36. Sustainable Practices for the Building. Landlord and Tenant acknowledge and agree that Landlord is committed to employing sustainable operating and maintenance practices for the Building. Tenant shall fully cooperate with Landlord in any reasonable programs in which Landlord may elect to participate relating to the Building's (i) energy efficiency, management and conservation; (ii) water conservation and management; (iii) environmental standards and efficiency; (iv) recycling and reduction programs; and/or (v) safety, which participation may include, without limitation, the Leadership in Energy and Environmental Design (LEED) program and related Green Building Rating System promoted by the U.S. Green Building Council ("**Green Energy Programs**"). All carbon tax credits and similar credits, offsets and deductions are the sole and exclusive property of Landlord. Tenant affirms its support of these practices, and agrees to cooperate with Landlord by implementing reasonable conservation practices. Periodically, Landlord may offer additional examples, guidance and practices related to energy conservation measures, which Tenant agrees to consider for implementation.

Notwithstanding anything herein to the contrary, Tenant shall not be restricted from operating its business in the fashion and manner which it deems appropriate for itself, in accordance with the Use provisions of this Lease. Should any specific practice(s) proposed by Landlord be deemed to be inconsistent with Tenant's business operations, Tenant shall so advise Landlord in writing as its reason for declining to implement such specific practice(s).

37. Intentionally Deleted.

38. Intentionally Deleted.

39. Landlord's Renovations. Except as otherwise expressly set forth herein, it is specifically understood and agreed that Landlord has made no representation or warranty to Tenant and has no obligation and has made no promises to alter, remodel, improve, renovate, repair or decorate the Premises, Building, the Property or any part thereof and that no representations respecting the condition of the Property, Premises or the Building except as specifically set forth herein, or the areas in the vicinity of the Property have been made by Landlord to Tenant. However, Tenant hereby acknowledges that Landlord may during the Lease Term renovate, improve, alter, or modify (collectively, the "**Renovations**") the Property and/or the Building, including, without limitation, the parking areas, Common Areas, systems and equipment, roof, and structural portions of the same. In connection with any Renovations, Landlord may, among other things, erect scaffolding or other necessary structures in the Premises and/or the Building, and limit or temporarily eliminate access to portions of the Property, including portions of the Common Areas, or perform work in the Premises or the Building, as applicable, which work may create noise, vibrations, dust or leave debris in the Building and/or the Premises. In connection with such Renovations, Landlord may enter the Premises at reasonable times and upon reasonable notice to Tenant, to construct such Renovations; provided, however, that Landlord agrees to perform any highly disruptive portion of the Renovations in the Premises during non-business hours. The scope and extent of such Renovations shall be determined by Landlord in its sole discretion. Certain areas, including areas of the Property and parking are that are currently being used by tenants of the Building, including by Tenant, may be temporarily unavailable for use by tenants of the Building, including Tenant, during portions of the Renovations. Tenant hereby agrees that such Renovations and Landlord's actions in connection with such Renovations shall in no way constitute a constructive eviction of Tenant nor entitle Tenant to any abatement of Rent. Landlord shall use commercially reasonable efforts to minimize interference with Tenant's use of and access to the Building and the Premises when performing such Renovations. Landlord shall have no responsibility or for any reason be liable to Tenant for any direct or indirect injury to or interference with Tenant's business arising from the Renovations, nor shall Tenant be entitled to any compensation or damages from Landlord for loss resulting from the Renovations or Landlord's actions in connection with such Renovations, or for any inconvenience or annoyance occasioned by such Renovations or Landlord's actions.

40. General Provisions. Nothing contained in this Lease shall be deemed or construed by the parties hereto or by any third person to create the relationship of principal and agent or of partnership or of joint venture of any association between Landlord and Tenant, and neither the method of computation of rent nor any other provisions contained in this Lease nor any acts of the parties hereto shall be deemed to create any relationship between Landlord and Tenant other than the relationship of landlord and tenant.

(b) Each and all of the provisions of this Lease shall be binding upon and inure to the benefit of the parties hereto, and except as otherwise specifically provided elsewhere in this Lease, their respective heirs, executors, administrators, successors, and assigns, subject at all times, nevertheless, to all agreements and restrictions contained elsewhere in this Lease with respect to the assignment, transfer, encumbering, or subletting of all or any part of Tenant's interest in this Lease.

(c) The captions of the paragraphs of this Lease are for convenience only and shall not be considered or referred to in resolving questions of interpretation or construction.

(d) This Lease is and shall be considered to be the only agreement between the parties hereto and their representatives and agents. All negotiations and oral agreements acceptable to both parties have been merged into and are included herein. There are no other representations or warranties between the parties and all reliance with respect to representations is solely upon the representations and agreements contained in this instrument.

(e) This Lease shall be governed by and construed pursuant to the laws of the State of California.

(f) Recourse by Tenant for breach of this Lease by Landlord shall be expressly limited to the amount of Landlord's interest in the Property and the rents, issues, insurance, condemnation, and sales proceeds actually received by Landlord, and profits therefrom, and in the event of any such breach or default by Landlord, Tenant hereby waives the right to proceed against any other assets of Landlord or against any other assets of any manager, member, officer, partner, director, principal, trustee, beneficiary, employee or agent of Landlord, unless Tenant brings a successful action to pierce the corporate veil of Landlord relating to the liability under this Lease. In the event of a breach of default of this Lease by Tenant, Landlord hereby waives the right to proceed against any assets of any manager, member, officer, partner, director, principal, trustee, beneficiary, employee or agent of Tenant, unless Landlord brings a successful action to pierce the corporate veil of Tenant relating to the liability under this Lease.

(g) Any provision or provisions of this Lease which shall be found to be invalid, void or illegal by a court of competent jurisdiction, shall in no way affect, impair, or invalidate any other provisions hereof, and the remaining provisions hereof shall nevertheless remain in full force and effect.

(h) This Lease may only be amended by a writing signed by the parties hereto, or by an electronic record that has been electronically signed by the parties hereto and has been rendered tamper-evident as part of the signing process. The exchange of email or other electronic communications discussing an amendment to this Lease, even if such communications are signed, does not constitute a signed electronic record agreeing to such an amendment.

(i) Each party represents to the other that the person signing this Lease on its behalf is properly authorized to do so, and in the event this Lease is signed by an agent or other third party on behalf of either Landlord or Tenant, written authority to sign on behalf of such party in favor of the agent or third party shall be provided to the other party hereto either prior to or simultaneously with the return to such other party of a fully executed copy of this Lease.

(j) No binding agreement between the parties with respect to the Premises shall arise or become effective until this Lease has been duly executed by both Tenant and Landlord and a fully executed copy of this Lease has been delivered to both Tenant and Landlord.

(k) Tenant acknowledges that the terms and conditions of this Lease constitute confidential information of Landlord. Tenant shall, not disclose the contents of this Lease, lease proposals, lease drafts, or other documentation containing the terms, identity of the parties, details or conditions contained herein in any manner to any third party without obtaining the prior written consent of the Landlord, except to the attorneys, accountants, brokers, lenders, investors, potential investors, potential business or merger partners, potential subtenants and assignees, or other authorized business representatives or agents of the parties, or except to the extent required to comply with applicable laws, including any filings by Tenant pursuant to state or federal securities laws. Tenant shall not make any public announcement of the consummation of this Lease transaction without the prior approval of the Landlord.

(l) Except as provided in Paragraph 22(c), the rights and remedies that either party may have under this Lease or at law or in equity, upon any breach, are distinct, separate and cumulative and shall not be deemed inconsistent with each other, and no one of them shall be deemed to be exclusive of any other.

(m) Tenant waives any claim for consequential damages which Tenant may have against Landlord for breach of or failure to perform or observe the requirements and obligations created by this Lease.

(n) Landlord and Tenant each agree to and they hereby do, to the maximum extent permitted by law, waive trial by jury in any action, proceeding or counterclaim brought by either of the parties hereto against the other on any matters whatsoever arising out of or in any way connected with this Lease, the relationship of Landlord and Tenant, Tenant's use or occupancy of the Premises and/or any claim of injury or damage, and any statutory remedy.

(o) This Lease shall not be recorded.

(p) Whenever this Lease requires an approval, consent, determination, selection or judgment by either Landlord or Tenant, unless another standard is expressly set forth, such approval, consent, determination, selection or judgment and any conditions imposed thereby shall be reasonable and shall not be unreasonably withheld or delayed and, in exercising any right or remedy hereunder, each party shall at all times act reasonably and in good faith.

41. Counterparts; Electronic Signatures. This Lease may be executed in any number of counterparts, each of which, when so executed by a party, shall be deemed an original, but all such counterparts shall constitute but one and the same instrument. Electronic transmission signatures of any of the parties shall be deemed to be original signatures in connection with the execution of this Lease or any modification of this Lease.

42. Amendments. This Lease may only be amended by a writing signed by the parties hereto, or by an electronic record that has been electronically signed by the parties hereto and has been rendered tamper-evident as part of the signing process. The exchange of email or other electronic communications discussing an amendment to this Lease, even if such communications are signed, does not constitute a signed electronic record agreeing to such an amendment.

43. Satellite Dish.

(a) Generally. During the Term so long as this Lease is in full force and effect and Tenant is not in default under this Lease beyond expiration of all applicable notice and cure periods, Landlord hereby grants to Tenant free of additional charge (but subject to the terms herein) a non-exclusive license to install, maintain and operate on the roof of the Building, at Tenant's sole cost and expense, one (1) satellite dish and related required equipment, including necessary cables (collectively, the "**Satellite Dish**"), the size (not to exceed eighteen (18) inches in diameter in any event), type, weight, design and exact location (if any location is then available) of which shall be subject to Landlord's prior written approval, which shall not be unreasonably withheld. In

connection with any such request for approval, Tenant shall deliver to Landlord plans and specifications setting forth with specificity the size, weight, design and proposed location of the Satellite Dish. Tenant shall ensure that the Satellite Dish is not visible from the ground, and, if the Satellite Dish will be visible from the ground, Landlord may require that the Satellite Dish, at Tenant's sole cost and expense, be painted to match the roof and properly screened so as to minimize visibility. The installation, maintenance and operation of the Satellite Dish shall be in accordance with the terms of this Lease, including, without limitation, the Rules and Regulations. Tenant shall ensure that the Satellite Dish is installed, maintained and operated in accordance with all Laws, including, without limitation, by obtaining all Federal Communications Commission and other licenses, permits or approvals required to operate the Satellite Dish, and Tenant shall promptly repair any damage to the Park (including, without limitation, the roof of the Building) caused in connection with the Satellite Dish. The Satellite Dish is and shall remain the property of Tenant, and Landlord and Tenant agree that the Satellite Dish is not, and installation of the Satellite Dish shall not cause the Satellite Dish to become, a fixture pursuant to this Lease or by operation of Law. The Satellite Dish shall be used solely in connection with Tenant's permitted business operations in the Premises, and Tenant shall not receive any income from any third-party for the use of the Satellite Dish, otherwise use the Satellite Dish to generate revenue, or permit any service provider for the Satellite Dish to solicit business of other tenants or occupants of the Park.

(b) Operation. Tenant shall be responsible for the operation, repair and maintenance of the Satellite Dish at Tenant's sole cost and expense, and upon the expiration or earlier termination of this Lease, Tenant shall remove the Satellite Dish, promptly repair any and all damage caused as a result of such removal, and restore all affected areas to their original condition existing immediately prior to the installation of the Satellite Dish, reasonable wear and tear excepted. Tenant shall use the roof of the Building solely for the operation of the Satellite Dish as set forth herein and for no other purpose. Tenant agrees to operate the Satellite Dish in such a manner so as not to materially interfere with or impair the operation of other satellite dish or other telecommunication equipment of Landlord or other tenants or occupants of the Park. If Tenant's use of the Satellite Dish causes such interference or impairment, Tenant shall, at its sole cost and expense, promptly eliminate such condition by relocating (subject to obtaining Landlord's prior written approval in accordance with the terms hereof) the Satellite Dish or, if such relocation would not eliminate such condition, removing the Satellite Dish in accordance with the terms herein. If Landlord repairs or replaces the roof of the Building, Tenant shall relocate the Satellite Dish to another location to be mutually agreed upon by the Parties, or remove the Satellite Dish if no such other location is available, in either case at Tenant's sole cost and expense, within ten (10) business days after written request from Landlord. Tenant shall be able to return the Satellite Dish to its original location on the roof or another mutually acceptable location, at Tenant's sole cost and expense, after the completion of such repair or replacement. Tenant shall notify Landlord prior to accessing the roof so that Landlord may have its representative(s) present in connection with any such access. Tenant shall obtain Landlord's prior written consent to any roof penetrations and any such penetrations permitted by Landlord shall be performed by Landlord's contractors at Tenant's sole cost and expense.

(c) Limitations. Landlord assumes no liability or responsibility for interference with the Satellite Dish, Tenant acknowledges and agrees that its installation, maintenance, operation and removal of the Satellite Dish is at its sole risk, and Tenant hereby absolves and fully releases Landlord from any and all cost, loss, damage, expense, liability, and causes of action, whether foreseeable or not, from any cause whatsoever, that Tenant may suffer to the Satellite Dish or that Tenant or any other party may suffer in connection with the Satellite Dish. The Satellite Dish shall be included within the coverage of all insurance policies required to be maintained by Tenant under this Lease. Tenant shall protect, defend, indemnify and hold Landlord harmless from and against any and all Claims in any way arising or resulting from or in connection with the Satellite Dish, and Tenant shall not permit any action or inaction in connection with the Satellite Dish to void any warranty for the roof of the Building. The rights respecting the Satellite Dish created in this Paragraph 43 are personal to BillionToOne and its Permitted Transferees only, and shall not be exercisable by any assignee, subtenant or other transferee of or successor to any portion of the BillionToOne's interest under this Lease or to the Premises, nor shall the Satellite Dish be used by any person who is not an occupant of the Premises.

IN WITNESS WHEREOF, the Landlord and Tenant have duly executed this Lease as of the date first set forth herein.

“LANDLORD”

WHIPPLE ROAD PORTFOLIO, LLC, a Delaware
limited liability company

By: HSRE-TARLTON III, its sole member

By: TPI INVESTORS 19, a member

By: TARLTON PROPERTIES, INC., its manager

By: /s/ Elizabeth Krietemeyer

Elizabeth Krietemeyer
Senior Vice President

“TENANT”

BillionToOne, Inc.
a Delaware corporation

By: /s/ Oguzhan Atay

Its: Chief Executive Officer

By: _____

Its: _____

Address: The Premises

EXHIBIT A

LEGAL DESCRIPTION

Real property in the City of Union City, County of Alameda, State of California, described as follows:

PARCEL ONE:

LOTS 1, 2, 3 AND 4 OF PARCEL MAP NO. 7543 FILED APRIL 13, 2001 IN BOOK 256 OF MAPS AT GAGES 35-39, INCLUSIVE, ALAMEDA COUNTY RECORDS.

PARCEL TWO:

NON-EXCLUSIVE EASEMENTS FOR ACCESS, PARKING, UTILITIES, DRAINAGE AND TEMPORARY CONSTRUCTION AND STORAGE OF MATERIALS AND EQUIPMENT APPURTENANT TO PARCEL ONE AS DESCRIBED IN AND UPON THE TERMS AND CONDITIONS SET FORTH IN THE DECLARATION OF EASEMENTS AND COVENANTS BY PRINCIPAL DEVELOPMENT INVESTORS, L.L.C., A DELAWARE LIMITED LIABILITY COMPANY, RECORDED APRIL 13, 2001, SERIES NO. 2001-124405, OFFICIAL RECORDS.

PARCEL THREE:

A NON-EXCLUSIVE EASEMENT FOR SLOPE AND EROSION CONTROL MAINTENANCE PURPOSES APPURTENANT TO PARCELS ONE AND TWO AS RESERVED BY PATRICIAN ASSOCIATES, INC., A CALIFORNIA CORPORATION IN THE GRANT DEED FROM SAID

PATRICIAN ASSOCIATES, INC., TO STANDARD PACIFIC CORP., A DELAWARE CORPORATION RECORDED JANUARY 28, 2000,

SERIES NO. 2000-25883 ALAMEDA COUNTY OFFICIAL RECORDS, OVER AND ACROSS THE NORTHERLY 12 FEET OF "RESULTANT PARCEL A" SAID RESULTANT PARCEL A BEING DESCRIBED AS FOLLOWS:

RESULTANT PARCEL A, PARCEL MAP 5162, PURSUANT TO LOT LINE ADJUSTMENT, RECORDED SEPTEMBER 28, 1999, SERIES NO. 99368595, OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:

A PORTION OF PARCEL "A" AS SHOWN ON PARCEL MAP 5162 FILED DECEMBER 8, 1998 IN BOOK 180 OF MAPS AT PAGE 58, ALAMEDA COUNTY RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST SOUTHERLY CORNER OF SAID PARCEL "A", SAID POINT BEING ON THE NORTHEASTERLY LINE OF PARCEL "B" AS SHOWN ON THAT MAP OF TRACT 4127, FILED FOR RECORD IN BOOK 115 OF MAPS AT RAGE 30, ALAMEDA COUNTY RECORDS; THENCE FROM SAID POINT OF BEGINNING, ON THE SOUTHWESTERLY LINE OF SAID PARCEL "A", NORTH 42° 49' 28" WEST, 602.70 FEET TO THE NORTHEASTERLY CORNER OF SAID PARCEL "B", THENCE SOUTH 49° 03' 29" WEST, 15.01 FEET TO THE SOUTHWESTERLY LINE OF SAID PARCEL "A"; THENCE ON SAID LINE NORTH 42° 49' 28" WEST, 323.13 FEET; THENCE LEAVING SAID SOUTHWESTERLY LINE, NORTH 82° 46' 54" EAST, 619.22 FEET TO THE EASTERLY LINE OF SAID PARCEL "A"; THENCE ON SAID LINE, SOUTH 16° 35' 30" EAST, 93.92 FEET TO A TANGENT CURVE TO THE LEFT; THENCE ON SAID CURVE WITH A RADIUS OF 538.00 FEET, THROUGH A CENTRAL ANGLE OF 30° 49' 36" FOR AN ARC DISTANCE OF 289.46 FEET TO THE MOST NORTHERLY CORNER OF THE LANDS OF THE CITY OF UNION CITY AS SHOWN ON SAID PARCEL MAP; THENCE SOUTH 23° 10' 46" WEST, 40.47 FEET; THENCE SOUTH 04° 22' 23" WEST, 114.54 FEET TO A TANGENT CURVE TO THE LEFT; THENCE ON SAID CURVE WITH A RADIUS OF 50.00 FEET THROUGH A CENTRAL ANGLE OF 26° 03' 56" FOR AN ARC DISTANCE OF 22.75 FEET, THENCE SOUTH 21° 41' 33" EAST, 66.59 FEET; THENCE SOUTH 40° 58' 20" WEST, 236.96 FEET TO THE POINT OF BEGINNING.

EXHIBIT A

EXHIBIT B

Union City Labs

- 3200 Whipple Rd
- 3240 Whipple Rd
- 3242 Whipple Rd
- 3280 Whipple Rd

EXHIBIT B

EXHIBIT C

Floor Plan of Premises

EXHIBIT C

EXHIBIT D

Commencement Memorandum

EXHIBIT D

EXHIBIT E

Tenant's Hazardous Materials

EXHIBIT E

EXHIBIT F

Work Letter

This Work Letter ("**Work Letter**") sets forth the terms and conditions relating to the construction of Tenant Improvements for the Premises. All references in this Work Letter to the Lease shall mean the relevant portions of the Lease between WHIPPLE ROAD PORTFOLIO, LLC, a Delaware limited liability company, as Landlord, and BillionToOne, Inc., a Delaware corporation, as Tenant, for the Premises to which this Work Letter is attached as Exhibit F (the "**Lease**").

In consideration of the mutual covenants contained below, Landlord and Tenant agree as follows:

1. **Definitions.** For purposes of this Work Letter, (i) capitalized terms not defined in this Work Letter but defined in the Lease shall have the same meaning ascribed to such terms in the Lease and (ii) other terms used in this Work Letter shall have the meaning ascribed to such term as set forth in this paragraph 1 or elsewhere in this Work Letter.

a. "**Tenant Improvements**" shall mean the work and improvements to be performed by Landlord as shown on the Construction Drawings (as hereinafter defined). All such work shall be performed by Landlord at Tenant's sole cost and expense, subject to reimbursement in the amount of the Tenant Improvement Allowance (as hereinafter defined).

b. "**Budget**" shall mean the initial budget for the Tenant Improvements attached as Exhibit "F-2" to the Lease.

c. "**Substantially Completed**" or "**Substantial Completion**" shall mean Landlord has completed the Tenant Improvements and received the final sign-off and any required certificate of occupancy by the applicable authorities that allows the Premises to be occupied, subject only to items which need correction or completion and are of a nature and degree as to typically appear on a construction project punch list ("**Punch List Items**") and excluding Tenant's installation of its trade fixtures, furniture, equipment, cabling, telecommunications and similar alterations within the Premises, which installation shall be Tenant's responsibility, at Tenant's cost. Within five (5) business days after Substantial Completion, Landlord and Tenant shall perform a joint walk-through of the Premises and mutually and reasonably identify in a written statement executed by each of them ("**Punch List**") the remaining Punch List Items. Landlord shall cause the Punch List Items to be corrected or completed as soon as reasonably possible.

2. Base, Shell and Core. Subject to completion of Landlord Improvement and Section 2(a) of the Lease, Tenant hereby accepts the base, shell and core of the Premises (collectively, the "Base, Shell and Core"), in its current "AS IS" condition existing as of the date of the Lease and the Commencement Date. Except with respect to the Landlord Improvements set forth in Paragraph 13(a) of the Lease and the Tenant Improvement Allowance set forth below, Landlord shall not be obligated to make or pay for any alterations

EXHIBIT F-1

or improvements to the Premises, the Building or the Park. Tenant acknowledges and agrees that neither Landlord nor any of Landlord's agents, representatives or employees has made any representations as to the suitability, fitness or condition of the Premises for the conduct of Tenant's business or for any other purpose, including without limitation, any storage incidental thereto. Any exception to the foregoing provisions must be made by express written agreement by both parties.

3. Construction Drawings for the Premises. Prior to the execution of this Lease, Landlord and Tenant have approved a detailed space plan for the construction of certain improvements in the Premises, which space plan is attached hereto as Schedule 1 (the "Final Space Plan"). Based upon and in conformity with the Final Space Plan, Landlord shall cause its architect and engineers to prepare and deliver to Tenant, for Tenant's approval, detailed specifications and engineered working drawings for the tenant improvements shown on the Final Space Plan (the "Working Drawings"). The Working Drawings shall incorporate modifications to the Final Space Plan as necessary to comply with the floor load and other structural and system requirements of the Building. To the extent that the finishes and specifications are not completely set forth in the Final Space Plan for any portion of the tenant improvements depicted thereon, the actual specifications and finish work shall be in accordance with the specifications for the Property's standard tenant improvement items, as determined by Landlord. Within seven (7) business days after Tenant's receipt of the Working Drawings, Tenant shall approve or disapprove the same, which approval shall not be unreasonably withheld; provided, however, that Tenant may only disapprove the Working Drawings to the extent such Working Drawings are inconsistent with the Final Space Plan and only if Tenant delivers to Landlord, within such seven (7) business day period, specific changes proposed by Tenant which are consistent with the Final Space Plan and do not constitute changes which would result in any of the circumstances described in items (i) through (iv) below. If any such revisions are timely and properly proposed by Tenant, Landlord shall cause its architect and engineers to revise the Working Drawings to incorporate such revisions and submit the same for Tenant's approval in accordance with the foregoing provisions, and the parties shall follow the foregoing procedures for approving the Working Drawings until the same are finally approved by Landlord and Tenant. Upon Landlord's and Tenant's approval of the Working Drawings, the same shall be known as the "Approved Working Drawings". Once the Approved Working Drawings have been approved by Landlord and Tenant, Tenant shall make no changes, change orders or modifications thereto except in accordance with Section 4(c) below. The Final Space Plan, Working Drawings and Approved Working Drawings shall be collectively referred to herein as, the "Construction Drawings."

4. Design Process/Working Drawings.

a. Architect and Contractor. Upon execution of the Lease, Landlord will retain the services of an architect ("Architect") and Dome Construction (the "Contractor"). Any contract with Contractor to construct the Tenant Improvements shall be based upon a stipulated sum or guaranteed maximum price. The contract with the Architect shall not impose limitations of liabilities for its errors or omissions less than \$2,000,000 and any such contracts with the Contractor shall be not based upon time and materials without a guaranteed maximum price. All contracts shall provide customary warranties of not less than one (1) year from completion of the Tenant Improvements.

b. Commencement of Construction. At such time as all necessary governmental permits and other required approvals have been obtained by Landlord, Landlord shall commence construction of and, once commenced, shall diligently pursue the completion of the Tenant Improvements substantially in compliance with the Construction Drawings, the Budget and this Work Letter. Following completion of the Construction Drawings, Landlord shall apply for and diligently pursue all permits and other required approvals for the Tenant Improvements. Prior to the execution of the Lease, Landlord and Tenant approved a preliminary schedule for the Tenant Improvements, which is attached to the Lease as Exhibit F-3 (the "**Schedule**"). Landlord shall construct the Excluded Work in a manner that will not materially interfere with Tenant's use of the Premises or its business activities conducted from the Premises. Landlord shall schedule the portion of the Excluded Work consisting of installation of permanently installed casework in the laboratory portion of the Premises, power upgrades, and such other work which the parties mutually agree would be disruptive to Tenant at least one (1) week prior to performing such work and shall perform such disruptive portion of the Excluded Work after normal business hours. For purposes of this Paragraph 4(b) only, "normal business hours" shall mean 7:00am – 11:30pm Monday through Friday and 9:00am to 5:00pm on Saturday.

c. Change Orders. Landlord's approval is required in advance of all changes to, and deviations from, the Construction Drawings (each a "**Change Order**"); which approval shall not be unreasonably withheld, conditioned or delayed, but may be withheld in Landlord's sole discretion if such change or modification would: (i) be of a quality lower than the quality of the standard tenant improvement items for the Building; (ii) materially increase the expected date of Substantial Completion for (y) the Tenant Improvements excluding the Excluded Work or (z) the Excluded Work; and/or (iii) require any changes to the base, shell and core or structural improvements or systems of the Building. In the event that Tenant requests any Change Order (which Landlord approves) which increases the cost to construct the Tenant Improvements above the Tenant Improvement Allowance (and, if properly requested by Tenant pursuant to Section 5(c), the Additional Allowance), such increased cost shall become part of the Excess Cost (as hereinafter defined) and shall be paid by Tenant to Landlord within ten (10) days of receipt of Landlord's invoice.

5. Tenant Improvement Allowance: Additional Allowance.

a. Landlord shall contribute up to, but not exceeding One Hundred Ninety and 00/100 Dollars (\$190.00) pre rentable square foot of the Premises (i.e., up to Seventeen Million One Hundred Thousand and 00/100 Dollars (\$17,100,000.00)), for costs relating to the initial design and construction of the Tenant Improvements (the "**Tenant Improvement Allowance**"). The Tenant Improvement Allowance shall be used to pay for the cost of (i) the Construction Drawings for the Tenant Improvements within the Premises, (ii) engineering required in connection with the performance of such work, (iii) all permit fees required by any administrative or governmental agency in connection with the performance of the Tenant Improvements or other costs expended in obtaining approvals and permits, (iv) actual contractor costs and charges for materials, supplies and labor, contractor's profit, overhead and general conditions, (v) any other costs incurred in connection with the hard and soft costs of construction of the Tenant Improvements, including without limitation, any costs, fees and expenses associated with any modifications, improvements or alterations to the Premises,

Building, the Common Areas and/or Park required to comply with Laws arising from the Tenant Improvements; (vi) built-in furniture which are fixtures are remain in the Premises at the end of the Term, (vii) data cabling, and (viii) Change Orders. Tenant shall be solely responsible for all costs of Tenant Improvements in excess of the Tenant Improvement Allowance. Prior to the execution of the Lease, Landlord and Tenant approved a preliminary budget for the Tenant Improvements, which is attached to the Lease as Exhibit F-2 (the “**Budget**”). The amount by which the estimated costs of the Tenant Improvement exceed the Tenant Improvement Allowance shall mean the “**Excess Cost**” and the percentage amount of the Excess Cost divided by the Budget shall mean the “**Percentage Contribution**”.

b. The cost of the Tenant Improvements shall be paid on a pari passu basis as follows: No more often than once per month, Landlord shall deliver to Tenant a written demand for payment of the Excess Cost together with all invoices paid by Landlord for labor rendered and materials delivered with respect to the applicable payment request. Within thirty (30) days following receipt of such demand, Tenant shall pay its Percentage Contribution of the amount of labor rendered and materials delivered as shown on the invoices; provided however, if the Tenant Improvement Allowance is exhausted, Tenant shall pay for the entire amount of the labor rendered and materials delivered.

c. Tenant shall have the option of increasing the Tenant Improvement Allowance up to an additional \$45.00 per rentable square foot of the Premises (i.e., up to an additional Four Million Fifty Thousand and 00/100 Dollars (\$4,050,000.00)) (the “**Additional Allowance**”) for the costs reasonably relating to the design and construction of the Tenant Improvements, upon written notice to Landlord prior to the Commencement Date. Any portion of the Additional Allowance used shall be amortized into the Monthly Base Rent at nine percent (9%) per annum over the Term commencing on the Commencement Date and shall be memorialized through an amendment to this Lease. Following Tenant’s election to increase the Tenant Improvement Allowance by the Additional Allowance, the Excess Cost and Percentage Contribution shall be recalculated accordingly.

d. If any portion of the Tenant Improvement Allowance or Additional Allowance, if any, is not used by Tenant within eighteen (18) months following the Commencement Date (the “**Outside Date**”), such portion shall be deemed waived with no further obligation by Landlord with respect thereto; provided, however, (a) if construction of the Tenant Improvements has commenced prior to the Outside Date, but has not been completed, then Tenant shall have an additional period from the Outside Date to use the Tenant Improvement Allowance or Additional Allowance, if any, to complete such work; provided, however, in no event shall such additional period exceed six (6) months. In no event shall Landlord be obligated to make disbursements pursuant to this Work Letter in a total amount that exceeds the Tenant Improvement Allowance as may be increased by the Additional Allowance, if any, and in no event shall Tenant be entitled to any excess, credit, deduction or offset against Rent for any unused portion of the Tenant Improvement Allowance or Additional Allowance.

EXHIBIT F-4

6. Consents/Approvals/Representatives. Landlord has appointed Ron Krietemeyer, as its authorized representative (“**Landlord’s Representative**”) to act for Landlord in all matters covered by this Work Letter. Tenant hereby designates Oguzhan At, as its authorized representative (“**Tenant’s Representative**”) with full power and authority to bind Tenant for all actions taken with regard to the Tenant Improvements. Except as otherwise provided in this Work Letter, within three (3) Business Days of receipt of any requested approval of any item or document, Landlord’s Representative shall approve or disapprove (with sufficient detail) any such request, unless the scope of Tenant’s request is such that Landlord’s Representative cannot, using commercially reasonable efforts, complete the required modifications within three (3) Business Days, in which case such three (3) Business Day period shall be extended for such period after Landlord receives the request as is reasonably necessary to respond to such request.

7. Construction Management Fee. Landlord shall employ Tarlton Properties, Inc. as the construction manager for construction of the Tenant Improvements at a fee equal to four percent (4%) of hard construction costs of the Tenant Improvements (i.e., amounts paid to any general contractor, subcontractors, vendors and suppliers of labor and materials for the construction of the Tenant Improvements). Such construction management fee shall be a cost of the Tenant Improvements.

8. Miscellaneous. In the event of any defects in the Tenant Improvements, upon written notice from Tenant describing with specificity such defect, Landlord shall enforce all warranties against the Architect and/or Contractor for correction of such defects. In the event of a conflict between the Lease (including the Work Letter) and the Approved Construction Drawings, the Approved Construction Drawings shall control.

9. Construction of the Tenant Improvements. All materials (as well as methods and processes) used in the performance of the Tenant Improvements shall be new and of good quality and conform to all reasonable standards of the Building. All of the Tenant Improvements shall be performed in a good and workmanlike manner and in accordance with any and all applicable codes, statutes, rules, regulations, ordinances and orders of any federal, state, county or municipal agency or other governmental body having jurisdiction over the Premises, and in substantial compliance with the Construction Drawings and Budget.

10. Non-chargeable construction costs. During the period of design, construction of the Tenant Improvements, Landlord shall not deduct from the Tenant Improvement Allowance or otherwise charge Tenant for: (i) parking; (ii) exterior staging areas; (iii) non-exclusive access to freight elevators; (iv) non-exclusive use of loading docks; or (v) utilities or temporary HVAC during building hours.

11. Tenant Delays. Any delay related to or arising from any interference by Tenant or its employees, agents or contractors with Landlord’s completion of the Tenant Improvements, or any default by Tenant under the Lease or failure to comply with the terms of this Work Letter which causes delay in the Substantial Completion of the Tenant Improvements shall constitute a “**Tenant Delay**”. Landlord shall give Tenant written notice of any claimed Tenant Delay within two (2) business days after the beginning of the delay, which notice includes a specific description of the claimed Tenant Delay. Should a Tenant Delay occur, Landlord shall not be responsible for such Tenant Delay, including without limitation, increased construction costs, increased general condition costs and other costs, the construction schedule and Tenant’s ability to conduct business or occupy the Premises and notwithstanding anything to the contrary set forth in the Lease or this Work Letter and regardless of the actual date of Substantial Completion, the Commencement Date (as set forth in the Basic Lease Information) shall be deemed to be the date the Lease Commencement Date would have occurred if no Tenant Delay or Delays, as set forth above, had occurred.

12. Tenant Default. Notwithstanding any provision to the contrary contained in the Lease, if an event of default by Tenant as described in Paragraph 20 of the Lease or any default by Tenant under this Work Letter has occurred and not cured within the applicable cure period at any time on or before the Substantial Completion of the Premises, then (i) in addition to all other rights and remedies granted to Landlord pursuant to the Lease, at law or in equity, Landlord shall have the right to withhold payment of all or any portion of the Tenant Improvement Allowance, the Additional Allowance, if any, and/or Landlord may cause Contractor to cease the construction of the Tenant Improvements (in which case, Tenant shall be responsible for any delay in the Substantial Completion of the Premises caused by such work stoppage), and (ii) all other obligations of Landlord under the terms of this Work Letter shall be suspended, until such time as such default is cured pursuant to the terms of the Lease (in which case, Tenant shall be responsible for any delay in Substantial Completion of the Premises caused by such inaction by Landlord). In addition, if the Lease is terminated prior to the Lease Commencement Date, due to a default by Tenant as described in Paragraph 20 of the Lease or under this Work Letter, in addition to any other remedies available to Landlord under the Lease, at law and/or in equity, Tenant shall pay to Landlord, as Additional Rent under the Lease, within five (5) days of receipt of a statement therefor, any and all costs incurred by Landlord (including any portion of the Tenant Improvement Allowance and Additional Allowance, if any, disbursed by Landlord) and not reimbursed or otherwise paid by Tenant through the date of such termination in connection with the Tenant Improvements to the extent planned, installed and/or constructed as of such date of termination, including, but not limited to, any costs related to the removal of all or any portion of the Tenant Improvements and restoration costs related thereto.

13. Time of the Essence in this Work Letter. Unless otherwise indicated, all references herein to a "number of days" shall mean and refer to calendar days. In all instances where Tenant is required to approve or deliver an item, if no written notice of approval is given or the item is not delivered within the stated time period, at Landlord's sole option, at the end of said period the item shall automatically be deemed approved or delivered by Tenant and the next succeeding time period shall commence.

EXHIBIT F-1

Description of Landlord Improvements/Warm-Shell Improvements

In accordance with Paragraph 13, Landlord, at Landlord's cost, shall complete the following improvements:

OCCUPANCY

- Designed to accommodate "B" and "L" occupancies.

SITE / PARKING

- Exterior hardscape and landscape including site lighting, curbs, sidewalks and drive aisles, miscellaneous site furnishings. (Part of sitewide improvements)
- Existing Caterpillar emergency generator with enclosure for life-safety and tenant back-up power (750kW / 900 kVA/60Hz).
- Immediate connection to Alameda Creek pedestrian/bicycle trail connecting to Union Landing (5-minute bicycle ride).
- Existing 279 parking spaces (3.1/1000 SF).

Site/Parking Landlord Warm Shell Project Scope

- Install 20 new Level 2 EV Charging station adjacent to building.
- New screened outdoor seating area adjacent to building.
- Install new park entry monuments. (Part of sitewide improvements)
- Install new Monument at building entry (if center entry option selected).
- Install bike racks in park. (Part of sitewide improvements)
- New park-wide bike share program. (Part of sitewide improvements)
- Upgrade park wide landscaping to native plant, drought resistant, low water design and irrigation system. (Part of sitewide improvements)

STRUCTURE

- Reinforced slab on grade supported by a perimeter footing and grade beams.
- Panelized wood roof supported by open-web steel joists, open-web steel trusses, steel tube columns, and reinforced concrete tilt-up walls.
- lateral load-resisting system consisting of a flexible wood structural panel sheathed roof diaphragm and both perimeter and interior concrete tilt-up shear walls.

Structural Landlord Warm Shell Project Scope

- Structural upgrades as necessary to support Warm Shell mechanical scope of work.
- Modifications and patch back as required for Warm Shell underground scope of work.
- Building envelope modifications as required to support Warm Shell lobby scope of work.

BUILDING/INTERIOR

- 2 dock high doors (10' x 10') and 4 grade level doors (12' x 15').
- Wet-pipe automatic fire suppression (sprinkler) systems with flow switches and alarms.
- Telecom main point of entry (MPOE) room at grade.
- New Double-height ground floor lobby, complete with main greeting/security desk, and all interior finishes, FF&E and art.

Building/Interior Landlord Warm Shell Project Scope

- Construct 2 restroom cores with a maximum of 21 fixtures and 9 sinks at locations to be determined by tenant floor plan (Tarlton standard finishes).
- Construct 1 IDF room at a location to be determined by tenant floor plan with power supplied to a dedicated panel (24 circuits) and empty conduit for tenant data connection to MPOE.
- Construct new exterior entry with defined architectural element and other exterior architectural improvements to enhance overall building appearance, per an agreed upon design.
- Construct new interior lobby (1800 square feet maximum with Tarlton standard lobby finishes).
- Install new code compliant Fire Alarm/Monitoring system.
- Replace two existing hot water heaters.
- Install/upgrade building card access system to allow exterior card access.
- Replace existing skylights (14 total) with new prismatic skylights.
- Building warm shell and building site will be delivered in compliance with the Americans with Disabilities Act (ADA).
- Building warm shell scope will be delivered CA Title 24 compliant.
- Building warm shell scope will be delivered in compliance with local Building and Fire codes.

EXHIBIT F1-2

MECHANICAL

Mechanical Landlord Warm Shell Project Scope

- Supply and install up to 275 tons of new mechanical capacity (undistributed—units installed on roof, plenums dropped) to support laboratory buildout for tenant improvement project. This capacity would accommodate a laboratory buildout for 60% (~54,000 square feet) of the building at 1 ton per 200 square feet of mechanical capacity (2CFM/SF).
- Landlord to provide reuse of minimum four (4) 10 ton and four (4) 12.5 ton (100 tons total) existing mechanical units for use on the office area buildout of the tenant improvement project (to be installed as part of TI).
- Install air distribution and exhaust fans in new warm shell scope restroom cores.
- Install new Building Management system (BMS) to support warm shell buildout. System will be capable of supporting final tenant improvement project buildout.
- Provide distributed HVAC to new warm shell lobby buildout.
- Provide dedicated unit (3 ton maximum), distributed to warm shell IDF room buildout.

ELECTRICAL

- Existing 750KW diesel generator, automatic transfer switch (ATS) and emergency power distribution panel.

Electrical Landlord Warm Shell Project Scope

- Provide new 4,000 amp service (480V, 3 phase, 4 wire), distribution switchgear in MPOE and distribution to warm shell project scope. Based on a 60% lab buildout (~54,000 square feet) this will provide 40 watts/SF for laboratory areas and 14 watts/SF for office areas to support a tenant improvement project.
- New lighting for all areas in warm shell scope.
- Convenience power distributed to all areas in warm shell scope. Power supplied to new 20 circuit panel in warm shell scope IDF room.

EXHIBIT F1-3

EXHIBIT F-2

Preliminary Budget

EXHIBIT F-3

Preliminary Schedule

SCHEDULE 1

Final Space Plan

Schedule-1

EXHIBIT G

Hazardous Materials Disclosure Certificate

Exhibit G

FIRST AMENDMENT TO LEASE

3200 Whipple Road
Union City, California

THIS FIRST AMENDMENT TO LEASE (this “**Amendment**”) is made as of October 11, 2023 (the “**Effective Date**”), by and between **WHIPPLE ROAD PORTFOLIO, LLC**, a Delaware limited liability company (“**Landlord**”), and **BILLIONTOONE, INC.**, a Delaware corporation (“**Tenant**”).

RECITALS

WHEREAS, Landlord and Tenant are parties to that certain Lease Agreement dated April 10, 2022 (the “**Lease**”), with respect to certain premises identified in the Lease as 3200 Whipple Road, Union City, California (the “**Premises**”).

WHEREAS, Landlord and Tenant desire to amend the Lease on the terms set forth herein, all as more particularly set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. **Defined Terms.** Capitalized terms defined in the Lease which are used in this Amendment shall have the same meaning as in the Lease, except as otherwise provided in this Amendment.

2. **Additional Allowance.** Pursuant to Section 5(c) of the Work Letter attached to the Lease, Tenant has exercised its option use a portion of the Additional Allowance to increase the Tenant Improvement Allowance by an additional Five Hundred Seventy-Two Thousand Eight Hundred Eighty-One and 65/100 Dollars (\$572,881.65) (such portion referred to as the “**Increased Allowance**”) to be used for the costs reasonably relating to the design and construction of the Tenant Improvements. The Increased Allowance shall be disbursed in accordance with the terms and conditions pertaining to the Tenant Improvement Allowance as set forth in the Lease.

3. **Base Rent.** Pursuant to the terms of the Lease, the Increased Allowance shall be amortized into the Monthly Base Rent at nine percent (9%) per annum over the Term. Accordingly, effective as of October 1, 2023, the Monthly Base Rent shall be increased by an amount equal to Seven Thousand Three Hundred Seventy-Two and 17/100 Dollars (\$7,372.17), and the Base Rent chart set forth in Paragraph 4(a) of the Lease is hereby revised and replaced with the following Base Rent chart below:

Months	Square Feet	\$/SF/Mo./NNN	Monthly Base Rent	\$/SF/Mo./NNN With ATIA
1-8*	22,500	\$4.95	\$111,375.00	\$4.95
9*	45,000	\$4.95	\$222,750.00	\$4.95
10-12*	45,000	\$4.95	\$230,122.17	\$5.11
13-24	89,969	\$5.12	\$468,305.85	\$5.21
25-36	89,969	\$5.30	\$484,438.53	\$5.38
37-48	89,969	\$5.49	\$501,135.85	\$5.57
49-60	89,969	\$5.68	\$518,417.58	\$5.76
61-72	89,969	\$5.88	\$536,304.17	\$5.96
73-84	89,969	\$6.08	\$554,816.79	\$6.17
85-96	89,969	\$6.30	\$573,977.35	\$6.38
97-108	89,969	\$6.52	\$593,808.53	\$6.60
109-120	89,969	\$6.75	\$614,333.80	\$6.83
121-126	89,969	\$6.98	\$635,577.46	\$7.06

The Monthly Base Rent shall be increased to include repayment of the Increased Allowance as provided herein; provided, that, notwithstanding anything to the contrary contained herein, any portion of the Monthly Base Rent that consists of such repayment of the Increased Allowance shall not be subject to abatement for any reason whatsoever, even if other Monthly Base Rent is subject to abatement, it being the specific intent of the Parties that such repayment of the Increased Allowance be made by Tenant in full and without any abatement.

4. Remaining Balance of Additional Allowance. Section 5(c) of the Work Letter attached to the Lease is hereby revised to provide that Tenant may use all or any portion of the remaining balance of the Additional Allowance, such balance equal to the amount of Three Million Four Hundred Seventy-Seven Thousand One Hundred Eighteen and 35/100 Dollars (\$3,477,118.35) (the “**Remaining Balance**”) for the costs reasonably relating to the design and construction of Alterations done in accordance with the terms and conditions set forth in Paragraph 14(d) of the Lease following completion of the Tenant Improvements. Any portion of the Remaining Allowance used by Tenant shall be amortized into the Monthly Base Rent at nine percent (9%) per annum over the Term commencing on the Commencement Date and shall be memorialized through an amendment to the Lease. If any portion of the Remaining Balance is not used by Tenant prior to December 7, 2024, such portion shall be deemed waived with no further obligation by Landlord with respect thereto. In no event shall Landlord be obligated to make disbursements in a total amount that exceeds the Remaining Balance and in no event shall Tenant be entitled to any abatement, credit, deduction, offset or other reduction against Rent for any unused portion of the Remaining Balance.

5. Civil Code Section 1938 Disclosure. For purposes of Section 1938(a) of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges, that neither the Building nor the Premises has undergone inspection by a Certified Access Specialist (CASp) (defined by California Civil Code Section 55.52). Pursuant to California Civil Code Section 1938, Tenant is hereby notified that a CASp can inspect the Premises and determine whether the Premises complies with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the Premises, Landlord may not prohibit Tenant from obtaining a CASp inspection of the Premises for the occupancy of the Tenant, if requested by Tenant. If Tenant desires a CASp inspection, the terms of Paragraph 14(k) of the Lease shall apply.

6. OFAC List Representation. Tenant hereby represents and warrants to Landlord that neither Tenant nor any of its officers, directors, shareholders, partners, members or affiliates is or will be an entity or person: (i) that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order 13224 issued on September 24, 2001 (“**EO 13224**”); (ii) whose name appears on the United States Treasury Department’s Office of Foreign Assets Control (“**OFAC**”) most current list of “Specifically Designated National and Blocked Persons” (which list may be published from time to time in various mediums including, but not limited to, the OFAC website, <http://www.treas.gov/ofac/t11sdn.pdf>); (iii) who commits, threatens to commit or supports “terrorism,” as that term is defined in EO 13224; or (iv) who is otherwise affiliated with any entity or person listed above.

7. Continuing Effect; Conflicts. All of the terms and conditions of the Lease shall remain in full force and effect, as the Lease is amended by this Amendment. If any provision of this Amendment conflicts with the Lease, the provisions of this Amendment shall control.

8. Warranty of Authority. Each party represents and warrants to the other that the person signing this Amendment is duly and validly authorized to do so on behalf of the entity it purports to so bind, and if such party is a limited liability company or a corporation, that such limited liability company or corporation has full right and authority to enter into this Amendment and to perform all of its obligations hereunder.

9. Amendments. The Lease may only be amended by a writing signed by the parties hereto, or by an electronic record that has been electronically signed by the parties hereto and has been rendered tamper-evident as part of the signing process. The exchange of email or other electronic communications discussing an amendment to the Lease, even if such communications are signed, does not constitute a signed electronic record agreeing to such an amendment.

10. Effectiveness. No binding agreement between the parties pursuant hereto shall arise or become effective until this Amendment has been duly executed by both Tenant and Landlord and a fully executed copy of this Amendment has been delivered to both Tenant and Landlord.

11. Counterparts; Electronic Signatures. This Amendment may be executed in counterparts, including both counterparts that are executed on paper and counterparts that are in the form of electronic records and are executed electronically. An electronic signature means any electronic sound, symbol or process attached to or logically associated with a record and executed and adopted by a party with the intent to sign such record, including facsimile or e mail electronic signatures. All executed counterparts shall constitute one agreement, and each counterpart shall be deemed an original. The parties hereby acknowledge and agree that electronic records and electronic signatures, as well as facsimile signatures, may be used in connection with the execution of this Amendment and electronic signatures, facsimile signatures

or signatures transmitted by electronic mail in so-called pdf format shall be legal and binding and shall have the same full force and effect as if a paper original of the Lease had been delivered and signed using a handwritten signature. Landlord and Tenant (i) agree that an electronic signature, whether digital or encrypted, of a party to this Amendment is intended to authenticate this writing and to have the same force and effect as a manual signature, (ii) intend to be bound by the signatures (whether original, faxed or electronic) on any document sent or delivered by facsimile, or electronic mail, or other electronic means, (iii) are aware that the other party will rely on such signatures, and (iv) hereby waive any defenses to the enforcement of the terms of the Lease based on the foregoing forms of signature. If this Amendment has been executed by electronic signature, all parties executing this document are expressly consenting under the Electronic Signatures in Global and National Commerce Act ("**E-SIGN**"), and Uniform Electronic Transactions Act ("**UETA**"), that a signature by fax, email or other electronic means shall constitute an Electronic Signature to an Electronic Record under both E-SIGN and UETA with respect to this specific transaction.

[Signature Page Follows]

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this Amendment as of the date first set forth above.

TENANT:

BillionToOne, Inc.,
a Delaware corporation

BY: /s/ Oguzhan Atay

ITS: CEO

LANDLORD:

WHIPPLE ROAD PORTFOLIO, LLC,
a Delaware limited liability company

By: HSRE-TARLTON III, its sole member

By: TPI INVESTORS 19, a member

By: TARLTON PROPERTIES, INC., its manager

By: /s/ Elizabeth Krietemeyer

Elizabeth Krietemeyer
Senior Vice President

LEASE AGREEMENT

(NNN)

Basic Lease Information

Lease Date: May __, 2020 (5/21/2020)

Landlord: O'Brien Drive Portfolio, LLC

Landlord's Address: c/o Tarlton Properties, Inc.
1530 O'Brien Drive, Suite C
Menlo Park, California 94025
Electronic address:

Tenant: BillionToOne Inc., a Delaware corporation

Tenant's Address: Prior to the Commencement Date:
1455 Adams Dr.
Menlo Park, CA
Attn: Oguzhan Atay

On and after the Commencement Date:

1035 O'Brien Drive
Menlo Park, CA 94025
Attn: Oguzhan Atay

Premises: Approximately 36,068 rentable square feet as shown on Exhibit A.

Premises Address: 1035 O'Brien Drive
Menlo Park, CA 94025

Building: Approximately 36,068 rentable square feet

Park: Approximately 10.739 Acres.

Term: The "Commencement Date" shall mean the date that Landlord delivers the Premises to Tenant with the Tenant Improvements described in the work letter attached hereto as Exhibit B and incorporated hereby (the "Work Letter") Substantially Completed (as defined in the Work Letter), which date is estimated to be November 30, 2020. The Term shall expire on the last day of the month which is one hundred twenty (120) months following the Commencement Date ("Expiration Date").

Base Rent (§3):

Period	RSF	NNN Rent/ PSF/Month	Monthly Base Rent
Months 1-12	22,050	\$5.80	\$127,890.00
Months 13-18	27,776	\$6.00	\$166,656.00
Months 19-24	36,068	\$6.21	\$223,982.28
Months 25-36	36,068	\$6.43	\$231,821.66
Months 37-48	36,068	\$6.65	\$239,935.42
Months 49-60	36,068	\$6.89	\$248,333.16

Security Deposit (§4): \$750,000.00, subject to adjustment as provided in Section 4 below.

***Tenant's Share of
Operating Expenses
(§6.1):** 100%

***Tenant's Share of Tax Expenses (§6.2):** 100%

***Tenant's Share of
Common Area
Utility Costs (§7):** 16.58%

***Tenant's Share of
Utility Expenses (§7):** 100%

Permitted Uses(§9): General office, laboratory, research and development, light manufacturing and related uses, but only to the extent permitted by the City of Menlo Park and all agencies and governmental authorities having jurisdiction thereof, and for no other use or purpose without Landlord's prior written consent, which consent shall not be unreasonably withheld.

Parking Spaces: Tenant's Share of non-exclusive and non-designated spaces.

Broker (§38): Cornish & Carey Commercial dba Newmark Knight Frank for Landlord and Kidder Mathews for Tenant

Exhibits: *Exhibit A* - Premises

Exhibit B - Work Letter

Schedule 1 – Space Plans

Schedule 2 – Initial Budget

Schedule 3 – Budget Adjustments

Exhibit C - Hazardous Materials Disclosure Certificate - Example

Exhibit D - Change of Commencement Date - Example

Exhibit E - Tenant's Initial Hazardous Materials Disclosure Certificate

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LEASE AGREEMENT

DATE: This Lease is made and entered into as of the Lease Date set forth in the Basic Lease Information. The Basic Lease Information and this Lease are and shall be construed as a single instrument.

1. Premises. Landlord hereby leases the Premises to Tenant upon the terms and conditions contained herein. Landlord hereby grants to Tenant right to use, on a non-exclusive basis, parking areas and ancillary facilities located within the Common Areas of the Park, subject to the terms of this Lease. Landlord and Tenant hereby agree that for purposes of this Lease, as of the Lease Date, the rentable square footage area of the Premises, the Building, and the Park shall be deemed to be the number of rentable square feet as set forth in the Basic Lease Information. Tenant hereby acknowledges that the rentable square footage of the Premises may include a proportionate share of certain areas used in common by all occupants of the Building and/or the Park (for example an electrical room or telephone room). Tenant further agrees that the number of rentable square feet of the Park may subsequently change after the Lease Date commensurate with any modifications to any of the foregoing by Landlord, and Tenant's Share shall accordingly change.

2. Adjustment of Commencement Date; Condition of the Premises.

2.1 If Landlord cannot deliver possession of the Premises on the Commencement Date, Landlord shall not be subject to any liability nor shall the validity of the Lease be affected; provided, the Lease Term and the obligation to pay Rent shall commence on the date possession is tendered. In the event the commencement date of this Lease is other than the Commencement Date specified in the Basic Lease Information, Landlord and Tenant shall execute a written amendment to this Lease, substantially in the form of Exhibit D hereto, wherein the parties shall specify the actual commencement date and the date on which Tenant is to commence paying Rent. The word "Term" whenever used herein refers to the initial term of this Lease and any extension thereof. Landlord shall deliver possession of the Premises to Tenant in its "as-is" condition, except for those certain Tenant Improvements to be constructed by Landlord pursuant to the Work Letter attached as Exhibit B. Subject to punch list items relating to the Tenant Improvements as set forth in Exhibit B, by taking possession of the Premises, Tenant shall be deemed to have accepted the Premises in satisfactory condition and state of repair. Tenant hereby acknowledges and agrees that neither Landlord nor Landlord's agents or representatives has made any representations or warranties as to the suitability, safety or fitness of the Premises for the conduct of Tenant's business, Tenant's intended use of the Premises or for any other purpose. Tenant agrees that at any time before or during the Term of this Lease, Landlord shall have the one-time right to relocate Tenant from the Premises described herein to other space within the Park on substantially the same terms and conditions of this Lease provided (i) Landlord shall provide Tenant at least thirty (30) days prior written notice, (ii) such relocation Premises shall be substantially the same in configuration, size, quality and design with improvements substantially similar to the original Premises, including, without limitation, lab space, offices, break rooms, conference rooms, installed in the relocation Premises, (iii) all costs to improve the relocation Premises and to relocate Tenant shall be paid for by Landlord at its sole cost and expense, (iv) Rent shall not increase as a result of such relocation, (v) Tenant shall not be required to surrender the original Premises until six (6) months after the new Premises are delivered to Tenant, and (vi) during such period Tenant occupies both the new Premises and original Premises, Tenant shall only be required to pay rent for the original Premises.

2.2 Tenant acknowledges that the applicable ordinance of the City of Menlo Park (the “City”) requires that Tenant must obtain an Administrative Use Permit (“AUP”) from the City if Tenant maintains on the Premises five (5) gallons or more of Hazardous Materials (as defined in Section 29.2 below). Accordingly, for the period from the Commencement Date until the date Tenant obtains the AUP from the City permitting Tenant to maintain on the Premises five (5) gallons or more of Hazardous Materials, Tenant shall maintain less than five (5) gallons of Hazardous Materials on the Premises. Tenant shall promptly apply for and shall use its commercially reasonable good faith diligent efforts to comply with the City’s requirements for the issuance to Tenant of the AUP. Landlord shall assist Tenant in the filing and processing of the application for the AUP, and Tenant shall pay all costs associated with such efforts, including but not limited to the costs and fees incurred by Green Environment and DES Architects/Engineers as well as City fees associated with the AUP; provided, however, Landlord shall not be responsible for the issuance of the AUP. Tenant shall deliver a copy of the AUP to Landlord and Tenant shall comply with the provisions thereof.

3. Rent. On the date that Tenant executes this Lease, Tenant shall deliver to Landlord the original executed Lease, the Base Rent in the amount of One Hundred Twenty-Seven Thousand Eight Hundred Ninety and 00/100 Dollars (\$127,890.00) (which shall be applied against the Rent payable for the first month of the Term), plus the amount of Seventy-Four Thousand Two Hundred Forty-Nine and 00/100 Dollars (\$74,249.00) (which amount shall be applied against Additional Rent payable for the first month of the Term), plus the Security Deposit, and all insurance certificates evidencing the insurance required to be obtained by Tenant under Section 12 of this Lease. Tenant agrees to pay Landlord, without prior notice or demand, or abatement, offset, deduction or claim, except as otherwise provided herein, the Base Rent described in the Basic Lease Information, payable in advance at Landlord’s address specified in the Basic Lease Information on the Commencement Date and thereafter on the first (1st) day of each month throughout the balance of the Term of the Lease. In addition to the Base Rent set forth in the Basic Lease Information, Tenant shall pay Landlord in advance on the Commencement Date and thereafter on the first (1st) day of each month throughout the balance of the Term of this Lease, as Additional Rent, Tenant’s Share of Operating Expenses, Tax Expenses, Common Area Utility Costs, and Utility Expenses. Tenant shall also pay to Landlord as Additional Rent hereunder, immediately on Landlord’s demand therefor, any and all costs and expenses incurred by Landlord to enforce the provisions of this Lease, including, but not limited to, costs associated with the delivery of notices, delivery and recordation of notice(s) of default, attorneys’ fees, expert fees, court costs and filing fees, to the extent Tenant has breached any of the provisions of this Lease (collectively, the “**Enforcement Expenses**”). The term “**Rent**” whenever used herein refers to the aggregate of all amounts due by Tenant hereunder, including without limitation, the foregoing amounts. If Landlord permits Tenant to occupy the Premises without requiring Tenant to pay rental payments for a period of time, the waiver of the requirement to pay rental payments shall only apply to waiver of the Base Rent and Tenant shall otherwise perform all other obligations of Tenant required hereunder. The Rent for any fractional part of a calendar month at the commencement or termination of the Lease term shall be a prorated amount of the Rent for a full calendar month based upon a thirty (30) day month. The prorated Rent shall be paid on the Commencement Date and the first day of the calendar month in which the date of termination occurs, as the case may be.

4. Security Deposit. Upon Tenant's execution of this Lease, Tenant shall deliver to Landlord, as a Security Deposit for the performance by Tenant of its obligations under this Lease, the amount specified in the Basic Lease Information. If Tenant is in default, then following expiration of all applicable notice and cure periods, Landlord may, but without obligation to do so, use the Security Deposit, or any portion thereof, to the extent reasonably necessary to cure the default or to compensate Landlord for all damages sustained by Landlord resulting from Tenant's default, including, but not limited to the Enforcement Expenses. Tenant shall, within ten (10) days of written request therefor, pay to Landlord a sum equal to the portion of the Security Deposit so applied or used so as to replenish the amount of the Security Deposit held to increase such deposit to the amount initially deposited with Landlord. Within sixty (60) calendar days after the termination of this Lease, Landlord shall return the Security Deposit to Tenant, less such amounts as are reasonably necessary, as determined solely by Landlord, to remedy Tenant's default(s) hereunder or to otherwise restore the Premises to a clean and safe condition, reasonable wear and tear excepted. If the cost to restore the Premises exceeds the amount of the Security Deposit, Tenant shall promptly deliver to Landlord any and all of such excess sums as reasonably determined by Landlord. Landlord shall not be required to keep the Security Deposit separate from other funds, and, unless otherwise required by law, Tenant shall not be entitled to interest on the Security Deposit. In no event or circumstance shall Tenant have the right to any use of the Security Deposit and, specifically, Tenant may not use the Security Deposit as a credit or to otherwise offset any payments required hereunder, including, but not limited to, Rent or any portion thereof. Tenant waives (i) California Civil Code Section 1950.7 and any and all other laws, rules and regulations applicable to security deposits in the commercial context ("**Security Deposit Laws**"), and (ii) any and all rights, duties and obligations either party may now or, in the future, will have relating to or arising from the Security Deposit Laws. Notwithstanding anything to the contrary herein, the Security Deposit may be retained and applied by Landlord (a) to offset Rent which is unpaid either before or after termination of this Lease, and (b) against other damages suffered by Landlord before or after termination of this Lease. Provided that Tenant has not been in default of this Lease beyond the applicable notice and cure period, upon the twenty-fifth (25) month of the Term, the then-current Security Deposit shall be reduced by the amount of Five Hundred Thousand and 00/100 Dollars (\$500,000.00), such that the Security Deposit shall be equal to Two Hundred Fifty Thousand and 00/100 Dollars (\$250,000.00) for the remainder of the third year of the Term. Upon the thirty-seventh (37th) month of the Term, Tenant shall deliver funds in the amount of Forty-Four Thousand Nine Hundred Forty-One and 89/100 Dollars (\$44,941.89) and the Security Deposit shall be equal to Two Hundred Ninety-Four Thousand Nine Hundred Forty-One and 89/100 Dollars (\$294,941.89) for the remainder of the Term.

Lessee, at Lessee's option, may substitute a portion of the cash held by Lessor as the Security Deposit by depositing with Lessor an unconditional and irrevocable letter of credit in the form required herein (the "**Letter of Credit**"), as security for the full and faithful performance of each and every obligation of Lessee under this Lease; provided, however, at all times during the Term, except during the third (3rd) year of the Term, the Lessee shall have a Security Deposit in the form of cash held by Lessor in an amount equal to no less than Two Hundred Ninety-Four Thousand Nine Hundred Forty-One and 89/100 Dollars (\$294,941.89) (the "**Minimum Cash Requirement**"). The Letter of Credit, together with (1) any cash from time to time held by Lessor

as part of the security deposit following a draw on the Letter of Credit or (2) any cash from time to time held by Lessor as part of the security deposit under this Section 4, is referred to herein as the "Security Deposit." The Letter of Credit shall be in the form and containing the terms required herein, running in favor of Lessor and issued by Comerica Bank, or another solvent, nationally recognized bank reasonably approved by Lessor and in a form reasonably satisfactory to Lessor. The Letter of Credit, and each subsequent replacement Letter of Credit shall: (1) be payable on demand, irrevocable, and unconditional; (2) be maintained in effect, whether through renewal or extension, for the period from the Lease Commencement Date and continuing until the date that is sixty (60) days after the expiration of the Term ("Letter of Credit Expiration Date"), and provide for automatic renewals of one-year periods unless the issuer has provided Lessor written notice of non-renewal at least sixty (60) days prior to the then expiration date, in which case Lessee shall deliver a replacement Letter of Credit or certificate of renewal or extension to Lessor at least thirty (30) days before the expiration of the Letter of Credit then held by Lessor, without any action whatsoever on the part of Lessor; (3) be fully assignable and transferable at no cost to Lessor by Lessor, its successors, and assigns; (4) permit partial draws and multiple presentations and drawings; (5) be honored by the bank issuing the same regardless of whether Lessee disputes Lessor's right to draw on the Letter of Credit; and (6) be otherwise subject to Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce Publication No. 600 (UCP600), or International Standby Practices—ISP98, International Chamber of Commerce Publication No. 590. Failure by Lessee to deliver cash or any replacement Letter of Credit as required above shall entitle Lessor to draw under the outstanding Letter(s) of Credit and to retain the entire proceeds thereof for application as the Security Deposit under this Lease. If at any time during the Term of this Lease, the bank or financial institution that issues the Letter of Credit is declared insolvent, or is placed into receivership by the Federal Deposit Insurance Corporation or any other governmental or quasi-governmental institution, then following written notice from Lessor, Lessee shall have twenty (20) days to replace the Letter of Credit with a new letter of credit from a bank or financial institution acceptable to Lessor in Lessor's reasonable discretion. If Lessee does not replace the Letter of Credit with a new letter of credit from a bank or financial institution acceptable to Lessor within such twenty (20) day period, then notwithstanding anything in the Lease to the contrary, Lessor shall have the right to draw upon the Letter of Credit for the full amount of the Letter of Credit. In such event, the Letter of Credit funds shall immediately become part of the "Security Deposit" under this Lease. Lessor shall not be obligated to keep any proceeds from a draw on the Letter of Credit separate from its general funds, and Lessee shall not be entitled to interest on either.

5. Tenant Improvements; Tenant Improvement Allowance. Tenant hereby accepts the Premises as suitable for Tenant's intended use and as being in satisfactory operating order, condition and repair, "AS IS", except for the Tenant Improvements as specified in the Work Letter. The costs of the Tenant Improvements shall be shared by Landlord and Tenant as set forth in the Work Letter. Tenant acknowledges and agrees that neither Landlord nor any of Landlord's agents, representatives or employees has made any representations as to the suitability, fitness or condition of the Premises for the conduct of Tenant's business or for any other purpose, including without limitation, any storage incidental thereto. Any exception to the foregoing provisions must be made by express written agreement by both parties.

6. Additional Rent. It is intended by Landlord and Tenant that this Lease be a "triple net lease." The costs and expenses described in this Section 6 and all other sums, charges, costs and expenses expressly specified in this Lease other than Base Rent are to be paid by Tenant to Landlord as additional rent (collectively, "Additional Rent") commencing as of the Commencement Date and continuing for the Term of this Lease. **Operating Expenses:** In addition to the Base Rent set forth in Section 3, Tenant shall pay Tenant's Share, which is specified in the Basic Lease Information, of all Operating Expenses as Additional Rent. The term "Operating Expenses" as used herein shall mean all amounts, expenses and costs of whatever nature paid or payable by Landlord in connection with the ownership, security insurance, control, administration (including, without limitation concierge services, if any), maintenance, repair, replacement and operation of the Premises, the Building and the lot upon which the Building is located, and where applicable, of the Park referred to in the Basic Lease Information, all related improvements thereto and thereon and all machinery, equipment, landscaping, fixtures and other facilities, including personal property and all costs associated with maintaining any certification(s) achieved by the Building, as may now or hereafter exist in or on the Building. Tenant's Share of Operating Expenses for the Park shall be equal to 16.58%. These Operating Expenses may include, but are not limited to: Landlord's cost of repairs to, and maintenance of, the roof, the roof membrane and the exterior walls of the Building;

6.1.1 Landlord's cost of maintaining the outside paved area, landscaping and other common areas for the Park. The term "**Common Areas**" shall mean those areas and facilities within the Park, exclusive of the Premises and the other portions of the Park leasable exclusively to other tenants, which Tenant shall have the non-exclusive right to use in common with other tenants in the Park and those portions of the Park which are provided, from time to time, for use in common by Landlord, Tenant and any other tenants of the Park.

6.1.2 Landlord's annual cost of commercially reasonable insurance insuring against fire and extended coverage (including, if Landlord elects, "all risk" or "special purpose" coverage) and all other insurance reasonably determined by Landlord, including, but not limited to, earthquake, flood and/or surface water endorsements for the Building, the lot upon which the Building is located and the Park (including the Common Areas), rental value insurance against loss of Rent in an amount equal to the amount of Rent for a period of at least six (6) months commencing on the date of loss, and subject to the provisions of Section 27 below, any deductible provided however, any earthquake insurance deductible in excess of One Hundred Thousand Dollars (\$100,000) shall be amortized over the remainder of the Term;

6.1.3 Landlord's cost of: (i) modifications and/or new improvements to the Building, the Common Areas and/or the Park occasioned by any rules, laws or regulations effective subsequent to the Commencement Date; (ii) reasonably necessary replacement improvements to the Building, the Common Areas and the Park after the Commencement Date; and (iii) new improvements to the Building, the Common Areas and/or the Park that reduce operating costs or improve life/safety conditions, all as reasonably determined by Landlord (collectively "**Permitted Capital Costs**"); provided, however, that except for capital improvements required because of Tenant's specific use of the Premises, if Landlord is required to or voluntarily makes such capital improvements as defined in accordance with generally accepted accounting principles, Landlord shall amortize the cost of said improvements over the useful life of said improvements as reasonably determined by

Landlord (together with interest on the unamortized balance at the rate equal to the effective rate of interest on Landlord's bank line of credit at the time of completion of said improvements, but in no event in excess of ten percent (10%) per annum) as an Operating Expense, except that with respect to capital improvements made to save Operating Expenses such amortization shall not be at a rate greater than the actual savings in Operating Expenses.

6.1.4 If Landlord elects to so procure, Landlord's cost of preventative maintenance, and repair contracts including, but not limited to, contracts for elevator systems and heating, ventilation and air conditioning systems, lifts for disabled persons, and trash or refuse collection;

6.1.5 Landlord's cost of security and fire protection services for the Building and/or the Park, as the case may be, if in Landlord's sole discretion such services are provided;

6.1.6 Landlord's cost of supplies, equipment, rental equipment and other similar items used in the operation and/or maintenance of the Park;

6.1.7 Landlord's cost for the repairs and maintenance items set forth in Section 11.2 below;

6.1.8 The management fee charged for the management of the Building which shall not exceed three percent (3%) of the total gross receipts received by Landlord from operating the Building, including Base Rent and Additional Rent;

6.1.9 Any wages, bonuses or other compensation of building engineer and property accountant, which amount shall be prorated on the basis of a per square foot basis to the extent such services are not provided exclusively to the Building; and

6.1.10 Operating Expenses shall also include any other expense or charge, whether or not described herein not specifically excluded by other provisions of this Lease, which in accordance with generally accepted accounting principles would be considered an expense of managing, operating, maintaining, and repairing the Property.

6.1.11 The following shall be excluded from the definition of Operating Expenses: costs occasioned by the act, omission or violation of law by Landlord, any other occupant of the Building or the Park, or their respective agents, employees or contractors; costs for which Landlord receives reimbursement from others, including reimbursement from insurance (provided that Landlord shall use commercially reasonable efforts to collect such amounts); (c) rent, interest, charges and fees incurred on debt or payments on any deed of trust or ground lease on the Building, or the Park; (d) advertising or promotional costs or other costs incurred by Landlord in procuring tenants for the Building or other portions of the Park; (e) costs incurred in repairing, maintaining or replacing any structural elements of the Park for which Landlord is responsible pursuant to Section 11.3 hereof; (f) any wages, bonuses or other compensation of employees above the grade of building manager and any executive salary of any officer or employee of Landlord or for employees to the extent not stationed at the Park; (g) general office overhead and general and administrative

expenses of Landlord, except as specifically provided herein; (h) leasing expenses and broker commissions payable by Landlord; (i) costs occasioned by casualties or by the exercise of the power of eminent domain; (j) costs to correct any construction defect in the Building or the Premises existing on the Commencement Date; (k) costs of any renovation, improvement, painting or redecorating of any portion of the Property or the Park not made available for Tenant's use and/or benefit; (l) costs incurred in connection with negotiations or disputes with any other occupant of the Park and costs arising from the violation by Landlord or any other occupant of the Park of the terms and conditions of any lease or other agreement; (m) costs incurred in connection with the presence of any Hazardous Materials on the Property or on other property in the Park that do not arise from or are not related to the intentional or negligent act or omission of Tenant or Tenant's Representatives; (n) any management fee, administrative fee or other similar fees except as expressly provided in Section 6.1.9 above; (o) costs and expenses which would be capitalized under generally accepted accounting principles, except for Permitted Capital Costs; and (p) expense reserves; (q) any costs and expenses relating solely to another building or to the interior portions of any other building or other structures except the Building (excluding, however, such costs and expenses relating to interior portions of such other building or structures that are used as Common Areas); and (r) repairs or maintenance of areas of the Park leasable exclusively to other tenants.

When, in the reasonable determination of Landlord, any service, including, but not limited to, HVAC, electrical, janitorial and property management service, is provided disproportionately either to the Premises or to any other premises within the Building, then Operating Expenses per square foot payable hereunder may be increased or reduced, as the case may be, by Landlord's reasonable determination of the increased or reduced cost per square foot of such disproportionate service; provided, however, that the foregoing shall not apply with Tenant leases the entire Building. Tenant shall also pay the cost of any above-standard services (including, without limitation, above-standard utility charges) and the cost of any separately metered utilities.

6.2 Tax Expenses: In addition to the Base Rent set forth in Section 3 and the Operating Expenses set forth in Section 6.1, Tenant shall pay its share, which is specified in the Basic Lease Information, of all real property taxes applicable to the land and improvements included within the lot on which the Premises are situated and one hundred percent (100%) of all personal property taxes now or hereafter assessed or levied against the Premises or Tenant's personal property. The amount of Tenant's Share of Tax Expenses shall be reviewed from time to time by Landlord and shall be subject to modification by Landlord if there is a change in the rentable square footage of the Premises, the Building and/or the Park. Tenant shall also pay one hundred percent (100%) of any increase in real property taxes attributable to any and all alterations, Tenant Improvements or other improvements of any kind, which are above standard improvements customarily installed for similar buildings located within the Building or the Park (as applicable), whatsoever placed in, on or about the Premises for the benefit of, at the request of, or by Tenant. The term "**Tax Expenses**" shall mean and include, without limitation, any form of tax and assessment (general, special, supplemental, ordinary or extraordinary), commercial rental tax, payments under any improvement bond or bonds, license fees, license tax, business license fee, rental tax, transaction tax, levy, or penalty imposed by authority having the direct or indirect power of tax (including any city, county, state or federal government, or any school, agricultural, lighting, drainage or other

improvement district thereof) as against any legal or equitable interest of Landlord in the Premises, the Building, the lot upon which the Building is located or the Park, as against Landlord's right to rent or as against Landlord's business of leasing the Premises or the occupancy of Tenant or any other tax, fee, or excise, however described, including, but not limited to, any value added tax, or any tax imposed in substitution (partially or totally) of any tax previously included within the definition of real property taxes, or any additional tax the nature of which was previously included within the definition of real property taxes. The term "**Tax Expenses**" shall not include (a) any franchise, estate, inheritance, gift, capital stock, net income, or excess profits tax imposed upon Landlord and other taxes applied or measured by Landlord's general or net income (as opposed to rents, receipts, or income attributable to operations at the Building); (b) any items included as Operating Expenses; (c) imposed on land and improvements other than the Park; (d) resulting from the improvement of any of the Building or the Park for the sole use of Landlord or other occupants; and (e) a penalty fee imposed as a result of Landlord's failure to pay Tax Expenses when due.

6.3 Intentionally Deleted.

6.4 Payment of Expenses: Landlord shall estimate Tenant's Share of the Operating Expenses and Tax Expenses for the calendar year in which the Lease commences. Commencing on the Commencement Date, one-twelfth (1/12th) of this estimated amount shall be paid by Tenant to Landlord, as Additional Rent, and thereafter on the first (1st) day of each month throughout the remaining months of such calendar year. Thereafter, Landlord shall estimate such expenses as close as reasonably possible to the beginning of each calendar year during the Term of this Lease, but no later than April 1 of such year, and Tenant shall pay one-twelfth (1/12th) of such estimated amount as Additional Rent hereunder on the first (1st) day of each month during such calendar year and for each ensuing calendar year throughout the Term of this Lease. If at any time during any such calendar year, it appears to Landlord that the Operating Expenses or Tax Expenses for such year will vary from Landlord's estimate, Landlord may, by written notice to Tenant, revise Landlord's estimate for such year and the Additional Rent payments by Tenant for such year shall thereafter be based upon such revised estimate. Landlord shall furnish to Tenant with such revised estimate written verification showing that the actual Operating Expenses or Tax Expenses are greater than Landlord's estimate. The increase in the monthly installments of Additional Rent resulting from Landlord's revised estimate shall not be retroactive, but the Additional Rent for each calendar year shall be subject to adjustment between Landlord and Tenant after the close of the calendar year, as provided herein. Tenant's obligation to pay Tenant's Share of Operating Expenses and Tax Expenses shall survive the expiration or earlier termination of this Lease.

6.5 Annual Reconciliation: By June 30th of each calendar year, or as soon thereafter as reasonably possible Landlord shall endeavor to furnish Tenant with an accounting of actual Operating Expenses and Tax Expenses (each, a "**Final Statement**"). Within thirty (30) days of Landlord's delivery of such Final Statement, Tenant shall pay to Landlord the amount of any underpayment. Notwithstanding the foregoing, failure by Landlord to give such a Final Statement by such date shall not constitute a waiver by Landlord of its right to collect any of Tenant's underpayment at any time. Landlord shall credit the amount of any overpayment by Tenant toward the next estimated monthly installment(s) of rent falling due, or where the Term of the Lease has expired, refund the amount of overpayment to Tenant. If the Term of the Lease expires prior to the annual reconciliation of expenses Landlord shall have the right to reasonably estimate Tenant's Share of such expenses, and if Landlord determines that an underpayment is due, Tenant hereby

agrees that Landlord shall be entitled to deduct such underpayment from Tenant's Security Deposit. If Landlord reasonably determines that an overpayment has been made by Tenant, Landlord shall refund said overpayment to Tenant concurrently with the delivery of the Security Deposit to Tenant pursuant to Section 4 above. Notwithstanding the foregoing, failure of Landlord to accurately estimate Tenant's Share of such expenses or to otherwise perform such reconciliation of expenses, including without limitation, Landlord's failure to deduct any portion of any underpayment from Tenant's Security Deposit, shall not constitute a waiver of Landlord's right to collect any of Tenant's underpayment at any time during the Term of the Lease or at any time after the expiration or earlier termination of this Lease for a period of three (3) years from such expiration or earlier termination.

6.6 Audit: After delivery to Landlord of at least thirty (30) days prior written notice and no later than ninety (90) days after delivery of Landlord's Final Statement, Tenant, at its sole cost and expense through any accountant designated by it, shall have the right to examine and/or audit the books and records evidencing such costs and expenses for the previous one (1) calendar year covered by such Final Statement, during Landlord's reasonable business hours but not more frequently than once during any calendar year. The audit may only cover the immediately preceding calendar year. Tenant must provide Landlord with a copy of the final audit report promptly after completion of such review. The audit must be conducted by a certified public accountant who is either an employee of Tenant or an independent accounting firm reasonably acceptable to Landlord and any such accounting firm may not be compensated on a contingency fee basis. The results of any such audit (and any negotiations between the parties related thereto) shall be maintained strictly confidential by Tenant and its accounting firm and shall not be disclosed, published or otherwise disseminated to any other party other than to Landlord and its authorized agents. Landlord and Tenant shall use their best efforts to cooperate in such negotiations and to promptly resolve any discrepancies between Landlord and Tenant in the accounting of such costs and expenses. If such inspection reveals that the amount of Operating Expenses billed to Tenant was incorrect, the appropriate party shall pay to the other party the deficiency or overpayment, as applicable, within thirty (30) days following delivery of the inspection. If Landlord's audit of the Operating Expenses and/or Tax Expenses for any year reveals a net overcharge of more than five percent (5%), Landlord promptly shall reimburse Tenant for the cost of the audit up to a maximum amount of Five Thousand and 00/100 (\$5,000); otherwise, Tenant shall bear the cost of Tenant's audit. Notwithstanding anything herein to the contrary, if Tenant does not notify Landlord in writing of any objection to any Final Statement within ninety (90) days after receipt thereof, then Tenant shall be deemed to have approved such determination set forth in the Final Statement and Tenant shall be deemed to have waived any such objection.

7. Utilities. Utility Expenses, Common Utility Costs and all other sums or charges set forth in this Section 7 are considered part of Additional Rent. In addition to the Base Rent set forth in Section 3 hereof and the Operating Expenses set forth in Section 6.1, Tenant shall pay the cost of all water, sewer use, sewer discharge fees and sewer connection fees, gas, heat, electricity, refuse pickup, janitorial service, telephone and other utilities billed or metered separately to the Premises and/or Tenant. Tenant shall also pay Tenant's Share of any assessments or charges for utility or similar purposes included within any tax bill for the lot on which the Premises are situated, including, without limitation, entitlement fees, allocation unit fees, and/or any similar fees or charges, and any penalties related thereto. For any such utility fees or use charges that are not billed or metered separately to Tenant, including without limitation, water and refuse pick up charges,

Tenant shall pay to Landlord, as Additional Rent, without prior notice or demand, on the Commencement Date and thereafter on the first (1st) day of each month throughout the balance of the Term of this Lease the amount which is attributable to Tenant's use of the utilities or similar services, as reasonably estimated and determined by Landlord based upon factors such as size of the Premises and intensity of use of such utilities by Tenant such that Tenant shall pay the portion of such charges reasonably consistent with Tenant's use of such utilities and similar services ("**Utility Expenses**"). If Tenant disputes any such estimate or determination, then Tenant shall either pay the estimated amount or cause the Premises to be separately metered at Tenant's sole expense. In addition, Tenant shall pay to Landlord Tenant's Share of any Common Area utility costs, fees, charges or expenses ("**Common Area Utility Costs**"). Tenant shall pay to Landlord one-twelfth (1/12th) of the estimated amount of Tenant's Share of the Common Area Utility Costs on the Commencement Date and thereafter on the first (1st) day of each month throughout the balance of the Term of this Lease and any reconciliation thereof shall be substantially in the same manner as specified in Section 6.5 above. Tenant acknowledges that the Premises may become subject to the rationing of utility services or restrictions on utility use as required by a public utility company, governmental agency or other similar entity having jurisdiction thereof. Notwithstanding any such rationing or restrictions on use of any such utility services, Tenant acknowledges and agrees that its tenancy and occupancy hereunder shall be subject to such rationing restrictions as may be imposed upon Landlord, Tenant, the Premises, the Building or the Park, and Tenant shall in no event be excused or relieved from any covenant or obligation to be kept or performed by Tenant by reason of any such rationing or restrictions. Tenant further agrees to timely and faithfully pay, prior to delinquency, any amount, tax, charge, surcharge, assessment or imposition levied, assessed or imposed upon the Premises, or Tenant's use and occupancy thereof. Notwithstanding anything to the contrary contained herein, if permitted by applicable Laws, Landlord shall have the right at any time and from time to time during the Term of this Lease to either contract for service from a different company or companies (each such company shall be referred to herein as an "**Alternate Service Provider**") other than the company or companies presently providing electricity service for the Building or the Park (the "**Electric Service Provider**") or continue to contract for service from the Electric Service Provider, at Landlord's sole discretion. Tenant hereby agrees to cooperate with Landlord, the Electric Service Provider, and any Alternate Service Provider at all times and, as reasonably necessary, shall allow Landlord, the Electric Service Provider, and any Alternate Service Provider reasonable access to the Building's electric lines, feeders, risers, wiring, and any other machinery within the Premises.

Tenant acknowledges and affirms its knowledge and understanding of Landlord's efforts to benchmark utility consumption within the entirety of the Building. As such, Tenant authorizes Landlord, acting on behalf of the Tenant, to request that the applicable utility provider deliver directly to Landlord the necessary consumption information to enable Landlord to satisfy the requirements established by the US EPA for whole building data for the Energy Star Portfolio Manager tool. Tenant agrees to deliver such additional written authorization to Landlord as may be required or mandated by the applicable utility provider to enable delivery of the requested consumption information. Tenant further authorizes Landlord to incorporate Tenant's utility data in the Energy Star Portfolio Manager tool, and/or such other benchmarking initiatives as Landlord actively participates in, subject only to the provision that Landlord will exercise commercially reasonable care to maintain the privacy of Tenant's specific consumption data. Any public dissemination of such data shall be in aggregate with other Building tenants' and occupants' consumption data, with no direct identification of individual tenant usage. To the extent that the

applicable utility provider is unable, or unwilling, to deliver the required utility consumption data as defined hereinabove, Tenant acknowledges and recognizes its obligation to deliver to Landlord that information directly, as an integral requirement of this Lease. Such information shall be delivered in the format set forth by Landlord for this purpose, on the same frequency as the invoicing received by Tenant from the utility provider for utilities consumed, unless some other frequency is agreed to in writing by Landlord and Tenant.

Notwithstanding anything in this Lease to the contrary, Landlord shall have the right to install meters, submeters and/or other energy measurement devices to the panel(s) servicing the Premises. The information collected by these devices shall be used to benchmark the Tenant's energy consumption, with the intent to identify, and then implement, energy conservation measures. It is acknowledged by the Landlord and Tenant that increased energy efficiency and energy conservation measures serve to reduce operating expenses and to also reduce greenhouse gas emissions. Landlord and Tenant mutually agree to cooperate on implementing energy conservation measures to ensure optimal results from such efforts.

8. Late Charges. Any and all sums or charges set forth in this Section 8 are considered part of Additional Rent. Tenant acknowledges that late payment (the second day of each month or any time thereafter) by Tenant to Landlord of Base Rent, Tenant's Share of Operating Expenses, Tax Expenses, Common Area Utility Costs, and Utility Expenses, or other sums due hereunder, will cause Landlord to incur costs not contemplated by this Lease, the exact amount of such costs being extremely difficult and impracticable to fix. Such costs include, without limitation, processing and accounting charges, and late charges that may be imposed on Landlord by the terms of any note secured by any encumbrance against the Premises, and late charges and penalties due to the late payment of real property taxes on the Premises. Therefore, if any installment of Rent or any other sum due from Tenant is not received by Landlord, Tenant shall promptly pay to Landlord as an additional sum equal to five percent (5%) of such delinquent amount as a late charge. Any amount not paid within five (5) days after Tenant's receipt of written notice that such amount is due shall bear interest on such delinquent amount from the date due until paid at the rate equal to the prime rate plus two percent (2%), in addition to the late charge. If Tenant delivers to Landlord a check for which there are not sufficient funds, Landlord may, at its sole option, require Tenant to replace such check with a cashier's check for the amount of such check and all other charges payable hereunder. The parties agree that this late charge and the other charges referenced above represent a fair and reasonable estimate of the costs that Landlord will incur by reason of late payment by Tenant. Acceptance of any late charge or other charges shall not constitute a waiver by Landlord of Tenant's default with respect to the delinquent amount, nor prevent Landlord from exercising any of the other rights and remedies available to Landlord for any other breach of Tenant under this Lease. If a late charge or other charge becomes payable for any three (3) installments of Rent within any twelve (12) month period, then Landlord, at Landlord's option, can require the Rent be paid monthly in advance by electronic funds transfer.

9. Use of Premises.

9.1 Compliance with Laws, Recorded Matters, and Rules and Regulations: The Premises are to be used solely for the purposes and uses specified in the Basic Lease Information and for no other uses or purposes without Landlord's prior written consent, which consent shall not be unreasonably withheld or delayed so long as the proposed use (i) does not involve the use

of Hazardous Materials other than as expressly permitted under the provisions of Section 29 below, (ii) does not require any additional parking in excess of the parking spaces already licensed to Tenant pursuant to the provisions of Section 24 of this Lease, and (iii) is compatible and consistent with the other uses then being made in the Park and in other similar types of buildings in the vicinity of the Park, as reasonably determined by Landlord. The use of the Premises by Tenant and its employees, representatives, agents, invitees, licensees, subtenants, customers or contractors (collectively, "**Tenant's Representatives**") shall be subject to, and at all times in compliance with, (a) any and all applicable laws, ordinances, statutes, orders and regulations as same exist from time to time (collectively, the "**Laws**"), (b) any and all documents, matters or instruments, including without limitation, any declarations of covenants, conditions and restrictions, and any supplements thereto, each of which has been or hereafter is recorded in any official or public records with respect to the Premises, the Building, the lot upon which the Building is located and/or the Park, or any portion thereof (collectively, the "**Recorded Matters**"), and (c) any reasonable rules and regulations promulgated by Landlord now or hereafter enacted relating to parking and the operation of the Premises, the Building and the Park (collectively, the "**Rules and Regulations**"). Tenant agrees to, and does hereby, assume full and complete responsibility to ensure that the Premises are adequate to fully meet the needs and requirements of Tenant's intended operations of its business within the Premises, and Tenant's use of the Premises and that same are in compliance with all applicable Laws throughout the Term of this Lease. Additionally, Tenant shall be solely responsible for the payment of all costs, fees and expenses associated with any modifications, improvements or alterations to the Premises, Building, the Common Areas and/or the Park occasioned by the enactment of, or changes to, any Laws arising from Tenant's particular use of the Premises or alterations, improvements or additions made to the Premises by Tenant or at Tenant's request regardless of when such Laws became effective. Except to the extent set forth in the immediately preceding sentence or in the Work Letter, Tenant shall have no obligation to correct or pay to correct any violations of Laws within the Premises, the Building or the Park existing as of the Commencement Date.

9.2 Prohibition on Use: Tenant shall not use the Premises or permit anything to be done in or about the Premises nor keep or bring anything therein which will in any way conflict with any of the requirements of the Board of Fire Underwriters or similar body now or hereafter constituted or in any way increase the existing rate of or affect any policy of fire or other insurance upon the Building or any of its contents, or cause a cancellation of any insurance policy. No auctions may be held or otherwise conducted in, on or about the Premises, the Building, the lot upon which the Building is located or the Park without Landlord's written consent thereto, which consent may be given or withheld in Landlord's sole discretion. Tenant shall not do or permit anything to be done in or about the Premises which will in any way obstruct or interfere with the rights of Landlord, other tenants or occupants of the Building, other buildings in the Park, or other persons or businesses in the area, or injure or annoy other tenants, as determined by Landlord, in its reasonable discretion, for the benefit, quiet enjoyment and use by Landlord and all other tenants or occupants of the Building or other buildings in the Park; nor shall Tenant cause, maintain or permit any private or public nuisance in, on or about the Premises, Building, Park and/or the Common Areas, including, but not limited to, any offensive odors, noises, fumes or vibrations. Tenant shall not damage or deface or otherwise commit or suffer to be committed any waste in, upon or about the Premises. Tenant shall not place or store, nor permit any other person or entity to place or store, any property, equipment, materials, supplies, personal property or any other items or goods outside of the Premises for any period of time. Tenant shall not permit any animals, including, but not limited to, any household pets, to be brought or kept in or about the Premises.

Tenant shall place no loads upon the floors, walls, or ceilings in excess of the maximum designed load permitted by the applicable Uniform Building Code or which may damage the Building or outside areas; nor place any harmful liquids in the drainage systems; nor dump or store waste materials, refuse or other such materials, or allow such to remain outside the Building area, except for any non-hazardous or non-harmful materials which may be stored in refuse dumpsters or in any enclosed trash areas provided. If Tenant fails to comply with such Laws, Recorded Matters, Rules and Regulations or the provisions of this Lease, in addition to all rights and remedies of Landlord hereunder including, but not limited to, the payment by Tenant to Landlord of all Enforcement Expenses and Landlord's costs and expenses, if any, to cure any of such failures of Tenant, if Landlord, at its sole option, elects to undertake such cure.

10. Alterations and Additions; and Surrender of Premises.

10.1 Alterations and Additions: Tenant may, from time to time, at its own cost and expense and without the consent of Landlord make nonstructural alterations to the interior of the Premises that do not affect or penetrate the structural portions of the Premises or the Building, the roof or exterior appearance of the Premises or Building, materially or adversely affect any mechanical, electrical, plumbing, sewer, life safety, HVAC or other system in the Building and the cost of which in any one instance is Fifty Thousand Dollars (\$50,000) or less, and the aggregate cost of all such work during the Term does not exceed One Hundred Fifty Thousand Dollars (\$150,000), provided Tenant first notifies Landlord in writing of any such nonstructural alterations and otherwise complies with the terms of this Section 10 and all applicable Laws, Building regulations and Landlord's engineering and design requirements for the Building, as applicable (collectively, "**Cosmetic Alterations**"). Otherwise, Tenant shall not install any signs, fixtures, improvements, nor make or permit any other alterations or additions to the Premises ("**Alterations**") without the prior written consent of Landlord. If any which consent shall not be unreasonably withheld, conditioned or delayed unless such proposed Alterations affect or propose to penetrate the structural portions of the Premises or the Building, the roof or exterior appearance of the Premises or Building, materially or adversely affect any mechanical, electrical, plumbing, sewer, life safety, HVAC or other system in the Building, in which case Landlord's consent may be withheld in Landlord's sole and absolute discretion. Tenant shall deliver at least ten (10) days prior notice to Landlord, from the date Tenant intends to commence construction of any Alterations or Cosmetic Alterations, sufficient to enable Landlord to post a Notice of Non-Responsibility. In all events, Tenant shall deliver to Landlord a complete set of plans and specifications for such work and shall obtain all permits or other governmental approvals prior to commencing any of such work and deliver a copy of same to Landlord. All Alterations shall be installed by a licensed contractor reasonably approved by Landlord (except for Alteration which do not require Landlord's consent), at Tenant's sole expense in compliance with all applicable Laws (including, but not limited to, the ADA as defined herein), Recorded Matters, and Rules and Regulations. If any alterations exceed Fifty Thousand and 00/100 Dollars (\$50,000.00) in cost in any one instance, or exceed the aggregate cost of One Hundred Fifty Thousand and 00/100 Dollars (\$150,000.00) during the Term, Tenant shall employ, at Tenant's expense, Tarlton Properties, Inc. as construction manager for such alterations at a fee equal to four and five tenths percent (4.5%) of the first Two Hundred Fifty Thousand Dollars (\$250,000.00) of hard construction costs (i.e., the amounts paid

to any general contractor, subcontractors, vendors, and suppliers for labor and materials for the construction of the alterations or improvements) and then four percent (4%) of such hard construction costs in excess of Two Hundred Fifty Thousand Dollars (\$250,000.00). Tenant shall keep the Premises and the property on which the Premises are situated free from any liens arising out of any work performed, materials furnished or obligations incurred by or on behalf of Tenant. As a condition to Landlord's consent to the installation of any fixtures, additions or other improvements, Landlord may require Tenant to remove any such installations or improvements prior to the expiration of the Term and restore the Premises to its condition prior to such installations or improvements, at Tenant's expense and may require Tenant to post and obtain a completion and indemnity bond for up to one hundred fifty percent (150%) of the cost of the work and may require the Alteration to be performed in accordance with Landlord's reasonable requirements relating to sustainability and energy efficiency and in all cases, Tenant shall ensure Alterations made on its behalf shall not cause any negative impact to any existing energy and/or sustainability related to certification(s) such as LEED or ENERGY STAR, and should such negative impact result from an Alteration, Tenant, at its sole cost and expense, shall cause such modification to the Alteration as are necessary to correct the negative impact. Landlord shall advise Tenant in writing at the time consent is granted (or with respect to a Cosmetic Alterations within ten (10) days from notice) whether Landlord requires Tenant to remove any alterations from the Premises prior to the expiration or sooner termination of the Lease. Tenant shall have no obligation to remove the Tenant Improvements.

10.2 Surrender of Premises: Upon the termination of this Lease, whether by forfeiture, lapse of time or otherwise, or upon the termination of Tenant's right to possession of the Premises, Tenant will at once surrender and deliver up the Premises, together with the fixtures (other than trade fixtures), the Mobile Benches (as defined in the Work Letter), Alterations unless Landlord has notified Tenant, in writing, that Landlord will require Tenant to remove as provided above, to Landlord in good condition and repair (including, but not limited to, replacing all light bulbs and ballasts not in good working condition) and in the condition in which the Premises existed as of the Commencement Date, except for reasonable wear and tear, casualty and condemnation. Reasonable wear and tear shall not include any damage or deterioration to the floors of the Premises arising from the use of forklifts in, on or about the Premises (including, without limitation, any marks or stains of any portion of the floors), any damage or deterioration that would have been prevented by proper maintenance by Tenant or Tenant otherwise performing all of its obligations under this Lease or any deterioration in the condition or diminution of the value of any portion of the Premises, the Building, the lot upon which the Building is located and/or the Park in any manner whatsoever related to directly, or indirectly, Hazardous Materials as a result of the intentional or negligent acts or omissions of Tenant or any of Tenant's Representatives. Unless Landlord requests, in writing, that Tenant not remove some or all of such fixtures (other than trade fixtures), additions or improvements, then upon such termination of this Lease, Tenant shall remove all tenant signage, trade fixtures, furniture, furnishings, personal property, additions, alterations, and other improvements installed by, or on behalf of Tenant and situated in or about the Premises if (a) Landlord's consent thereto was conditioned upon such removal and restoration from the Premises or (b) if Tenant made any such additions, alterations or other improvements without obtaining Landlord's prior written consent in breach of Section 10.1. Tenant shall repair any damage caused by the installation or removal of such signs, trade fixtures, furniture, furnishings, fixtures, additions and improvements which are to be removed from the Premises by Tenant hereunder. Tenant shall ensure that the removal of such items and the repair of the Premises

will be completed prior to such termination of this Lease. Notwithstanding anything to the contrary herein, Tenant shall, within twenty-four hours after the expiration of this Lease, at Tenant's expense and in compliance with the National Electric Code and other applicable laws, remove all electronic, fiber, phone and data cabling and related equipment that has been installed by or for the exclusive benefit of Tenant in or around the Premises (collectively, the "Cabling"); provided, however, Tenant shall not remove such Cabling if Tenant receives a written notice from Landlord at least fifteen (15) days prior to the expiration of the Lease authorizing such Cabling to remain in place, in which event the Cabling shall be surrendered with the Premises upon the expiration of the Lease.

11. Repairs and Maintenance.

11.1 Tenant's Repairs and Maintenance Obligations: Except for those portions of the Building to be maintained by Landlord, as provided in Sections 11.2 and 11.3 below, Tenant shall, at Tenant's sole cost and expense, keep and maintain the Premises and the adjacent dock and staging areas, in good, clean and safe condition and repair to the reasonable satisfaction of Landlord including, but not limited to, repairing any damage caused by Tenant or Tenant's Representatives and replacing any property so damaged by Tenant or Tenant's Representatives (subject to Section 13 below). Without limiting the generality of the foregoing, Tenant shall be solely responsible for maintaining, repairing and replacing (a) all electrical wiring and equipment serving the Premises, (b) all interior lighting (including, without limitation, light bulbs and/or ballasts) and exterior lighting serving the Premises or adjacent to the Premises, (c) all glass, windows, window frames, window casements, skylights, interior and exterior doors, door frames and door closers, (d) all roll-up doors, ramps and dock equipment, including without limitation, dock bumpers, dock plates, dock seals, dock levelers and dock lights, (e) all tenant signage, (f) security systems, (g) all partitions, fixtures, equipment, interior painting, and interior walls and floors of the Premises and every part thereof (including, without limitation, any demising walls contiguous to any portion of the Premises).

11.2 Reimbursable Repairs and Maintenance Obligations: Subject to the provisions of Sections 6 and 9 of this Lease and except for (i) the obligations of Tenant set forth in Section 11.1 above, and (ii) the obligations of Landlord set forth in Section 11.3 below, Landlord agrees, at Landlord's expense, subject to reimbursement pursuant to Section 6 above, to keep in good repair including without limitation, the plumbing and mechanical systems of the Premises, all mechanical systems, heating, ventilation and air conditioning systems serving the Premises and the Building, sprinkler systems, fire protection systems for the Building, the roof, roof membranes, exterior walls of the Building, signage (exclusive of tenant signage), and exterior electrical wiring and equipment, exterior lighting, exterior glass, exterior doors/entrances and door closers, exterior window casements, exterior painting of the Building (exclusive of the Premises), and underground utility and sewer pipes outside the exterior walls of the Building. In addition, Landlord shall perform, subject to reimbursement pursuant to Section 6, any required replacement of any portion of the Premises which is of a capital nature. For purposes of this Section 11.2, the term "exterior" shall mean outside of and not exclusively serving the Premises. Subject to reimbursement for the cost thereof in accordance with the provisions to Section 6 above, Landlord shall procure and maintain (a) the heating, ventilation and air condition systems preventive maintenance and repair contract(s); such contract(s) to be on a bi-monthly or quarterly basis and (b) the fire and sprinkler protection services and preventive maintenance and repair contract(s) to be on bi-monthly or quarterly basis.

11.3 Landlord's Repairs and Maintenance Obligations: Landlord agrees, at Landlord's sole cost and expense (except for repairs rendered necessary by the intentional or negligent acts or omissions of Tenant or any of Tenant's Representatives which shall be subject to Section 13 below), to (a) keep in good repair the structural portions of the floors, foundations and exterior perimeter walls of the Building (exclusive of glass and exterior doors), and (b) replace the structural portions of the roof of the Building (excluding the roof membrane) as, and when, Landlord determines such replacement to be necessary in Landlord's reasonable discretion.

11.4 Tenant's Failure to Perform Repairs and Maintenance Obligations: Except for normal maintenance and repair of the items described above, Tenant shall have no right of access to or right to install any device on the roof of the Building nor make any penetrations of the roof of the Building without the express prior written consent of Landlord. If Tenant refuses or neglects to repair and maintain the Premises properly as required herein and to the reasonable satisfaction of Landlord, Landlord may, but without obligation to do so, at any time make such repairs and/or maintenance without Landlord having any liability to Tenant for any loss or damage that may accrue to Tenant's merchandise, fixtures or other property, or to Tenant's business by reason thereof, except to the extent any damage is caused by the willful misconduct or gross negligence by Landlord or its authorized agents and representatives. In the event Landlord makes such repairs and/or maintenance, upon completion thereof Tenant shall pay to Landlord, as additional rent, the Landlord's costs for making such repairs and/or maintenance, upon presentation of a bill therefor, plus any Enforcement Expenses. The obligations of Tenant hereunder shall survive the expiration of the Term of this Lease or the earlier termination thereof. Tenant hereby waives any right to repair at the expense of Landlord under any applicable Laws now or hereafter in effect respecting the Premises.

11.5 Landlord's Failure to Perform Repair and Maintenance Obligations: Tenant has advised Landlord that Tenant must maintain certain CLIA certifications relating to the Permitted Use of the Premises and that if Landlord fails to complete necessary repairs and/or maintenance to the Building that Landlord is obligated to perform under the terms and conditions of this Lease, such failure may invalidate Tenant's certification (the "**Certification**"). Landlord shall have no liability to Tenant arising out of or in connection with Tenant's inability to obtain or maintain such Certification. Notwithstanding any provision set forth in this Lease to the contrary, if Tenant provides written notice to Landlord (the "**First Notice**") of necessary repair and/or maintenance to the Premises that Landlord is obligated to perform under Sections 11.2 or Section 11.3 above which are critical to Tenant's maintenance of the Certification necessary for Tenant's use of the Premises for the Permitted Use, and Landlord thereafter fails to perform such repair or maintenance within three (3) days after Landlord's receipt of the First Notice from Tenant, then Tenant may, upon an additional three (3) days' prior written notice to Landlord and opportunity to commence a cure, which notice must state in bold-faced, all capital letters "**FAILURE TO COMMENCE A CURE WITHIN 3 DAYS FOLLOWING RECEIPT OF THIS NOTICE WILL RESULT IN THE EXERCISE OF SELF-HELP RIGHTS**" (the "**Second Notice**") perform Landlord's repair or maintenance obligations the subject of Tenant's notice. In no event shall Tenant be permitted to complete any maintenance or repair work to the structural portions of the Building or the roof of the Building or complete any replacements of a capital nature. If such action was required under the terms of the Lease to be taken by Landlord and was not taken by Landlord within such three (3) day period following Landlord's receipt of the Second Notice and Tenant elects to perform Landlord's repair or maintenance obligations, then Tenant shall (subject

to the below terms and conditions) be entitled to prompt reimbursement by Landlord of Tenant's actual and reasonable costs and expenses in taking such action within thirty (30) days after the date Landlord receives a bill therefor accompanied by invoices or other documentation to substantiate the amount paid by Tenant with a reasonably particularized breakdown of its costs and expenses in connection with taking such action. In the event Tenant takes such action, Tenant shall use only those contractors used by Landlord in the Building. In the event that Tenant exercises its self-help rights under this Section 11.5, Tenant agrees to indemnify, defend and hold Landlord harmless from and against any and all claims, losses, costs, expenses, damages, awards and/or proceedings arising as a result of Tenant's performance of its self-help rights (including, without limitation, personal injuries, damage to property and interference with use or occupancy of the Building by tenants or occupants of the Building or their invitees). The obligations set forth in this Section 11.5 shall survive the expiration of the Term of this Lease or the earlier termination thereof.

12. Insurance.

12.1 Types of Insurance: Tenant shall maintain in full force and effect at all times during the Term of this Lease, at Tenant's sole cost and expense, for the protection of Tenant and Landlord, as their interests may appear, policies of insurance issued by a carrier or carriers reasonably acceptable to Landlord and its lender(s) which afford the following coverages: (i) worker's compensation: statutory limits; (ii) employer's liability, as required by law, with a minimum limit of \$100,000 per employee and \$500,000 per occurrence; (iii) site liability pollution policy insuring the Premises, with a minimum amount limit of \$1,000,000 per occurrence under an annual or multi-year policy; and (iv) commercial general liability insurance (occurrence form) providing coverage against any and all claims for bodily injury and property damage occurring in, on or about the Premises arising out of Tenant's and Tenant's Representatives' use and/or occupancy of the Premises or occasioned by any occurrence in, on, about or related to the Premises. Such insurance shall include coverage for blanket contractual liability, fire damage, premises, personal injury, personal and advertising, and a plate-glass rider to provide coverage for all glass in, on or about the Premises including, without limitation, skylights. Such commercial liability insurance shall have a combined single limit of not less than Two Million Dollars (\$2,000,000) per occurrence with a Four Million Dollar (\$4,000,000) aggregate limit and excess/umbrella insurance in the amount of Four Million Dollars (\$4,000,000). If Tenant has other locations which it owns or leases, the policy shall include an aggregate limit per location endorsement. If necessary, as reasonably determined by Landlord, Tenant shall provide for restoration of the aggregate limit; (v) comprehensive automobile liability insurance: a combined single limit of not less than \$2,000,000 per occurrence and insuring Tenant against liability for claims arising out of the ownership, maintenance, or use of any owned, hired or non-owned automobiles; (vi) "all risk" or "special purpose" property insurance, including without limitation, earthquake sprinkler leakage, boiler and machinery comprehensive form, if applicable, covering damage to or loss of any personal property, trade fixtures, inventory, fixtures and equipment located in, on or about the Premises, and in addition, business interruption of Tenant, together with, if the property of Tenant's invitees is to be kept in the Premises, warehouse's legal liability or bailee customers insurance for the full replacement cost of the property belonging to invitees and located in the Premises. Such insurance shall be written on a replacement cost basis (without deduction for depreciation) in an amount equal to one hundred percent (100%) of the full replacement value of the aggregate of the items referred to in this subparagraph (v); and (vi) such other insurance as may otherwise be required of all tenants or by any of Landlord's lenders or joint venture partners.

12.2 Insurance Policies: Insurance required to be maintained by Tenant shall be written by companies (i) licensed to do business in the State of California, (ii) domiciled in the United States of America, and (iii) having a "General Policyholders Rating" of at least A:VIII (or such higher rating as may be required by a lender having a lien on the Premises) as set forth in the most current issue of "A.M. Best's Rating Guides." Tenant shall deliver to Landlord certificates of insurance and true and complete copies of any and all endorsements required herein for all insurance required to be maintained by Tenant hereunder prior to the Commencement Date or prior to any early access to the Premises in accordance with Section 2.2 above. Tenant shall, at least ten (10) days prior to expiration of each policy, furnish Landlord with certificates of renewal or "binders" thereof. If available, each policy shall expressly provide that such policies shall not be cancelable or otherwise subject to modification except after thirty (30) days prior written notice to the parties named as additional insureds as required in this Lease (except for cancellation for nonpayment of premium, in which event cancellation shall not take effect until at least ten (10) days' notice has been given to Landlord). Tenant shall have the right to provide insurance coverage which it is obligated to carry pursuant to the terms of this Lease under a blanket insurance policy, provided such blanket policy expressly affords coverage for the Premises and for Landlord as required by this Lease.

12.3 Additional Insureds and Coverage: Landlord, any property management company and/or agent of Landlord for the Premises, the Building, the lot upon which the Building is located or the Park, and any lender(s) of Landlord having a lien against the Premises, the Building, the lot upon which the Building is located or the Park shall be named as additional insureds under all of the policies required in Section 12.1(iii) above. Additionally, such policies shall provide for severability of interest. All insurance to be maintained by Tenant shall, except for workers' compensation and employer's liability insurance, be primary, without right of contribution from insurance maintained by Landlord. Any umbrella/excess liability policy (which shall be in "following form") shall provide that if the underlying aggregate is exhausted, the excess coverage will drop down as primary insurance. The limits of insurance maintained by Tenant shall not limit Tenant's liability under this Lease. It is the parties' intention that the insurance to be procured and maintained by Tenant as required herein shall provide coverage for any and all damage or injury arising from or related to Tenant's operations of its business and/or Tenant's or Tenant's Representatives' use of the Premises and/or any of the areas within the Park, whether such events occur within the Premises (as described in Exhibit A hereto) or in any other areas of the Park. It is not contemplated or anticipated by the parties that the aforementioned risks of loss be borne by Landlord's insurance carriers, rather it is contemplated and anticipated by Landlord and Tenant that such risks of loss be borne by Tenant's insurance carriers pursuant to the insurance policies procured and maintained by Tenant as required herein.

12.4 Failure of Tenant to Purchase and Maintain Insurance: In the event Tenant does not purchase the insurance required in this Lease or keep the same in full force and effect throughout the Term of this Lease (including any renewals or extensions), Landlord may, but without obligation to do so, purchase the necessary insurance and pay the premiums therefor. If Landlord so elects to purchase such insurance, Tenant shall promptly pay to Landlord as Additional Rent, the amount so paid by Landlord, upon Landlord's demand therefor. In addition, Landlord may recover from Tenant and Tenant agrees to pay, as Additional Rent, any and all Enforcement Expenses and damages which Landlord may sustain by reason of Tenant's failure to obtain and maintain such insurance. If Tenant fails to maintain any insurance required in this Lease, Tenant shall be liable for all losses, damages and costs resulting from such failure.

12.5 Landlord's Insurance: Landlord shall obtain and carry in Landlord's name, as insured, as an Operating Expense to the extent provided in Section 6, during the Term, "all risk" property insurance coverage (with rental loss insurance coverage for a period of one (1) year), flood insurance, public liability and property damage insurance, and insurance against such other risks or casualties as Landlord shall reasonably determine, including, but not limited to, insurance coverages required of Landlord by the beneficiary of any deed of trust which encumbers the Premises, including earthquake insurance coverage insuring Landlord's interest in the Premises, Building and Park (including the Tenant Improvements and Alterations to the Premises constructed by or on behalf of Tenant in accordance with Section 10.1 above) in an amount not less than the full replacement cost of the Building. The proceeds of any such insurance shall be payable solely to Landlord and Tenant shall have no right or interest therein. Landlord shall have no obligation to insure against loss by Tenant to the Tenant's equipment, fixtures, furniture, inventory, or other personal property of Tenant in or about the Premises occurring from any cause whatsoever.

13. Waiver of Subrogation. Landlord and Tenant hereby mutually waive their respective rights of recovery against each other and any and all subtenants permitted to be added under this Lease from time to time for any loss of, or damage to, either parties' property to the extent that such loss or damage is due to a risk insured by an insurance policy required to be in effect at the time of such loss or damage. Each party shall obtain any special endorsements, if required by its insurer whereby the insurer waives its rights of subrogation against the other party and any and all subtenants permitted to be added under this Lease from time to time. This provision is intended to waive fully, and for the benefit of the parties hereto and any and all subtenants permitted to be added under this Lease from time to time, any rights and/or claims which might give rise to a right of subrogation in favor of any insurance carrier. The coverage obtained by Tenant and Landlord pursuant to Section 12 of this Lease shall include, without limitation, a waiver of subrogation endorsement attached to the certificate of insurance. The provisions of this Section 13 shall not apply in those instances in which such waiver of subrogation would invalidate such insurance coverage or would cause either party's insurance coverage to be voided or otherwise uncollectible.

14. Limitation of Liability and Indemnity. Except to the extent of damage resulting from the sole active gross negligence or willful misconduct of Landlord or its authorized representatives, Tenant agrees to protect, defend (with counsel acceptable to Landlord) and hold Landlord and Landlord's lenders, partners, members, property management company (if other than Landlord), agents, directors, officers, employees, representatives, contractors, shareholders, successors and assigns and each of their respective partners, members, directors, employees, representatives, agents, contractors, shareholders, successors and assigns (collectively, the "**Indemnitees**") harmless and indemnify the Indemnitees from and against all liabilities, damages, claims, losses, judgments, charges and expenses (including reasonable attorneys' fees, costs of court and expenses necessary in the prosecution or defense of any litigation including the enforcement of this provision) arising from or in any way related to, directly or indirectly, (i) Tenant's or Tenant's Representatives' use of the Premises, Building and/or the Park, (ii) the conduct of Tenant's business, (iii) from any activity, work or thing done, permitted or suffered by Tenant in or about the Premises, (iv) in any way connected with the Premises or with the improvements or personal property therein, including, but not limited to, any liability for injury to person or property of Tenant, Tenant's Representatives, or third party persons, and/or (v) Tenant's failure to perform any covenant or obligation of Tenant under this Lease. Tenant agrees that the obligations of Tenant herein shall survive the expiration or earlier termination of this Lease.

Subject to the provisions of this Lease, except to the extent of damage resulting from the negligence or willful misconduct of Tenant or Tenant's authorized representatives, or Tenant's breach of this Lease, Landlord shall indemnify, defend and hold harmless Tenant from all Claims arising from the gross negligence or willful misconduct by Landlord, its agents or employees, or any other persons entering upon the Premises under expressed or implied invitation of the Landlord. The provisions of this section shall survive the expiration or termination of this Lease with respect to any damage, injury, death, breach or default occurring prior to such expiration or termination.

Except to the extent of damage resulting from the gross negligence or willful misconduct of Landlord or its authorized representatives by Landlord, to the fullest extent permitted by law, Tenant agrees that neither Landlord nor any of Landlord's lender(s), partners, members, employees, representatives, legal representatives, successors or assigns shall at any time or to any extent whatsoever be liable, responsible or in any way accountable for any loss, liability, injury, death or damage to persons or property which at any time may be suffered or sustained by Tenant or by any person(s) whomsoever who may at any time be using, occupying or visiting the Premises, the Building or the Park, including, but not limited to, any acts, errors or omissions by or on behalf of any other tenants or occupants of the Building and/or the Park. Tenant shall not, in any event or circumstance, be permitted to offset or otherwise credit against any payments of Rent required herein for matters for which Landlord may be liable hereunder. Landlord and its authorized representatives shall not be liable for any interference with light or air, or for any latent defect in the Premises or the Building.

15. Assignment and Subleasing.

15.1 Prohibition: Except as otherwise provided in this Section, Tenant shall not assign, mortgage, hypothecate, encumber, grant any license or concession, pledge or otherwise transfer this Lease (collectively, "assignment"), in whole or in part, whether voluntarily or involuntarily or by operation of law, nor sublet or permit occupancy by any person other than Tenant of all or any portion of the Premises without first obtaining the prior written consent of Landlord, which consent shall not be unreasonably withheld. Tenant hereby agrees that Landlord may withhold its consent to any proposed sublease or assignment if the proposed sublessee or assignee or its business is subject to compliance with additional requirements of the ADA (defined below) and/or Environmental Laws (defined below) beyond those requirements which are applicable to Tenant, unless the proposed sublessee or assignee shall (a) first deliver plans and specifications for complying with such additional requirements and obtain Landlord's written consent thereto, and (b) comply with all Landlord's conditions for or contained in such consent, including without limitation, requirements for security to assure the lien-free completion of such improvements. If Tenant seeks to sublet or assign all or any portion of the Premises, Tenant shall deliver to Landlord at least ten (10) days prior to the proposed commencement of the sublease or assignment (the "**Proposed Effective Date**") the following: (i) the name of the proposed assignee or sublessee; (ii) such information as to such assignee's or sublessee's financial responsibility and standing as Landlord may reasonably require; and (iii) the aforementioned plans and specifications, if any.

Within ten (10) days after Landlord's receipt of a written request from Tenant that Tenant seeks to sublet or assign all or any portion of the Premises, Landlord shall notify Tenant in writing that Landlord (a) elects to consent to the proposed assignment or sublease subject to the terms and conditions hereinafter set forth; (b) refuses such consent, specifying reasonable grounds for such refusal; or (c) elects to recapture the space described in the sublease or assignment, as applicable, except with respect to a Permitted Transferee (as defined in Section 15.4), if the sublease or assignment (1) by itself or taken together with prior sublease(s) or partial assignment(s) covers or totals, as the case may be, more than fifty percent (50%) of the rentable square feet of the Premises and (2) is for a term greater than fifty percent (50%) of the period remaining in the Term of this Lease as of the time of the Proposed Effective Date. If such recapture notice is given, it shall serve to terminate this Lease with respect to the proposed sublease or assignment space, or, if the proposed sublease or assignment space covers all the Premises, it shall serve to terminate the entire term of this Lease in either case, as of the Proposed Effective Date. However, no termination of this Lease with respect to part or all of the Premises shall become effective without the prior written consent, where necessary, of the holder of each deed of trust encumbering the Premises or any part thereof. If this Lease is terminated pursuant to the foregoing with respect to less than the entire Premises, the Rent shall be adjusted on the basis of the proportion of square feet retained by Tenant to the square feet originally demised and this Lease as so amended shall continue thereafter in full force and effect. Each assignment or sublease agreement to which Landlord has consented shall be an instrument in writing and in form reasonably satisfactory to Landlord, and shall include a provision whereby such instrument is and shall be subject and subordinate to the provisions of this Lease, and, except as otherwise set forth in a sublease approved by Landlord, agrees to perform all of the obligations of Tenant hereunder (to the extent such obligations relate to the portion of the Premises assigned or subleased). As Additional Rent hereunder, Tenant shall reimburse Landlord for reasonable legal and other out-of-pocket expenses incurred by Landlord in connection with any actual or proposed assignment or subletting. Each permitted assignee shall be and remain liable jointly and severally with Tenant for payment of Rent and for the due performance of, and compliance with all the terms, covenants, conditions and agreements herein contained on Tenant's part to be performed or complied with, for the term of this Lease. No assignment or subletting shall affect the continuing primary liability of Tenant (which, following assignment, shall be joint and several with the assignee), and Tenant shall not be released from performing any of the terms, covenants and conditions of this Lease. Tenant hereby acknowledges and agrees that it understands that Landlord's accounting department may process and accept Rent payments without verifying that such payments are being made by Tenant, a permitted sublessee or a permitted assignee in accordance with the provisions of this Lease. Although such payments may be processed and accepted by such accounting department personnel, any and all actions or omissions by the personnel of Landlord's accounting department shall not be considered as acceptance by Landlord of any proposed assignee or sublessee nor shall such actions or omissions be deemed to be a substitute for the requirement that Tenant obtain Landlord's prior written consent to any such subletting or assignment, and any such actions or omissions by the personnel of Landlord's accounting department shall not be considered as a voluntary relinquishment by Landlord of any of its rights hereunder nor shall any voluntary relinquishment of such rights be inferred therefrom. For purposes hereof, in the event Tenant is a corporation, partnership, joint venture, trust or other entity other than a natural person, any change in the direct or indirect ownership of Tenant (whether pursuant to one or more transfers) which results in a change of more than fifty percent (50%) in the direct or indirect ownership of Tenant (each a "**Change of Control**") shall be deemed to be an assignment within the meaning of this Section 15 and shall be subject to all the provisions hereof.

Notwithstanding the foregoing, provided that Tenant is not in default hereunder past any applicable cure period, Tenant may, without Landlord's prior written consent, conduct a Change of Control provided that following each such Change of Control, Tenant shall have a current verifiable net worth at least equal to or greater than that of Tenant immediately prior to such Change of Control. Any and all options, first rights of refusal, tenant improvement allowances and other similar rights granted to Tenant in this Lease, if any, shall not be assignable by Tenant except to a Permitted Transferee (as defined in Section 15.4 below) or unless expressly authorized in writing by Landlord.

15.2 Excess Sublease Rental or Assignment Consideration. In the event of any sublease or assignment of all or any portion of the Premises where the rent or other consideration provided for in the sublease or assignment either initially or over the term of the sublease or assignment exceeds the Rent or pro rata portion of the Rent, as the case may be, for such space reserved in the Lease, after deducting only (a) a standard leasing commission payable by Tenant in consummating such assignment or sublease, (b) the cost of reasonable tenant improvements required for a sublease, provided that the drawings for such tenant improvements and the cost thereof are approved in writing by Landlord pursuant to this Lease, and (c) reasonable attorneys' fees incurred by Tenant in negotiating and reviewing the assignment or sublease documentation, then Landlord may require that Tenant shall pay the Landlord monthly, as Additional Rent, at the same time as the monthly installments of Rent are payable hereunder, fifty percent (50%) of the amount of such excess of each such payment of rent or other consideration in excess of the Rent called for hereunder.

15.3 Waiver. Notwithstanding any assignment or sublease, or any indulgences, waivers or extensions of time granted by Landlord to any assignee or sublessee, or failure by Landlord to take action against any assignee or sublessee, Tenant waives notice of any default of any assignee or sublessee and agrees that Landlord may, at its option, proceed against Tenant without having taken action against or joined such assignee or sublessee, except that Tenant shall have the benefit of any indulgences, waivers and extensions of time granted to any such assignee or sublessee.

15.4 Permitted Transferee. Notwithstanding the foregoing, Tenant may, without Landlord's prior written consent and without any right to terminate the Lease or a portion of the Premises as provided in Section 15.1 above or any participation by Landlord in assignment and subletting proceeds as provided in Section 15.2 above, sublet a portion or the entire Premises or assign this Lease to a parent, subsidiary, affiliate, division or corporation controlled or under common control with Tenant ("affiliate"), or to a successor corporation related to Tenant by merger, consolidation or reorganization, or to a purchaser of substantially all of Tenant's business operations conducted on the Premises (all of the foregoing to be collectively referred to herein as "**Permitted Transferee**"), provided that any such assignee or sublessee shall have a current verifiable net worth at least equal to that of Tenant immediately prior to the effective date of the sublease or assignment, or, if less, financial resources sufficient, in Landlord's reasonable good faith judgment, to perform the obligations under the assignment or sublease, as applicable. Tenant's foregoing rights in this Section 15.4 to assign this Lease or to sublease a portion of the entire Premises shall be subject to the following conditions: (a) Tenant shall not be in default hereunder past any applicable cure period; (b) in the case of an assignment or subletting to an affiliate, Tenant shall remain liable to Landlord hereunder if Tenant is a surviving entity; and (c) the transferee or successor entity shall expressly assume in writing all of Tenant's obligations hereunder.

16. Ad Valorem Taxes. Prior to delinquency, Tenant shall pay all taxes and assessments levied upon trade fixtures, alterations, additions, improvements, inventories and personal property located and/or installed on or in the Premises by, or on behalf of, Tenant; and if requested by Landlord, Tenant shall promptly deliver to Landlord copies of receipts for payment of all such taxes and assessments. To the extent any such taxes are not separately assessed or billed to Tenant, Tenant shall pay the amount thereof as invoiced by Landlord.

17. Subordination. Without the necessity of any additional document being executed by Tenant for the purpose of effecting a subordination, and at the election of Landlord or any bona fide mortgagee or deed of trust beneficiary with a lien on all or any portion of the Premises or any ground lessor with respect to the land of which the Premises are a part, the rights of Tenant under this Lease and this Lease shall be subject and subordinate at all times to: (i) all ground leases or underlying leases which may now exist or hereafter be executed affecting the Building or the land upon which the Building is situated or both, and (ii) the lien of any mortgage or deed of trust which may hereafter be executed in any amount for which the Building, the lot upon which the Building is located, ground leases or underlying leases, or Landlord's interest or estate in any of said items is specified as security; provided however, Landlord shall use commercially reasonable efforts to obtain a subordination, non-disturbance and attornment agreement ("**SNDA**") from the beneficiary of any deed of trust executed by Landlord as trustor after the date of this Lease, such SNDA to be on such beneficiary's form and reasonably satisfactory to Tenant. As of the date hereof, there is no deed of trust encumbering the Building or the lot upon which the Building is located. Notwithstanding anything to the contrary in this Section 17, Landlord or any such ground lessor, mortgagee, or any beneficiary shall have the right to subordinate or cause to be subordinated any such ground leases or underlying leases or any such liens to this Lease. If any ground lease or underlying lease terminates for any reason or any mortgage or deed of trust is foreclosed or a conveyance in lieu of foreclosure is made for any reason, Tenant shall, notwithstanding any subordination and upon the request of such successor to Landlord, attorn to and become the Tenant of the successor in interest to Landlord, provided such successor in interest will not disturb Tenant's use, occupancy or quiet enjoyment of the Premises so long as Tenant is not in default of the terms and provisions of this Lease following expiration of all applicable notice and cure periods. The successor in interest to Landlord following foreclosure, sale or deed in lieu thereof shall not be (a) liable for any act or omission of any prior lessor or with respect to events occurring prior to acquisition of ownership; (b) subject to any offsets or defenses which Tenant might have against any prior lessor; (c) bound by prepayment of more than one (1) month's Rent, except in those instances when Tenant pays Rent quarterly in advance pursuant to Section 8 hereof, then not more than three months' Rent; or (d) liable to Tenant for any Security Deposit not actually received by such successor in interest to the extent any portion or all of such Security Deposit has not already been forfeited by, or refunded to, Tenant. Landlord shall be liable to Tenant for all or any portion of the Security Deposit not forfeited by, or refunded to Tenant, until and unless Landlord transfers such Security Deposit to the successor in interest. Tenant covenants and agrees to execute (and acknowledge if required by Landlord, any lender or ground lessor) and deliver, within ten (10) business days of a demand or request by Landlord and in the form reasonably requested by Landlord, ground lessor, mortgagee or beneficiary, any additional documents evidencing the priority or subordination of this Lease with respect to any such ground leases or underlying leases or the lien of any such mortgage or deed of trust.

18. Right of Entry. Except in the event of emergency, but subject Tenant's reasonable security/control procedures for its CLIA operations, Landlord and Landlord's agents shall provide Tenant with one (1) business day notice prior to entry of the Premises. Tenant grants Landlord or its agents the right to enter the Premises at all reasonable times subject to such prior notice for purposes of inspection, exhibition, posting of notices, repair or alteration. At Landlord's option, Landlord shall at all times have and retain a key with which to unlock all the doors in, upon and about the Premises, excluding Tenant's vaults and safes. It is further agreed that Landlord shall have the right to use any and all means Landlord deems necessary to enter the Premises in an emergency. Landlord shall have the right to place "for rent" or "for lease" signs on the outside of the Premises, the Building and in the Common Areas. Landlord shall also have the right to place "for sale" signs on the outside of the Building and in the Common Areas. Tenant hereby waives any claim from damages or for any injury or inconvenience to or interference with Tenant's business, or any other loss occasioned thereby except for any claim for any of the foregoing arising out of the gross negligence or willful misconduct of Landlord or its authorized representatives.

19. Estoppel Certificate. Tenant shall execute (and acknowledge if required by any lender or ground lessor) and deliver to Landlord, within fifteen (15) days after Landlord provides such to Tenant, a statement in writing certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification), the date to which the Rent and other charges are paid in advance, if any, acknowledging that there are not, to Tenant's actual knowledge, any uncured defaults on the part of Landlord hereunder or specifying such defaults as are claimed, and such other matters as Landlord may reasonably require. Any such statement may be conclusively relied upon by Landlord and any prospective purchaser or encumbrancer of the Premises. Tenant's failure to deliver such statement within such time shall be conclusive upon the Tenant that (a) this Lease is in full force and effect, without modification except as may be represented by Landlord; (b) there are no uncured defaults in Landlord's performance; and (c) not more than one month's Rent has been paid in advance, except in those instances when Tenant pays Rent quarterly in advance pursuant to Section 8 hereof, then not more than three month's Rent has been paid in advance.

20. Tenant's Default. The occurrence of any one or more of the following events shall, at Landlord's option, constitute a material default by Tenant of the provisions of this Lease:

20.1 The abandonment of the Premises by Tenant or the vacation of the Premises by Tenant which would cause any insurance policy to be invalidated or otherwise lapse. Tenant agrees to notice and service of notice as provided for in this Lease and waives any right to any other or further notice or service of notice which Tenant may have under any statute or law now or hereafter in effect;

20.2 The failure by Tenant to make any payment of Rent, Additional Rent or any other payment required hereunder on the date said payment is due and Tenant fails to cure such default within five (5) days after written notice of such failure is given to Tenant by Landlord;

20.3 The failure by Tenant to observe, perform or comply with any of the obligations, conditions, covenants or provisions of this Lease (except failure to make any payment of Rent and/or Additional Rent) and such failure is not cured within twenty (20) days after written notice of such failure is given to Tenant by Landlord. If such failure is susceptible of cure but cannot reasonably be cured within the aforementioned time period, Tenant shall promptly commence the cure of such failure and thereafter diligently prosecute such cure to completion within the time period specified by Landlord in any written notice regarding such failure as may be delivered to Tenant by Landlord. In no event or circumstance shall Tenant have more than sixty (60) days to complete any such cure, unless otherwise expressly agreed to in writing by Landlord (in Landlord's sole discretion);

20.4 The making of a general assignment by Tenant for the benefit of creditors, the filing of a voluntary petition by Tenant or the filing of an involuntary petition by any of Tenant's creditors seeking the rehabilitation, liquidation, or reorganization of Tenant under any law relating to bankruptcy, insolvency or other relief of debtors and, in the case of an involuntary action, the failure to remove or discharge the same within sixty (60) days of such filing, the appointment of a receiver or other custodian to take possession of substantially all of Tenant's assets or this leasehold, Tenant's insolvency or inability to pay Tenant's debts or failure generally to pay Tenant's debts when due, any court entering a decree or order directing the winding up or liquidation of Tenant or of substantially all of Tenant's assets, Tenant taking any action toward the dissolution or winding up of Tenant's affairs, the cessation or suspension of Tenant's use of the Premises, or the attachment, execution or other judicial seizure of substantially all of Tenant's assets or this leasehold;

20.5 Tenant's use or storage of Hazardous Materials in, on or about the Premises, the Building, the lot upon which the Building is located and/or the Park other than as expressly permitted by the provisions of Section 29 below;

20.6 The making of any material misrepresentation or omission by Tenant in any materials delivered by or on behalf of Tenant to Landlord pursuant to this Lease;

20.7 Tenant fails to execute (and acknowledge if required) and deliver, within the time period set forth in Section 17 above, documents evidencing the priority or subordination of this Lease with respect to any such ground leases or underlying leases or the lien of any mortgage or deed of trust and Tenant fails to cure such default within ten (10) days after written notice of such failure is given to Tenant by Landlord; or

20.8 Tenant fails to execute (and acknowledge if required) and deliver to Landlord, within the time period set forth in Section 19 above, an estoppel certificate and Tenant fails to cure such default within ten (10) days after written notice of such failure is given to Tenant by Landlord.

21. Remedies for Tenant's Default.

21.1 Landlord's Rights: In the event of Tenant's material default under this Lease, Landlord may terminate Tenant's right to possession of the Premises by any lawful means in which case upon delivery of written notice by Landlord this Lease shall terminate on the date specified by Landlord in such notice and Tenant shall immediately surrender possession of the Premises to Landlord. In addition, the Landlord shall have the immediate right of re-entry whether or not this Lease is terminated, and if this right of re-entry is exercised following abandonment of the Premises by Tenant, Landlord may consider any personal property belonging to Tenant and left on the Premises to also have been abandoned. No re-entry or taking possession of the Premises by

Landlord pursuant to this Section 21 shall be construed as an election to terminate this Lease unless a written notice of such intention is given to Tenant. If Landlord relets the Premises or any portion thereof, (i) Tenant shall be liable immediately to Landlord for all costs Landlord incurs in reletting the Premises or any part thereof, including, without limitation, broker's commissions, expenses of cleaning, redecorating, and further improving the Premises and other similar costs (collectively, the "**Reletting Costs**"), and (ii) the rent received by Landlord from such reletting shall be applied to the payment of, first, any indebtedness from Tenant to Landlord other than Base Rent, Operating Expenses, Tax Expenses, Common Area Utility Costs, and Utility Expenses; second, all costs including maintenance, incurred by Landlord in reletting; and, third, Base Rent, Operating Expenses, Tax Expenses, Common Area Utility Costs, Utility Expenses, and all other sums due under this Lease. Any and all of the Reletting Costs shall be fully chargeable to Tenant and shall not be prorated or otherwise amortized in relation to any new lease for the Premises or any portion thereof. After deducting the payments referred to above, any sum remaining from the rental Landlord receives from reletting shall be held by Landlord and applied in payment of future Rent as Rent becomes due under this Lease. In no event shall Tenant be entitled to any excess rent received by Landlord. Reletting may be for a period shorter or longer than the remaining term of this Lease. No act by Landlord other than giving written notice to Tenant shall terminate this Lease. Acts of maintenance, efforts to relet the Premises or the appointment of a receiver on Landlord's initiative to protect Landlord's interest under this Lease shall not constitute a termination of Tenant's right to possession. So long as this Lease is not terminated, Landlord shall have the right to remedy any default of Tenant, to maintain or improve the Premises, to cause a receiver to be appointed to administer the Premises and new or existing subleases and to add to the Rent payable hereunder all of Landlord's reasonable costs in so doing, with interest at the maximum rate permitted by law from the date of such expenditure.

21.2 Damages Recoverable: If Tenant breaches this Lease and abandons the Premises before the end of the Term, or if Tenant's right to possession is terminated by Landlord because of a breach or default under this Lease, then in either such case, Landlord may recover from Tenant all damages suffered by Landlord as a result of Tenant's failure to perform its obligations hereunder, including, but not limited to, the cost of any Tenant Improvements constructed by or on behalf of Tenant pursuant to Exhibit B hereto, the portion of any broker's or leasing agent's commission incurred with respect to the leasing of the Premises to Tenant for the balance of the Term of the Lease remaining after the date on which Tenant is in default of its obligations hereunder, and all Reletting Costs, and the worth at the time of the award (computed in accordance with paragraph (3) of Subdivision (a) of Section 1951.2 of the California Civil Code) of the amount by which the Rent then unpaid hereunder for the balance of the Lease Term exceeds the amount of such loss of Rent for the same period which Tenant proves could be reasonably avoided by Landlord and in such case, Landlord prior to the award, may relet the Premises for the purpose of mitigating damages suffered by Landlord because of Tenant's failure to perform its obligations hereunder; provided, however, that even though Tenant has abandoned the Premises following such breach, this Lease shall nevertheless continue in full force and effect for as long as Landlord does not terminate Tenant's right of possession, and until such termination, Landlord shall have the remedy described in Section 1951.4 of the California Civil Code (Landlord may continue this Lease in effect after Tenant's breach and abandonment and recover Rent as it becomes due, if Tenant has the right to sublet or assign, subject only to reasonable limitations) and may enforce all its rights and remedies under this Lease, including the right to recover the Rent from Tenant as it becomes due hereunder. The "worth at the time of the award" within the meaning of Subparagraphs

(a)(1) and (a)(2) of Section 1951.2 of the California Civil Code shall be computed by allowing interest at the rate of ten percent (10%) per annum. Tenant waives redemption or relief from forfeiture under California Code of Civil Procedure Sections 1174 and 1179, or under any other present or future law, in the event Tenant is evicted or Landlord takes possession of the Premises by reason of any default of Tenant hereunder.

21.3 Rights and Remedies Cumulative: The foregoing rights and remedies of Landlord are not exclusive; they are cumulative in addition to any rights and remedies now or hereafter existing at law, in equity by statute or otherwise, or to any equitable remedies Landlord may have, and to any remedies Landlord may have under bankruptcy laws or laws affecting creditor's rights generally. In addition to all remedies set forth above, if Tenant materially defaults under this Lease, any and all Base Rent waived by Landlord under Section 3 above shall be immediately due and payable to Landlord and all options granted to Tenant hereunder shall automatically terminate, unless otherwise expressly agreed to in writing by Landlord.

21.4 Waiver of a Default: The waiver by Landlord of any default of any provision of this Lease shall not be deemed or construed a waiver of any other default by Tenant hereunder or of any subsequent default of this Lease, except for the default specified in the waiver.

22. Holding Over. If Tenant holds possession of the Premises after the expiration of the Term of this Lease with Landlord's consent, Tenant shall become a tenant from month-to-month upon the terms and provisions of this Lease, provided the monthly Base Rent during such hold over period shall be the greater of (a) one hundred fifty percent (150%) of the Base Rent due on the last month of the Lease Term, payable in advance on or before the first day of each month, or (b) the then market rent for comparable space as the Premises. Acceptance by Landlord of the monthly Base Rent without the additional fifty percent (50%) increase of Base Rent shall not be deemed or construed as a waiver by Landlord of any of its rights to collect the increased amount of the Base Rent as provided herein at any time. Such month-to-month tenancy shall not constitute a renewal or extension for any further term. All options, if any, granted under the terms of this Lease shall be deemed automatically terminated and be of no force or effect during said month-to-month tenancy. Tenant shall continue in possession until such tenancy shall be terminated by either Landlord or Tenant giving written notice of termination to the other party at least thirty (30) days prior to the effective date of termination. This paragraph shall not be construed as Landlord's permission for Tenant to hold over. Acceptance of Base Rent by Landlord following expiration or termination of this Lease shall not constitute a renewal of this Lease.

23. Landlord's Default. Landlord shall not be deemed in breach or default of this Lease unless Landlord fails within a reasonable time to perform an obligation required to be performed by Landlord hereunder. For purposes of this provision, a reasonable time shall not be less than thirty (30) days after receipt by Landlord of written notice specifying the nature of the obligation Landlord has not performed; provided, however, that if the nature of Landlord's obligation is such that more than thirty (30) days, after receipt of written notice, is reasonably necessary for its performance, then Landlord shall not be in breach or default of this Lease if performance of such obligation is commenced within such thirty (30) day period and thereafter diligently pursued to completion. If Landlord commits a default, Tenant's remedy shall be to institute an action against Landlord for damages or for equitable or injunctive relief, but Tenant shall not have the right to rent abatement, to offset against rent, or to terminate this Lease in the event of any default by Landlord.

24. Parking. Tenant shall have the right to use the number of non-designated and nonexclusive parking spaces specified in the Basic Lease Information at no additional cost to Tenant in the parking area for the Building, subject to such reasonable rules and regulations for such parking facilities which may be established or altered by Landlord at any time from time to time during the Term of the Lease, provided that such rules and regulations shall not unreasonably interfere with Tenant's parking license.

25. Sale of Premises. In the event of any sale of the Premises by Landlord or the cessation otherwise of Landlord's interest therein, Landlord shall be and is hereby entirely released from any and all of its obligations to perform or further perform under this Lease and from all liability hereunder accruing from or after the date of such sale; and the purchaser, at such sale or any subsequent sale of the Premises shall be deemed, without any further agreement between the parties or their successors in interest or between the parties and any such purchaser, to have assumed and agreed to carry out any and all of the covenants and obligations of the Landlord under this Lease. For purposes of this Section 25, the term "Landlord" means only the owner and/or agent of the owner as such parties exist as of the date on which Tenant executes this Lease. A ground lease or similar long term lease by Landlord of the entire Building, of which the Premises are a part, shall be deemed a sale within the meaning of this Section 25. Tenant agrees to attorn to such new owner provided such new owner does not disturb Tenant's use, occupancy or quiet enjoyment of the Premises so long as Tenant is not in default of any of the provisions of this Lease.

26. Waiver. No delay or omission in the exercise of any right or remedy of either party on any default by the other party shall impair such a right or remedy or be construed as a waiver. The subsequent acceptance of Rent by Landlord after default by Tenant of any covenant or term of this Lease shall not be deemed a waiver of such default, other than a waiver of timely payment for the particular Rent payment involved, and shall not prevent Landlord from maintaining an unlawful detainer or other action based on such breach. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly Rent and other sums due hereunder shall be deemed to be other than on account of the earliest Rent or other sums due, nor shall any endorsement or statement on any check or accompanying any check or payment be deemed an accord and satisfaction; and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or other sum or pursue any other remedy provided in this Lease. No failure, partial exercise or delay on the part of either party in exercising any right, power or privilege hereunder shall operate as a waiver thereof.

27. Casualty Damage. If the Premises or any part thereof shall be damaged by fire or other casualty, Tenant shall give prompt written notice thereof to Landlord. In the event of a total destruction of the Building or the Premises during the Term from any cause, either party may elect to terminate this Lease by giving written notice of termination to the other party within thirty (30) days after the casualty occurs. A total destruction shall be deemed to have occurred for this purpose if the Building or the Premises is destroyed to the extent of seventy-five percent (75%) or more of the replacement cost thereof. If the Lease is not terminated, and provided insurance proceeds and any contributions from Tenant, if necessary, are available to fully repair the damage, Landlord shall repair and restore the Building, including the Tenant Improvements and Alterations

completed by or on behalf of Tenant in accordance with Section 10.1 above (but Landlord shall not be required to rebuild, repair, or replace any part of Tenant's furniture, furnishings, fixtures and/or equipment) in a diligent manner and this Lease shall continue in full force and effect, except that Rent shall be abated as set forth herein. In the event of a partial destruction of the Building or the Premises to an extent less than seventy-five percent (75%) of the replacement cost thereof, and if the damage thereto can be repaired, reconstructed, or restored within a period of two hundred seventy (270) days from the date of such casualty (the "**Restoration Period**"), and provided insurance proceeds and any deductibles and/or contributions from Tenant, if required, are available to fully repair the damage and there are at least twelve (12) months remaining of the Term of this Lease (or the cost to repair the damage to the Building or Premises would cost less than five percent (5%) of the replacement cost of the Building if less than twelve (12) months are remaining of the Term), Landlord shall commence to repair and restore the Premises or Building and shall proceed with reasonable diligence to restore the Premises or Building (except that Landlord shall not be responsible for delays outside its control) to substantially the same condition in which it was immediately prior to the happening of the casualty, including the Tenant Improvements and Alterations completed by or on behalf of Tenant in accordance with Section 10.1 above; provided, Landlord shall not be required to rebuild, repair, or replace any part of the Tenant's furniture, furnishings, fixtures and/or equipment. Rent shall be abated in accordance with this Section 27. If any of the foregoing conditions are not met, Landlord shall have the option of either repairing and restoring the Building or Premises, or terminating this Lease by giving written notice of termination to Tenant within thirty (30) days after the casualty. Landlord shall not in any event be required to spend for such work an amount in excess of the insurance proceeds (excluding any deductible) and any contributions from Tenant, if required, actually received by Landlord as a result of the fire or other casualty. Landlord shall not be liable for any inconvenience or annoyance to Tenant, injury to the business of Tenant, loss of use of any part of the Premises by the Tenant or loss of Tenant's personal property resulting in any way from such damage or the repair thereof, except that, Rent shall be abated proportionally in the ratio which the Tenant's use of the Premises is impaired during the period of such repair, reconstruction, or restoration, from the date of the casualty until such repair, reconstruction or restoration is completed. Notwithstanding anything to the contrary contained herein, if the Premises or any other portion of the Building be damaged by fire or other casualty resulting from the intentional or negligent acts or omissions of Tenant or any of Tenant's Representatives, (i) Tenant shall not have any right to terminate this Lease due to the occurrence of such casualty or damage, and (ii) Tenant shall be liable to Landlord for the cost and expense of the repair and restoration of all or any portion of the Building caused thereby (including, without limitation, any deductible) to the extent such cost and expense is not covered by insurance proceeds. In the event the holder of any indebtedness secured by the Premises requires that the insurance proceeds be applied to such indebtedness, then Landlord shall have the right to terminate this Lease by delivering written notice of termination to Tenant within thirty (30) days after the date of notice to Tenant of any such event, whereupon all rights and obligations shall cease and terminate hereunder except for those obligations expressly intended to survive any such termination of this Lease. In addition, if Landlord elects to repair and restore the Building or Premises under this Section 27, but the repairs and restoration are not substantially completed within the Restoration Period plus the period of any force majeure delays, Tenant may terminate this Lease by written notice to Landlord within twenty (20) days after the expiration of the Restoration Period, provided that the repairs and restoration are not substantially completed prior to the receipt by Landlord of such notice of termination. Except as otherwise provided in this Section 27, Tenant hereby waives the provisions of Sections 1932(2.), 1933(4.), 1941 and 1942 of the California Civil Code.

28. Condemnation. If twenty-five percent (25%) or more of the Premises is condemned by eminent domain, inversely condemned or sold in lieu of condemnation for any public or quasi-public use or purpose (“**Condemned**”), then Tenant or Landlord may terminate this Lease as of the date when physical possession of the Premises is taken and title vests in such condemning authority, and Rent shall be adjusted to the date of termination. Tenant shall not because of such condemnation assert any claim against Landlord or the condemning authority for any compensation because of such condemnation, and Landlord shall be entitled to receive the entire amount of any award without deduction for any estate of interest or other interest of Tenant. Notwithstanding the foregoing, Tenant shall be entitled to receive any damages awarded by the court for (a) leasehold improvements installed at Tenant’s expense or other property owned by Tenant, and (b) reasonable costs of moving by Tenant to another location in San Mateo County or surrounding areas within the San Francisco Bay Area. The entire balance of the award shall be the property of Landlord. If neither party elects to terminate this Lease, Landlord shall, if necessary, promptly proceed to restore the Premises or the Building to substantially its same condition prior to such partial condemnation, allowing for the reasonable effects of such partial condemnation, and a proportionate allowance shall be made to Tenant, as solely determined by Landlord, for the Rent corresponding to the time during which, and to the part of the Premises of which, Tenant is deprived on account of such partial condemnation and restoration. Landlord shall not be required to spend funds for restoration in excess of the amount received by Landlord as compensation awarded.

29. Environmental Matters/Hazardous Materials.

29.1 Hazardous Materials Disclosure Certificate: Prior to executing this Lease, Tenant has completed, executed and delivered to Landlord Tenant’s initial Hazardous Materials Disclosure Certificate (the “**Initial HazMat Certificate**”), a copy of which is attached hereto as Exhibit E and incorporated herein by this reference. Tenant covenants, represents and warrants to Landlord that the information on the Initial HazMat Certificate is true and correct and accurately describes the use(s) of Hazardous Materials which will be made and/or used on the Premises by Tenant. Tenant shall, commencing with the date which is one year from the Commencement Date and continuing every year thereafter, complete, execute, and deliver to Landlord, an updated Hazardous Materials Disclosure Certificate (the “**HazMat Certificate**”) certifying Tenant’s continued use of Hazardous Materials on the Premises and including any updates to Hazardous Materials proposed to be used on the Premises (in which case, Tenant shall not be permitted to use such updated proposed Hazardous Materials until approved in writing by Landlord in accordance with Section 29.3 below), and any other reasonably necessary documents as requested by Landlord. The HazMat Certificate required hereunder shall be in substantially the form as that which is attached hereto as Exhibit C.

29.2 Definition of Hazardous Materials: As used in this Lease, the term “**Hazardous Materials**” shall mean and include (a) any hazardous or toxic wastes, materials or substances, and other pollutants or contaminants, which are or become regulated by any Environmental Laws; (b) petroleum, petroleum by products, gasoline, diesel fuel, crude oil or any fraction thereof; (c) asbestos and asbestos containing material, in any form, whether friable or non-friable; (d)

polychlorinated biphenyls; (e) radioactive materials; (f) lead and lead-containing materials; (g) any other material, waste or substance displaying toxic, reactive, ignitable or corrosive characteristics, as all such terms are used in their broadest sense, and are defined or become defined by any Environmental Law (defined below); or (h) any materials which cause or threatens to cause a nuisance upon or waste to any portion of the Premises, the Building, the lot upon which the Building is located, the Park or any surrounding property; or poses or threatens to pose a hazard to the health and safety of persons on the Premises or any surrounding property.

29.3 Prohibition; Environmental Laws: Tenant shall not be entitled to use nor store any Hazardous Materials on, in, or about the Premises, the Building, the lot upon which the Building is located and the Park, or any portion of the foregoing, without, in each instance, obtaining Landlord's prior written consent thereto. If Landlord consents to any such usage or storage, then Tenant shall be permitted to use and/or store only those Hazardous Materials that are necessary for Tenant's business and to the extent disclosed in the HazMat Certificate and as expressly approved by Landlord in writing, provided that such usage and storage is only to the extent of the quantities of Hazardous Materials as specified in the then applicable HazMat Certificate as expressly approved by Landlord and provided further that such usage and storage is in full compliance with any and all local, state and federal environmental, health and/or safety-related laws, statutes, orders, standards, courts' decisions, ordinances, rules and regulations (as interpreted by judicial and administrative decisions), decrees, directives, guidelines, permits or permit conditions, currently existing and as amended, enacted, issued or adopted in the future which are or become applicable to Tenant or all or any portion of the Premises (collectively, the "**Environmental Laws**"). Tenant agrees that any changes to the type and/or quantities of Hazardous Materials specified in the most recent HazMat Certificate may be implemented only with the prior written consent of Landlord, which consent may be withheld in Landlord's sole and absolute discretion; provided, however, Landlord's consent shall not unreasonably withheld with respect to any types and/or quantities of Hazardous Materials as adjusted on a square footage basis that Landlord has approved for use by any other tenant in the Park with respect to such proposed types of Hazardous Materials in the same quantity proposed by Tenant (adjusted on a square footage basis). Tenant shall not be entitled nor permitted to install any tanks under, on or about the Premises for the storage of Hazardous Materials without the express written consent of Landlord, which may be given or withheld in Landlord's sole discretion. Subject to Section 18 above, Landlord shall have the right at all times during the Term of this Lease to (i) inspect the Premises, (ii) conduct tests and investigations to determine whether Tenant is in compliance with the provisions of this Section 29, and (iii) request lists of all Hazardous Materials used, stored or otherwise located on, under or about any portion of the Premises and/or the Common Areas. The cost of all such inspections, tests and investigations shall be borne solely by Tenant if such tests and investigation determines that Tenant or any of Tenant's Representatives are directly or indirectly responsible in any manner for any contamination revealed by such inspections, tests and investigations. The aforementioned rights granted herein to Landlord and its representatives shall not create (a) a duty on Landlord's part to inspect, test, investigate, monitor or otherwise observe the Premises or the activities of Tenant and Tenant's Representatives with respect to Hazardous Materials, including without limitation, Tenant's operation, use and any remediation related thereto, or (b) liability on the part of Landlord and its representatives for Tenant's use, storage, disposal or remediation of Hazardous Materials, it being understood that Tenant shall be solely responsible for all liability in connection therewith.

29.4 Tenant's Environmental Obligations: Tenant shall give to Landlord immediate verbal and follow-up written notice of any spills, releases, discharges, disposals, emissions, migrations, removals or transportation of Hazardous Materials on, under or about any portion of the Premises or in any Common Areas. Tenant, at its sole cost and expense, covenants and warrants to promptly investigate, clean up, remove, restore and otherwise remediate (including, without limitation, preparation of any feasibility studies or reports and the performance of any and all closures) any spill, release, discharge, disposal, emission, migration or transportation of Hazardous Materials arising from or related to the intentional or negligent acts or omissions of Tenant or Tenant's Representatives such that the affected portions of the Park and any adjacent property are returned to the condition existing prior to the appearance of such Hazardous Materials. Any such investigation, clean up, removal, restoration and other remediation shall only be performed after Tenant has obtained Landlord's prior written consent, which consent shall not be unreasonably withheld so long as such actions would not potentially have a material adverse longterm or short-term effect on any portion of the Premises, the Building, the lot upon which the Building is located or the Park. Notwithstanding the foregoing, Tenant shall be entitled to respond immediately to an emergency without first obtaining Landlord's prior written consent. Tenant, at its sole cost and expense, shall conduct and perform, or cause to be conducted and performed, all closures as required by any Environmental Laws or any agencies or other governmental authorities having jurisdiction thereof. If Tenant fails to so promptly investigate, clean up, remove, restore, provide closure or otherwise so remediate, Landlord may, but without obligation to do so, take any and all steps necessary to rectify the same and Tenant shall promptly reimburse Landlord, upon demand, for all costs and expenses to Landlord of performing investigation, clean up, removal, restoration, closure and remediation work. All such work undertaken by Tenant, as required herein, shall be performed in such a manner so as to enable Landlord to make full economic use of the Premises, the Building, the lot upon which the Building is located and the Park after the satisfactory completion of such work.

29.5 Environmental Indemnity: In addition to Tenant's obligations as set forth hereinabove, Tenant and Tenant's officers and directors agree to, and shall, protect, indemnify, defend (with counsel reasonably acceptable to Landlord) and hold Landlord and the other Indemnitees harmless from and against any and all claims, judgments, damages, penalties, fines, liabilities, losses (including, without limitation, diminution in value of any portion of the Premises, the Building, the lot upon which the Building is located or the Park, damages for the loss of or restriction on the use of rentable or usable space, and from any adverse impact of Landlord's marketing of any space within the Building and/or Park), suits, administrative proceedings and costs (including, but not limited to, attorneys' and consultant fees and court costs) arising at any time during or after the Term of this Lease in connection with or related to, directly or indirectly, the use, presence, transportation, storage, disposal, migration, removal, spill, release or discharge of Hazardous Materials on, in or about any portion of the Premises, the Common Areas, the Building, the lot upon which the Building is located or the Park as a result (directly or indirectly) of the intentional or negligent acts or omissions of Tenant or any of Tenant's Representatives. Neither the written consent of Landlord to the presence, use or storage of Hazardous Materials in, on, under or about any portion of the Premises, the Building, the lot upon which the Building is located and/or the Park, nor the strict compliance by Tenant with all Environmental Laws shall excuse Tenant and Tenant's officers and directors from its obligations of indemnification pursuant hereto. Notwithstanding anything to the contrary, Tenant shall have no obligation or liability for the use, presence, transportation, storage, disposal, migration, removal, spill, release or discharge

of Hazardous Materials on, in or about any portion of the Premises, the Common Areas, the Building, the lot upon which the Building is located or the Park that were not caused (directly or indirectly) by or the result of a release by Tenant or any of Tenant's Representatives. Tenant shall not be relieved of its indemnification obligations under the provisions of this Section 29.5 due to Landlord's status as either an "owner" or "operator" under any Environmental Laws.

29.6 Survival: Tenant's obligations and liabilities pursuant to the provisions of this Section 29 shall survive the expiration or earlier termination of this Lease.

30. Financial Statements. Tenant, for the reliance of Landlord, any lender holding or anticipated to acquire a lien upon the Premises, the Building or the Park or any portion thereof, or any prospective purchaser of the Building or the Park or any portion thereof, within fifteen (15) days after Landlord's request therefor, but not more often than once every two (2) years, shall deliver to Landlord the then current audited or reviewed financial statements of Tenant (including interim periods following the end of the last fiscal year for which annual statements are available) which statements shall be prepared or compiled by a certified public accountant and shall present fairly the financial condition of Tenant at such dates and the result of its operations and changes in its financial positions for the periods ended on such dates. If an audited or reviewed financial statement has not been prepared, Tenant shall provide Landlord with an unaudited financial statement and/or such other information, the type and form of which are acceptable to Landlord in Landlord's reasonable discretion, which reflects the financial condition of Tenant. Tenant may condition delivery of such financial statements upon Landlord executing and delivering to Tenant a non-disclosure agreement in the form previously executed by Landlord in connection with this Lease.

31. General Provisions.

31.1 Time. Time is of the essence in this Lease and with respect to each and all of its provisions in which performance is a factor.

31.2 Successors and Assigns. The covenants and conditions herein contained, subject to the provisions as to assignment, apply to and bind the heirs, successors, executors, administrators and assigns of the parties hereto.

31.3 Recordation. Tenant shall not record this Lease or a short form memorandum hereof without the prior written consent of the Landlord.

31.4 Landlord's Personal Liability. The liability of Landlord (which, for purposes of this Lease, shall include Landlord and the owner of the Building if other than Landlord) to Tenant for any default by Landlord under the terms of this Lease shall be limited to the actual interest of Landlord and its present or future partners or members in the Premises and Building and all rents, incomes, proceeds and awards derived therefrom, and Tenant agrees to look solely to the Premises and Building and all rents, incomes, proceeds and awards derived therefrom for satisfaction of any liability and shall not look to other assets of Landlord nor seek any recourse against the assets of the individual partners, members, directors, officers, shareholders, agents or employees of Landlord (including without limitation, any property management company of Landlord); it being intended that Landlord and the individual partners, members, directors, officers, shareholders,

agents and employees of Landlord (including without limitation, any property management company of Landlord) shall not be personally liable in any manner whatsoever for any judgment or deficiency. The liability of Landlord under this Lease is limited to its actual period of ownership of title to the Building, and in the event of any sale or exchange of the Building by Landlord and assignment of this Lease by Landlord, Landlord shall, upon providing Tenant with written confirmation that the assignee has assumed all obligations of Landlord under this Lease and Landlord has delivered any Security Deposit held by Landlord to Landlord's successor in interest, be and hereby is entirely relieved of all liability under any and all of Landlord's covenants and obligations contained in or derived from this Lease with respect to the period commencing with the consummation of the sale or exchange and assignment.

31.5 Separability. Any provisions of this Lease which shall prove to be invalid, void or illegal shall in no way affect, impair or invalidate any other provisions hereof and such other provision shall remain in full force and effect.

31.6 Choice of Law. This Lease is governed by federal law, including without limitation the Electronic Signatures in Global and National Commerce Act (15 U.S.C. §§ 7001 *et seq.*) and, to the extent that state law applies, the laws of the State of California without regard to its conflicts of law rules. Notwithstanding which of the parties may be deemed to have prepared this Lease, this Lease shall not be interpreted either for or against Landlord or Tenant, but this Lease shall be interpreted in accordance with the general tenor of the language in an effort to reach an equitable result.

31.7 Notices. All notices required under this Lease and other information concerning this Lease ("**Communications**") shall be personally delivered or sent by first class mail, postage prepaid, by overnight courier. Such Communications sent by personal delivery, mail or overnight courier will be sent to the addresses listed in the Basic Lease Information, or to such other addresses as the Landlord and the Tenant may specify from time to time in writing. Communications shall be effective (i) if mailed, upon the earlier of receipt or five (5) days after deposit in the U.S. mail, first class, postage prepaid, or (ii) if hand-delivered, by courier or otherwise (including telegram, lettergram or mailgram), when delivered.

Tenant acknowledges and accepts this Section 31.7.

Tenant's initials OA

31.8 Attorneys' Fees. In the event any dispute between the parties results in litigation or other proceeding, the prevailing party shall be reimbursed by the party not prevailing for all reasonable costs and expenses, including, without limitation, reasonable attorneys' and experts' fees and costs incurred by the prevailing party in connection with such litigation or other proceeding, and any appeal thereof. Such costs, expenses and fees shall be included in and made a part of the judgment recovered by the prevailing party, if any.

31.9 Entire Agreement. This Lease supersedes any prior agreements, representations, negotiations or correspondence between the parties, and contains the entire agreement of the parties on matters covered. No other agreement, statement or promise made by any party, that is not in writing and signed by all parties to this Lease, shall be binding.

31.10 Warranty of Authority. On the date that Tenant executes this Lease, Tenant shall deliver to Landlord an original certificate of status for Tenant issued by the California Secretary of State or statement of partnership for Tenant recorded in the county in which the Premises are located, as applicable, and such other documents as Landlord may reasonably request with regard to the lawful existence of Tenant. Each person executing this Lease on behalf of a party represents and warrants that (1) such person is duly and validly authorized to do so on behalf of the entity it purports to so bind, and (2) if such party is a partnership, corporation or trustee, that such partnership, corporation or trustee has full right and authority to enter into this Lease and perform all of its obligations hereunder. Tenant hereby warrants that this Lease is valid and binding upon Tenant and enforceable against Tenant in accordance with its terms.

31.11 Joint and Several. If Tenant consists of more than one person or entity, the obligations of all such persons or entities shall be joint and several.

31.12 Covenants and Conditions. Each provision to be performed by Tenant hereunder shall be deemed to be both a covenant and a condition.

31.13 Waiver of Jury Trial. The parties hereto shall and they hereby do waive trial by jury in any action, proceeding or counterclaim brought by either of the parties hereto against the other on any matters whatsoever arising out of or in any way related to this Lease, the relationship of Landlord and Tenant, Tenant's use or occupancy of the Premises, the Building or the Park, and/or any claim of injury, loss or damage.

31.14 Counterclaims. In the event Landlord commences any proceedings for nonpayment of Rent, Additional Rent, or any other sums or amounts due hereunder, Tenant shall not interpose any counterclaim of whatever nature or description in any such proceedings, provided, however, nothing contained herein shall be deemed or construed as a waiver of the Tenant's right to assert such claims in any separate action brought by Tenant or the right to offset the amount of any final judgment owed by Landlord to Tenant.

31.15 Underlining. The use of underlining within the Lease is for Landlord's reference purposes only and no other meaning or emphasis is intended by this use, nor should any be inferred.

31.16 Merger. The voluntary or other surrender of this Lease by Tenant, the mutual termination or cancellation hereof by Landlord and Tenant, or a termination of this Lease by Landlord for a material default by Tenant hereunder, shall not work a merger, and, at the sole option of Landlord, (i) shall terminate all or any existing subleases or subtenancies, or (ii) may operate as an assignment to Landlord of any or all of such subleases or subtenancies. Landlord's election of either or both of the foregoing options shall be exercised by delivery by Landlord of written notice thereof to Tenant and all known subtenants under any sublease.

31.17 Energy Reporting. Tenant shall comply with all reasonably energy usage reporting requirements of Landlord relating to Tenant's use of the Premises, consistent with all applicable laws, rules and regulations.

31.18 Force Majeure. Any prevention, delay or stoppage due to strikes, lockouts, labor disputes, government mandated shutdowns, government mandated closures related to COVID-19 or any other viruses, epidemics or pandemics, or acts of God, acts of war, terrorism, terrorist activities, inability to obtain services, labor, or materials or reasonable substitutes therefore, governmental actions, civil commotions and other causes beyond the reasonable control of the party obligated to perform and not due to the fault or neglect of such party claiming the same and except with respect to the obligations imposed with regard to Rent and other charges to be paid by Tenant pursuant to this Lease (collectively, a “**Force Majeure**”), notwithstanding anything to the contrary contained in this Lease, shall excuse the performance of such party for a period equal to any such prevention, delay or stoppage and, therefore, if this Lease specifies a time period for performance of an obligation of either party, that time period shall be extended by the period of any delay in such party’s performance caused by a Force Majeure. In no event shall lack of profitability, inability to obtain financing, or lack or insufficiency of funds be a basis for Force Majeure, and no failure to pay Rent when due shall be excused nor the time for payment extended because of Force Majeure.

31.19 Counterparts; Electronic Signatures. This Lease may be executed in counterparts, including both counterparts that are executed on paper and counterparts that are in the form of electronic records and are executed electronically. An electronic signature means any electronic sound, symbol or process attached to or logically associated with a record and executed and adopted by a party with the intent to sign such record, including facsimile or e-mail electronic signatures. All executed counterparts shall constitute one agreement, and each counterpart shall be deemed an original. The parties hereby acknowledge and agree that electronic records and electronic signatures, as well as facsimile signatures, may be used in connection with the execution of this Lease and electronic signatures, facsimile signatures or signatures transmitted by electronic mail in so-called pdf format shall be legal and binding and shall have the same full force and effect as if a paper original of this Lease had been delivered and signed using a handwritten signature. Landlord and Tenant (i) agree that an electronic signature, whether digital or encrypted, of a party to this Lease is intended to authenticate this writing and to have the same force and effect as a manual signature, (ii) intend to be bound by the signatures (whether original, faxed or electronic) on any document sent or delivered by facsimile, or electronic mail, or other electronic means, (iii) are aware that the other party will rely on such signatures, and (iv) hereby waive any defenses to the enforcement of the terms of this Lease based on the foregoing forms of signature. If this Lease has been executed by electronic signature, all parties executing this document are expressly consenting under the Electronic Signatures in Global and National Commerce Act (“E-SIGN”), and Uniform Electronic Transactions Act (“UETA”), that a signature by fax, email or other electronic means shall constitute an Electronic Signature to an Electronic Record under both E-SIGN and UETA with respect to this specific transaction.

Tenant acknowledges and accepts this Section 31.19. Tenant’s initials OA

31.20 Amendments. This Lease may only be amended by a writing signed by the parties hereto, or by an electronic record that has been electronically signed by the parties hereto and has been rendered tamper-evident as part of the signing process. The exchange of email or other electronic communications discussing an amendment to this Lease, even if such communications are signed, does not constitute a signed electronic record agreeing to such an amendment.

Tenant acknowledges and accepts this Section 31.20. Tenant’s initials OA

32. Signs. Tenant shall be permitted to install signage on the front door and on the monument sign for the Building subject to Landlord's reasonable prior approval of such signage. Tenant shall be provided with signage on the lobby directory. All signs and graphics of every kind visible in or from public view or corridors or the exterior of the Premises shall be subject to Landlord's prior written approval which approval shall not be unreasonably withheld and shall be subject to any applicable governmental laws, ordinances, and regulations and in compliance with Landlord's sign criteria as same may exist from time to time. Tenant shall remove all such signs and graphics prior to the termination of this Lease. Such installations and removals shall be made in a manner as to avoid damage or defacement of the Premises; and Tenant shall repair any damage or defacement, including without limitation, discoloration caused by such installation or removal. Landlord shall have the right, at its option, to deduct from the Security Deposit such sums as are reasonably necessary to remove such signs, including, but not limited to, the costs and expenses associated with any repairs necessitated by such removal. Notwithstanding the foregoing, in no event shall any: (a) neon, flashing or moving sign(s) or (b) sign(s) which shall interfere with the visibility of any sign, awning, canopy, advertising matter, or decoration of any kind of any other business or occupant of the Building or the Park be permitted hereunder. Tenant further agrees to maintain any such sign, awning, canopy, advertising matter, lettering, decoration or other thing as may be approved in good condition and repair at all times.

33. Mortgagee Protection. Upon any default on the part of Landlord, Tenant will give written notice in accordance with Section 31.10 hereof, to any beneficiary of a deed of trust or mortgagee of a mortgage covering the Premises who has provided Tenant with notice of their interest together with an address for receiving notice, and shall offer such beneficiary or mortgagee a reasonable opportunity to cure the default (which, in no event shall be less than sixty (60) days), including time to obtain possession of the Premises by power of sale or a judicial foreclosure, if such should prove necessary to effect a cure. If such default cannot be cured within such time period, then such additional time as may be necessary will be given to such beneficiary or mortgagee to effect such cure so long as such beneficiary or mortgagee has commenced the cure within the original time period and thereafter diligently pursues such cure to completion, in which event this Lease shall not be terminated while such cure is being diligently pursued. Tenant agrees that each lender to whom this Lease has been assigned by Landlord is an express third party beneficiary hereof.

34. Warranties of Tenant. Tenant hereby warrants and represents to Landlord, for the express benefit of Landlord, that Tenant has undertaken a complete and independent evaluation of the risks inherent in the execution of this Lease and the operation of the Premises for the use permitted hereby, and that, based upon said independent evaluation, Tenant has elected to enter into this Lease and hereby assumes all risks with respect thereto. Tenant hereby further warrants and represents to Landlord, for the express benefit of Landlord, that in entering into this Lease, Tenant has not relied upon any statement, fact, promise or representation (whether express or implied, written or oral) not specifically set forth herein in writing and that any statement, fact, promise or representation (whether express or implied, written or oral) made at any time to Tenant, which is not expressly incorporated herein in writing, is hereby waived by Tenant.

35. Compliance with Americans with Disabilities Act.

35.1 Landlord and Tenant hereby agree and acknowledge that the Premises, the Building and/or the Park may be subject to the requirements of the Americans with Disabilities Act, a federal law codified at 42 U.S.C. 12101 et seq, including, but not limited to Title III thereof, all regulations and guidelines related thereto, together with any and all laws, rules, regulations, ordinances, codes and statutes now or hereafter enacted by local or state agencies having jurisdiction thereof, including all requirements of Title 24 of the State of California, as the same may be in effect on the date of this Lease and may be hereafter modified, amended or supplemented (collectively, the “**ADA**”). Any Tenant Improvements to be constructed hereunder shall be in compliance with the requirements of the ADA, and all costs incurred for purposes of compliance therewith shall be a part of and included in the costs of the Tenant Improvements. Tenant shall be solely responsible for conducting its own independent investigation of this matter and for ensuring that the design of all Tenant Improvements strictly comply with all requirements of the ADA; provided that Tenant’s failure to complete such investigation shall not waive Landlord’s obligation to construct the Tenant Improvements in accordance with the terms of the Work Letter. Subject to reimbursement pursuant to Section 6 of the Lease, if any barrier removal work or other work is required to the Common Areas or the Park under the ADA, then such work shall be the responsibility of Landlord; provided, if such work is required under the ADA as a result of Tenant’s specific use of the Premises or any work or alteration made to the Premises by or on behalf of Tenant (other than the Tenant Improvements), then such work shall be performed by Landlord at the sole cost and expense of Tenant. Except as otherwise expressly provided in this provision, Tenant shall be responsible at its sole cost and expense for fully and faithfully complying with all applicable requirements of the ADA, including without limitation, not discriminating against any disabled persons in the operation of Tenant’s business in or about the Premises, and offering or otherwise providing auxiliary aids and services as, and when, required by the ADA. Within ten (10) days after receipt, Landlord and Tenant shall advise the other party in writing, and provide the other with copies of (as applicable), any notices alleging violation of the ADA relating to any portion of the Premises or the Building; any claims made or threatened in writing regarding noncompliance with the ADA and relating to any portion of the Premises or the Building; or any governmental or regulatory actions or investigations instituted or threatened regarding noncompliance with the ADA and relating to any portion of the Premises or the Building. Tenant shall and hereby agrees to protect, defend (with counsel acceptable to Landlord) and hold Landlord and the other Indemnites harmless and indemnify the Indemnites from and against all liabilities, damages, claims, losses, penalties, judgments, charges and expenses (including reasonable attorneys’ fees, costs of court and expenses necessary in the prosecution or defense of any litigation including the enforcement of this provision) arising from or in any way related to, directly or indirectly, Tenant’s or Tenant’s Representatives’ violation or alleged violation of the ADA. Tenant agrees that the obligations of Tenant herein shall survive the expiration or earlier termination of this Lease. Notwithstanding anything to the contrary, but subject to Section 9.1 above, Tenant shall have no liability or responsibility to correct any violations of the requirements of the ADA which exist as of the Commencement Date.

35.2 Civil Code Section 1938. To the extent permitted by law, Tenant waives any and all rights under and benefits of California Civil Code Section 1938. In accordance with California Civil Code Section 1938, Landlord hereby informs Tenant that as of the Date of this Lease, neither the Building nor the Premises have been inspected by a Certified Access Specialist (as defined in California Civil Code section 55.52(3)) (“**CASp**”). Tenant shall not engage any CASp to inspect the Building or Premises without Landlord’s prior written consent, which shall not be unreasonably withheld, conditioned or delayed. California Civil Code Section 1938(e) provides:

“A Certified Access Specialist (CASP) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises.”

Accordingly, Landlord and Tenant hereby mutually agree that if Tenant desires to obtain a CASp inspection, (i) the CASp inspection shall be at Tenant's sole cost and expense, (ii) the inspection shall be performed by a CASp that is currently certified in California and has been approved by Landlord, (iii) the CASp inspection shall take place during regular business hours with at least five (5) business days' prior written notice to Landlord and shall not materially disrupt any of the other tenants within the Building, (iv) Tenant shall promptly provide Landlord with a copy of the final report prepared in connection with the CASp inspection (the “**CASP Report**”), and (v) Tenant shall be solely responsible for promptly making any repair or modifications necessary to correct violations of construction-related accessibility standards that are noted in the CASp Report (the “**Required Modifications**”) and shall defend with competent counsel, indemnify and hold Landlord harmless from any claims, damages or liability resulting from Tenant's failure to promptly make such Required Modifications. The Required Modifications shall not proceed until Landlord has approved in writing: (i) Tenant's contractor, and (ii) complete and detailed plans and specifications for the Required Modifications. The Required Modifications shall be performed in a good and workmanlike manner in compliance with all of the terms of the Lease. At Landlord's sole discretion, Landlord may elect to complete the Required Modifications. If Landlord elects to complete the Required Modifications, Landlord may forward invoices and bills for the expenses of the Required Modifications to Tenant, and Tenant shall, no later than ten (10) days prior to the due date, pay such invoices or bills and deliver satisfactory evidence of such payment to Landlord. Alternatively, Tenant shall reimburse Landlord for any costs incurred by Landlord within ten (10) days of Landlord's invoice therefor.

Tenant hereby acknowledges and agrees that the CASp Report is to be kept strictly confidential, except as necessary for Tenant to complete repairs and correct violations of construction-related accessibility standards as noted in the CASp Report. Accordingly, except as provided above or as may be required by law or court order, Tenant shall not release, publish or otherwise distribute (and shall not authorize or permit any other person or entity to release, publish or otherwise distribute) any information contained in the CASp Report. Tenant's obligations hereunder shall survive the expiration or earlier termination of this Lease.

36. Brokerage Commission. Landlord and Tenant each represents and warrants for the benefit of the other that it has had no dealings with any real estate broker, agent or finder in connection with the Premises and/or the negotiation of this Lease, except for the Broker(s) (as set forth in the Basic Lease Information), and that it knows of no other real estate broker, agent or finder who is or might be entitled to a real estate brokerage commission or finder's fee in connection with this Lease or otherwise based upon contacts between the claimant and Tenant. Each party shall indemnify and hold harmless the other from and against any and all liabilities or expenses arising

out of claims made for a fee or commission by any real estate broker, agent or finder in connection with the Premises and this Lease other than Broker(s), if any, resulting from the actions of the indemnifying party. Any real estate brokerage commission or finder's fee payable to the Broker(s) in connection with this Lease shall be payable pursuant to a separate agreement.

37. Quiet Enjoyment. Landlord covenants with Tenant, upon the paying of Rent and observing and keeping the covenants, agreements and conditions of this Lease on its part to be kept, and during the periods that Tenant is not otherwise in default of any of the terms or provisions of this Lease beyond expiration of all applicable notice and cure periods, and subject to the rights of any of Landlord's lenders, (i) that Tenant shall and may peaceably and quietly hold, occupy and enjoy the Premises and the Common Areas during the Term of this Lease, and (ii) neither Landlord, nor any successor or assign of Landlord, shall disturb Tenant's occupancy or enjoyment of the Premises and the Common Areas.

38. Landlord's Ability to Perform Tenant's Unperformed Obligations. Notwithstanding anything to the contrary contained in this Lease, if Tenant shall fail to perform any of the terms, provisions, covenants or conditions to be performed or complied with by Tenant pursuant to this Lease beyond any applicable notice and cure period, and/or if the failure of Tenant relates to a matter which in Landlord's judgment reasonably exercised is of an emergency nature and such failure shall remain uncured for a period of time commensurate with such emergency, then Landlord may, at Landlord's option without any obligation to do so, and in its sole discretion as to the necessity therefor, perform any such term, provision, covenant, or condition, or make any such payment and Landlord by reason of so doing shall not be liable or responsible for any loss or damage thereby sustained by Tenant or anyone holding under or through Tenant. If Landlord so performs any of Tenant's obligations hereunder, the full amount of the cost and expense entailed or the payment so made or the amount of the loss so sustained shall immediately be owing by Tenant to Landlord, and Tenant shall promptly pay to Landlord within five (5) days of notice, as Additional Rent, the full amount thereof and Enforcement Expenses.

39. Sustainability. Landlord and Tenant acknowledge and agree that Landlord is committed to employing sustainable operating and maintenance practices for the Building. Tenant shall fully cooperate with Landlord in any programs in which Landlord may elect to participate relating to the Building's (i) energy efficiency, management and conservation; (ii) water conservation and management; (iii) environmental standards and efficiency; (iv) recycling and reduction programs; and/or (v) safety, which participation may include, without limitation, the Leadership in Energy and Environmental Design (LEED) program and related Green Building Rating System promoted by the U.S. Green Building Council. All carbon tax credits and similar credits, offsets and deductions are the sole and exclusive property of Landlord. Tenant affirms its support of these practices, and agrees to cooperate with Landlord by implementing reasonable conservation practices. Periodically, Landlord may offer additional examples, guidance and practices related to energy conservation measures, which Tenant agrees to consider for implementation. Notwithstanding anything herein to the contrary, Tenant shall not be restricted from operating its business in the fashion and manner which it deems appropriate for itself. Should any specific practice(s) proposed by Landlord be deemed to be inconsistent with Tenant's business operations, Tenant shall so advise Landlord in writing as its reason for declining to implement such specific practice(s).

TENANT:

BillionToOne, Inc.,
a Delaware corporation

BY: /s/ Oguzhan Atay

DATE: 05/19/2020

ITS: CEO

LANDLORD:

O'BRIEN DRIVE PORTFOLIO, LLC,
A Delaware limited liability company

By: TARLTON PROPERTIES, INC.,
a California corporation its managing member

By: /s/ John C. Tarlton
John C. Tarlton
President & CEO

By: O'BRIEN DRIVE PORTFOLIO MEMBER, LLC,
a Delaware limited liability company, its co-managing
member

By: PRINCIPAL REAL ESTATE INVESTORS, LLC,
a Delaware limited liability company, its authorized
signatory

By: /s/ Jeff Uittenbogaard
Name: Jeff Uittenbogaard
Title: Investment Director

By: /s/ Joel Woehler
Name: Joel Woehler
Title: Investment Director – Asset Management

EXHIBIT A

PREMISES

Exhibit A

EXHIBIT B

WORK LETTER AGREEMENT

This Work Letter ("Work Letter") sets forth the terms and conditions relating to the construction of improvements for the Premises. All references in this Work Letter to the "Lease" shall mean the relevant portions of the Lease to which this Work Letter is attached as Exhibit B.

SECTION 1

BASE, SHELL AND CORE

Except as otherwise provided in the Lease or this Work Letter, Tenant hereby accepts the base, shell and core of the Premises (collectively, the "Base, Shell and Core"), in its current "AS-IS" condition existing as of the date of the Lease and the Commencement Date. Except for the Allowance set forth below, Landlord shall not be obligated to make or pay for any alterations or improvements to the Premises, the Building or the Real Property. Tenant acknowledges and agrees that neither Landlord nor any of Landlord's agents, representatives or employees has made any representations as to the suitability, fitness or condition of the Premises for the conduct of Tenant's business or for any other purpose, including without limitation, any storage incidental thereto. Any exception to the foregoing provisions must be made by express written agreement by both parties.

SECTION 2

CONSTRUCTION DRAWINGS FOR THE PREMISES

Prior to the execution of this Lease, Landlord and Tenant have approved a detailed space plan for the construction of certain improvements in the Premises, which space plan has been prepared by DES Architects, as 20-0410 BTO Pricing Plans-Space Plan, attached hereto as Schedule 1 (the "**Final Space Plan**"). Based upon and in conformity with the Final Space Plan, Landlord shall cause its architect and engineers to prepare and deliver to Tenant, for Tenant's approval, detailed specifications and engineered working drawings for the tenant improvements shown on the Final Space Plan (the "**Working Drawings**"). The Working Drawings shall incorporate modifications to the Final Space Plan as necessary to comply with the floor load and other structural and system requirements of the Building. To the extent that the finishes and specifications are not completely set forth in the Final Space Plan for any portion of the tenant improvements depicted thereon, the actual specifications and finish work shall be in accordance with the specifications for the Building's standard tenant improvement items ("**Specifications**"), as determined by Landlord. Within seven (7) business days after Tenant's receipt of the Working Drawings, Tenant shall approve or disapprove the same, which approval shall not be unreasonably withheld; provided, however, that Tenant may only disapprove the Working Drawings to the extent such Working Drawings are inconsistent with the Final Space Plan and only if Tenant delivers to Landlord, within such seven (7) business-day period, specific changes proposed by Tenant which are consistent with the Final Space Plan and do not constitute changes which would result in any of the circumstances described in items (i) through (iv) below. If any such revisions are timely and properly proposed by Tenant, Landlord shall cause its architect and engineers to revise the Working Drawings to incorporate such revisions and submit the same for Tenant's approval in accordance

Exhibit B-1

with the foregoing provisions, and the parties shall follow the foregoing procedures for approving the Working Drawings until the same are finally approved by Landlord and Tenant. Upon Landlord's and Tenant's approval of the Working Drawings, the same shall be known as the "**Approved Working Drawings**". The tenant improvements shown on the Approved Working Drawings shall be referred to herein as the "**Tenant Improvements**". Once the Approved Working Drawings have been approved by Landlord and Tenant, Tenant shall make no changes, change orders or modifications thereto without the prior written consent of Landlord, which consent shall not be unreasonably withheld, but may be withheld in Landlord's sole discretion if such change or modification would: (i) be of a quality lower than the quality of the standard tenant improvement items for the Building; (ii) materially increase the cost of designing or constructing the Tenant Improvements above the cost of the tenant improvements depicted in the Final Space Plan; and/or (iii) require any changes to the Base, Shell and Core or structural improvements or systems of the Building. The Final Space Plan, Working Drawings and Approved Working Drawings shall be collectively referred to herein as, the "**Construction Drawings**".

SECTION 3

CONSTRUCTION AND COSTS OF TENANT IMPROVEMENTS

Landlord has obtained a bid to construct the Tenant Improvements from C.P. Construction (the "**Contractor**") to (i) obtain all applicable building permits for construction of the Tenant Improvements (collectively, the "**Permits**"), and (ii) construct the Tenant Improvements as depicted on the Approved Working Drawings, in compliance with such Permits and all applicable laws in effect at the time of construction, and in good workmanlike manner. Any contract with Contractor to construct the Tenant Improvements shall be based upon a stipulated sum or guaranteed maximum price. Tenant shall be entitled to a one-time improvement allowance (the "**Allowance**") in an amount up to, but not exceeding, Sixty and 00/100 Dollars (\$60.00) per rentable square foot of the Premises (i.e., up to Two Million One Hundred Sixty-Four Thousand Eighty and 00/100 Dollars (\$2,164,080.00)) (the "**Allowance**") for (i) the costs reasonably relating to the design and construction of the Tenant Improvements and (ii) the costs to purchase approximately one hundred ninety-four (194) mobile benches for the laboratory space of the Premises to be tagged by Landlord, at Landlord's option; provided, however, that the final number shall be set forth on the commencement memorandum in the form of Exhibit D attached hereto (the "Mobile Benches"). The cost of the design and construction of the Tenant Improvements shall include Landlord's construction supervision and management fee in an amount equal to four percent (4%) of hard construction costs (scope of work to include coordination of architect, engineer, design/build subcontractors, general contractor, submittals for permits, construction and punch list) as a cost of the Tenant Improvements. Prior to the execution of this Lease, Landlord and Tenant have approved a preliminary budget for the Tenant Improvements, which is attached hereto as Schedule 2 (the "**Initial Budget**"), which may be adjusted upon agreement of the parties to include all or any portion of the additional items and increased cost associated with such items to construct the Tenant Improvements as set forth on Schedule 3 attached hereto (the "**Budget Adjustments**"). Tenant shall pay for all costs and fees of the Tenant Improvements in excess of the Allowance and Additional Allowance, if any, ("**Over-Allowance Amount**"), on a pari passu basis with Landlord as such costs become due, in the proportion of the Over-Allowance Amount payable by Tenant to the Allowance (and, if properly requested by Tenant pursuant to this Section 3, the Additional Allowance). Landlord shall disburse the Allowance and Additional Allowance, if

any, directly to the applicable design professional, contractor, materialman or other laborer in connection with the construction of the Tenant Improvements. In the event that Tenant requests any changes, change orders or modifications to the Final Space Plan (which Landlord approves pursuant to Section 1 above) which increase the cost to construct the Tenant Improvements above the Allowance (and, if properly requested by Tenant pursuant to this Section 3, the Additional Allowance) ("**Change Orders**"), such increased cost shall become part of the Over-Allowance Amount. If such Change Orders delay Landlord's completion of the Tenant Improvements set forth on the Final Space Plan, then such delay shall constitute a "**Tenant Delay**". Except with respect to the Mobile Benches, in no event shall Landlord be obligated to pay for any of Tenant's furniture, computer systems, telephone systems, equipment or other personal property which may be depicted on the Construction Drawings; such items shall be paid for by Tenant. Tenant shall not be entitled to receive in cash or as a credit against any rental or otherwise, any portion of the Allowance not used to pay for the cost of the design and construction of the Tenant Improvements. If any portion of the Allowance or Additional Allowance, if any, is not used by Tenant within twelve (12) months following the Commencement Date, such portion shall be deemed waived with no further obligation by Landlord with respect thereto. In no event shall Landlord be obligated to make disbursements pursuant to this Work Letter in a total amount that exceeds the Allowance and the Additional Allowance, if any, and in no event shall Tenant be entitled to any excess, credit, deduction or offset against Rent for any unused portion of the Allowance or Additional Allowance.

Tenant shall have the option of increasing the Allowance up to an additional \$5.00 per rentable square foot of the Premises (i.e., up to an additional One Hundred Eighty Thousand Three Hundred Forty and 00/100 Dollars (\$180,340.00)) (the "**Additional Allowance**") for the costs reasonably relating to the design and construction of the Tenant Improvements, upon written notice to Landlord prior to the Commencement Date. Any portion of the Additional Allowance used shall be amortized into the Monthly Base Rent at eight percent (8%) per annum over the Term commencing on the Commencement Date and shall be memorialized through an amendment to this Lease.

SECTION 4

READY FOR OCCUPANCY; SUBSTANTIAL COMPLETION

OF THE TENANT IMPROVEMENTS

4.1 Ready for Occupancy; Substantial Completion. For purposes of this Lease, including for purposes of determining the Commencement Date (as set forth in the Basic Lease Information), the Premises shall be ready for occupancy upon Substantial Completion of the Premises. For purposes of this Lease, "Substantial Completion" of the Premises shall occur upon the completion of construction of the Tenant Improvements in the Premises pursuant to the Approved Working Drawings and the final sign-off by the applicable authorities that allows the Premises to be occupied, with the exception of any punch list items and any tenant fixtures, work-stations, built-in furniture, or equipment to be installed by Tenant or under the supervision of Contractor.

Exhibit B-3

4.2 Delay of the Substantial Completion of the Premises. If there shall be a delay or there are delays in the Substantial Completion of the Premises as a direct, indirect, partial, or total result of any of the following (collectively, "Tenant Delays"):

4.2.1 Tenant's failure to timely respond to requests for approval of the Working Drawings or any other matter requiring Tenant's approval or action and this Work Letter does not deem approval given for such failure to respond;

4.2.2 a breach by Tenant of the terms of this Work Letter or the Lease;

4.2.3 Tenant's request for changes in any of the Construction Drawings and/or any Change Orders;

4.2.4 Tenant's requirement for materials, components, finishes or improvements which are not available in a commercially reasonable time, provided that promptly after Landlord learns of such long lead times, Landlord informs Tenant that such materials, components, finishes or improvements will not be available in a commercially reasonable time;

4.2.5 Tenant's delay in making payments for Over-Allowance Amount as required in Section 3 above; or

4.2.6 Any other act or omission by Tenant, or its contractor, consultants, agents, or employees, or persons employed by any such persons that results in a delay of Substantial Completion and that continues for more than two (2) business days after Landlord's written notice to Tenant.

then, notwithstanding anything to the contrary set forth in the Lease and regardless of the actual date of Substantial Completion, the Commencement Date (as set forth in the Basic Lease Information) shall be deemed to be the date the Lease Commencement Date would have occurred if no Tenant Delay or Delays, as set forth above, had occurred. Notwithstanding anything the contrary, any event of Force Majeure (as defined in Section 31.18 of the Lease) shall not be a Tenant Delay. In no event shall lack of profitability, inability to obtain financing, or lack or insufficiency of funds be a basis for Force Majeure, and no failure to pay the Over-Allowance Amount or other amounts when due shall be excused nor the time for payment extended because of Force Majeure.

SECTION 5

MISCELLANEOUS

5.1 Tenant's Representative. Tenant has designated Oguzhan Atay as its sole representative with respect to the matters set forth in this Work Letter, who shall have full authority and responsibility to act on behalf of the Tenant as required in this Work Letter.

5.2 Landlord's Representative. Landlord has designated Ron Krietemeyer as its sole representative with respect to the matters set forth in this Work Letter, who, until further notice to Tenant, shall have full authority and responsibility to act on behalf of the Landlord as required in this Work Letter.

5.3 Time of the Essence in This Work Letter. Unless otherwise indicated, all references herein to a “number of days” shall mean and refer to calendar days. In all instances where Tenant is required to approve or deliver an item, if no written notice of approval is given or the item is not delivered within the stated time period, at Landlord’s sole option, at the end of said period the item shall automatically be deemed approved or delivered by Tenant and the next succeeding time period shall commence.

5.4 Tenant’s Lease Default. Notwithstanding any provision to the contrary contained in the Lease, if an event of default by Tenant as described in Section 20 of the Lease or any default by Tenant under this Work Letter has occurred at any time on or before the Substantial Completion of the Premises, then (i) in addition to all other rights and remedies granted to Landlord pursuant to the Lease, at law or in equity, Landlord shall have the right to withhold payment of all or any portion of the Allowance, the Additional Allowance, if any, and/or Landlord may cause Contractor to cease the construction of the Premises (in which case, Tenant shall be responsible for any delay in the Substantial Completion of the Premises caused by such work stoppage), and (ii) all other obligations of Landlord under the terms of this Work Letter shall be forgiven, until such time as such default is cured pursuant to the terms of the Lease (in which case, Tenant shall be responsible for any delay in Substantial Completion of the Premises caused by such inaction by Landlord). In addition, if the Lease is terminated prior to the Lease Commencement Date, due to a default by Tenant as described in Section 20 of the Lease or under this Work Letter, in addition to any other remedies available to Landlord under the Lease, at law and/or in equity, Tenant shall pay to Landlord, as Additional Rent under the Lease, within five (5) days of receipt of a statement therefor, any and all costs incurred by Landlord (including any portion of the Allowance and Additional Allowance, if any, disbursed by Landlord) and not reimbursed or otherwise paid by Tenant through the date of such termination in connection with the Tenant Improvements to the extent planned, installed and/or constructed as of such date of termination, including, but not limited to, any costs related to the removal of all or any portion of the Tenant Improvements and restoration costs related thereto.

Exhibit B-5

SCHEDULE 1

SPACE PLANS

SCHEDULE 1

SCHEDULE 2

INITIAL BUDGET

SCHEDULE 3

BUDGET ADJUSTMENTS

SCHEDULE 3

EXHIBIT C

HAZARDOUS MATERIALS DISCLOSURE CERTIFICATE EXAMPLE

EXHIBIT C-1

EXHIBIT D

CHANGE OF COMMENCEMENT DATE

EXHIBIT D-1

EXHIBIT E

TENANT'S HAZARDOUS MATERIALS DISCLOSURE CERTIFICATE

EXHIBIT E-1

FIRST AMENDMENT TO LEASE

1035 O'Brien Drive
Menlo Park, California 94025

THIS FIRST AMENDMENT TO LEASE (this "**Amendment**") is made as of August 7, 2021 (the "**Effective Date**"), by and between O'BRIEN DRIVE PORTFOLIO, LLC, a Delaware limited liability Company ("**Landlord**"), and BillionToOne, Inc., a Delaware corporation ("**Tenant**").

RECITALS

WHEREAS, Landlord and Tenant are parties to that Certain Lease Agreement dated May 21, 2021 (the "**Lease**"), with respect to Certain premises identified in the Lease 1035 O'Brien Drive, Menlo Park, California 94025 (the "**Premises**").

WHEREAS, Landlord and Tenant desire to amend the Lease on the terms set forth herein, all as more particularly set forth herein.

NOW, THEREFORE, in Consideration of the mutual Covenants herein Contained, and other good and valuable Consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. Defined Terms. Capitalized terms defined in the Lease which are used in this Amendment shall have the same meaning as in the Lease, except as otherwise provided in this Amendment.

2. Additional Allowance. Tenant has exercised its option to increase the Allowance for an additional One Hundred Twenty-Two Thousand Eight Hundred Eighteen and 13/100 Dollars (\$122,818.13)) (the "**Additional Allowance**") to be used for the Costs reasonably relating to the design and Construction of the Tenant Improvements. The Additional Allowance shall be disbursed in accordance with the terms and Conditions pertaining to the Allowance as set forth in the Lease.

3. Base Rent. Pursuant to the terms of the Lease, the Additional Allowance shall be amortized into the Monthly Base Rent at eight percent (8%) per annum over the Term. Accordingly, effective as of July 1, 2021, the Monthly Base Rent shall be increased by an amount equal to One Thousand Five Hundred Twenty-Three and 77/100 Dollars (\$1,523.77), and the Base Rent Chart set forth in the Basic Lease Information of the Lease is hereby revised and replaced with the following Base Rent Chart below:

<u>Period</u>	<u>Monthly Base Rent</u>	<u>NNN Rent/PSF/month</u>
7/1/2021 - 2/21/2022	\$ 129,413.77	\$ 5.87
2/22/2022 - 8/21/2022	\$ 168,179.77	\$ 6.05
8/22/2022 - 2/21/2023	\$ 225,506.05	\$ 6.25
2/22/2023 - 2/21/2024	\$ 233,345.43	\$ 6.47
2/22/2024 - 2/21/2025	\$ 241,459.19	\$ 6.69
2/22/2025 - 2/21/2026	\$ 249,856.93	\$ 6.93
2/22/2026 - 2/21/2027	\$ 258,548.59	\$ 7.17
2/22/2027 - 2/21/2028	\$ 267,544.46	\$ 7.42
2/22/2028 - 2/21/2029	\$ 276,855.18	\$ 7.68
2/22/2029 - 2/21/2030	\$ 286,491.78	\$ 7.94
2/22/2030 - 2/28/2031	\$ 296,465.66	\$ 8.22

4. Mobile Benches. Pursuant to Section 3 of the Work Letter, Tenant was entitled to apply the Allowance toward the purchase of the Mobile Benches; however, Tenant elected not to purchase the Mobile Benches with the Allowance and paid directly for the Mobile Benches without reimbursement. Landlord acknowledges and agrees that the Mobile Benches were bought and paid for directly by Tenant without application of any Allowance funds. Landlord and Tenant hereby agree that the Mobile Benches (i) are and shall remain the personal property of Tenant, and (ii) shall be removed from the Premises by Tenant upon Tenant's surrender of the Premises in accordance with the requirements of Section 10.2 of the Lease.

5. Civil Code Section 1938 Disclosure. For purposes of Section 1938(a) of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges, that neither the Building nor the Premises has undergone inspection by a Certified Access Specialist (CASP) (defined by California Civil Code Section 55.52). Pursuant to California Civil Code Section 1938, Tenant is hereby notified that a CASp can inspect the Premises and determine whether the Premises complies with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the Premises, Landlord may not prohibit Tenant from obtaining a CASp inspection of the Premises for the occupancy of the Tenant, if requested by Tenant. Landlord and Tenant shall mutually agree on the arrangements for the time and manner of any CASp inspection, the payment of the fee for the CASp inspection and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the Premises.

6. OFAC List Representation. Tenant hereby represents and warrants to Landlord that neither Tenant nor any of its officers, directors, shareholders, partners, members or affiliates is or will be an entity or person: (i) that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order 13224 issued on September 24, 2001 ("EO 13224"); (ii) whose name appears on the United States Treasury Department's Office of Foreign Assets Control ("OFAC") most current list of "Specifically Designated National and Blocked Persons" (which list may be published from time to time in various mediums including, but not limited to, the OFAC website, <http://www.treas.gov/ofac/t11sdn.pdf>); (iii) who commits, threatens to commit or supports "terrorism," as that term is defined in EO 13224; or (iv) who is otherwise affiliated with any entity or person listed above.

7. Continuing Effect; Conflicts. All of the terms and conditions of the Lease shall remain in full force and effect, as the Lease is amended by this Amendment. If any provision of this Amendment conflicts with the Lease, the provisions of this Amendment shall control.

8. Warranty of Authority. Each party represents and warrants to the other that the person signing this Amendment is duly and validly authorized to do so on behalf of the entity it purports to so bind, and if such party is a limited liability company or a corporation, that such limited liability company or corporation has full right and authority to enter into this Amendment and to perform all of its obligations hereunder.

9. Amendments. This Lease may only be amended by a writing signed by the parties hereto, or by an electronic record that has been electronically signed by the parties hereto and has been rendered tamper-evident as part of the signing process. The exchange of email or other electronic communications discussing an amendment to this Lease, even if such communications are signed, does not constitute a signed electronic record agreeing to such an amendment.

Tenant acknowledges and accepts this Section 8.

Tenant's Initials QA / _____

10. Effectiveness. No binding agreement between the parties pursuant hereto shall arise or become effective until this Amendment has been duly executed by both Tenant and Landlord and a fully executed copy of this Amendment has been delivered to both Tenant and Landlord.

11. Counterparts; Electronic Signatures. This Lease may be executed in counterparts, including both counterparts that are executed on paper and counterparts that are in the form of electronic records and are executed electronically. An electronic signature means any electronic sound, symbol or process attached to or logically associated with a record and executed and adopted by a party with the intent to sign such record, including facsimile or e mail electronic signatures. All executed counterparts shall constitute one agreement, and each counterpart shall be deemed an original. The parties hereby acknowledge and agree that electronic records and electronic signatures, as well as facsimile signatures, may be used in connection with the execution of this Lease and electronic signatures, facsimile signatures or signatures transmitted by electronic mail in so-called pdf format shall be legal and binding and shall have the same full force and effect as if a paper original of this Lease had been delivered and signed using a handwritten signature. Landlord and Tenant (i) agree that an electronic signature, whether digital or encrypted, of a party to this Lease is intended to authenticate this writing and to have the same force and effect as a manual signature, (ii) intend to be bound by the signatures (whether original, faxed or electronic) on any document sent or delivered by facsimile, or electronic mail, or other electronic means, (iii) are aware that the other party will rely on such signatures, and (iv) hereby waive any defenses to the enforcement of the terms of this Lease based on the foregoing forms of signature. If this Lease has been executed by electronic signature, all parties executing this document are expressly consenting under the Electronic Signatures in Global and National Commerce Act ("E-SIGN"), and Uniform Electronic Transactions Act ("UETA"), that a signature by fax, email or other electronic means shall constitute an Electronic Signature to an Electronic Record under both E-SIGN and UETA with respect to this specific transaction.

Tenant acknowledges and accepts this Section 10. Tenant's Initials OA / _____

12. Notices. All notices required under this Lease and other information concerning this Lease ("Communications") shall be personally delivered or sent by first class mail, postage prepaid, by overnight courier. In addition, the Landlord may, in its sole discretion, send such Communications to the Tenant electronically, or permit the Tenant to send such Communications to the Landlord electronically, in the manner described in this Section.

Such Communications sent by personal delivery, mail or overnight courier will be sent to the addresses listed in the Basic Lease Information, or to such other addresses as the Landlord and the Tenant may specify from time to time in writing. Communications shall be effective (i) if mailed, upon the earlier of receipt or five (5) days after deposit in the U.S. mail, first class, postage prepaid, or (ii) if hand-delivered, by courier or otherwise (including telegram, lettergram or mailgram), when delivered.

Such Communications may be sent electronically by the Landlord to the Tenant (i) by transmitting the Communication to the electronic address provided by the Tenant or to such other electronic address as the Tenant may specify from time to time in writing, or (ii) by posting the Communication on a website and sending the Tenant a notice to the Tenant's postal address or electronic address telling the Tenant that the Communication has been posted, its location, and providing instructions on how to view it.

Communications sent electronically to the Tenant will be effective when the Communication, or a notice advising of its posting to a website, is sent to the Tenant's electronic address.

Tenant acknowledges and accepts this Section 11. Tenant's Initials QA / _____

[Signature Page Follows]

TENANT:

BillionToOne, Inc.,
a Delaware corporation

BY: /s/ Oguzhan Atay

DATE: August 7, 2021

ITS: CEO

LANDLORD:

O'BRIEN DRIVE PORTFOLIO, LLC,

By: TARLTON PROPERTIES, INC.
a California corporation, its managing member

By: /s/ John C. Tarlton
John C. Tarlton
President & CEO

DATE: August 9, 2021

By: O'BRIEN DRIVE PORTFOLIO MEMBER, LLC,
a Delaware limited liability company, its co-managing member

By: PRINCIPAL REAL ESTATE INVESTORS, LLC,
a Delaware limited liability company, its authorized signatory

By: /s/ Alex Mather
Name: Alex Mather
Title: Managing Director

DATE: August 20, 2021

By: _____
Name: _____
Title: _____

DATE: _____

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.**

COLLABORATION AGREEMENT

This collaboration agreement (the “Agreement”) dated January 6, 2023 (the “**Effective Date**”) is between BillionToOne, Inc., having offices at 1035 O’Brien Dr., Menlo Park, California 94025 (“BTO”) and Janssen Research & Development, LLC, having offices at 920 Route 202, Raritan, New Jersey 08869 (“**Janssen**”).

BTO has expertise and experience developing and commercializing molecular diagnostic assays.

Janssen is developing the compound Nipocalimab (M281), an anti-neonatal Fc receptor (FcRn) monoclonal antibody for the treatment of Hemolytic Disease of the Fetus and Newborn (HDFN) and has clinical samples of maternal blood to which circulating fetal DNA and a blood group of the fetus can be determined that Janssen is interested in having tested with an assay developed and being commercialized by BTO.

Janssen and BTO want to conduct preliminary research to determine suitability of use of BTO’s existing proprietary assay to test subjects who may be treated with Janssen’s M281 in a clinical trial (the “**Study**”). All activities under this Agreement including the Study shall be conducted in the United States only.

The parties therefore agree as follows:

DEFINITIONS:

“**Applicable Laws**” means United States federal, state or local laws, rules and regulations (including privacy), including any rules, regulations, guidance or other requirements of a Regulatory Authority, that may be in effect from time to time and applicable to a particular activity hereunder, and subject to the conditions and limitations set forth in this Agreement, shall include the applicable regulations and guidance of the FDA that constitute good manufacturing practices and good clinical practices.

“**Investigational Use Device or Device for Performance Study**” means a device (which includes an assay or test) requested by Janssen to be used in the performance of the Study. It is a device that is either (i) an existing laboratory developed test, or (ii) a diagnostic test not yet cleared or approved for use as an IVD (in vitro diagnostic) and is in the development stage and for which the full performance characteristics have not yet been established. A device intended to be used for research purposes, without any medical objective, shall not be deemed to be a device for performance study.

“**IVD**” or “**In Vitro Diagnostic**” means a product or service for in vitro testing of patient or subject specimens, or other biological materials, for use in the diagnosis or evaluation of a disease or for the prediction or monitoring of a response to any Therapeutic Product (or other agent) or other prognostic use.

“**Regulatory Authority**” means the United States Food and Drug Administration (FDA).

“Regulatory Documentation” means any documents BTO submits to any Regulatory Authority pursuant to Section 7.1.1 and any subsequent feedback therefrom.

“Therapeutic Product” means any product that constitutes or contains a chemical or biologic substance for the medical cure, treatment or prevention of disease.

1. PERFORMANCE, PAYMENT, AND TAX

1.1 BTO shall perform the activities set forth in Exhibit A (“**Research Plan**”) and provide Janssen with a summary of all results of those activities. Janssen and BTO agree that any additional research, if desired by both parties, would be conducted according to a separate agreement or an amendment to this Agreement; however, neither party is obligated to enter into any such separate agreement or amendment.

1.2 Within [***] following the Effective Date Janssen shall pay BTO an upfront payment of [***]. The foregoing payment shall be nonrefundable and non-creditable against any other payments due under this Agreement.

1.3 The parties have agreed on payments for milestones of BTO’s activities in the Research Plan (each, a “**Milestone Payment**”). Janssen shall pay to BTO the Milestone Payment upon the achievement of the applicable milestone. BTO will notify Janssen in writing promptly after the achievement of such milestone and will invoice Janssen for payment of such milestone as provided in Section 1.4. Each Milestone Payment is nonrefundable and non- creditable against any other payments due under this Agreement.

BTO shall keep records of matters relating to its performance under the Research Plan and will make those records available to Janssen’s duly authorized representative for examination upon reasonable notice to BTO and no more frequently than [***].

1.4 The following procedures apply to invoicing and payment for processing of samples submitted. BTO invoices will be due and payable within [***] after BTO submits them. BTO will submit invoices electronically through a web-based system using the Accounts Payable website, [***]. When logging into the website, BTO will be prompted for its supplier number, which can be found on the Purchase Order.

A valid nine-digit Purchase Order (PO) number and nine-digit supplier number is needed and will be furnished by Janssen to BTO.

Invoices will only be paid via Electronic Funds Transfer (EFT), an electronic payment method in which funds are directly deposited into a bank account.

BTO will not send paper invoices to Janssen Accounts Payable.

BTO will submit a completed Account Management Profile Form to Janssen Accounts Payable. Invoices will not be processed without an invoice number, invoice date, amount of invoice, purchase order number, explanation of work completed, or a remit to address. If desired by BTO, a courtesy invoice copy marked “customer copy” should be sent via e-mail to [***] at [***].

If requested by BTO, Janssen will provide reasonable technical support to BTO to ensure that BTO is able to properly submit invoices through the Janssen accounts payable website.

1.5 Tax matters will be treated as follows.

1.5.1 “**Tax**” or “**Taxes**” means any present or future taxes, levies, imposts, duties, charges, assessments or fees of any nature (including any interest thereon).

1.5.2 Janssen will make all payments to BTO under this Agreement without deduction or withholding for Taxes except to the extent that any such deduction or withholding is required by Applicable Laws in effect at the time of payment and only after such deduction or withholding has been reviewed and approved in writing by BTO. On the date of execution of this Agreement, BTO will deliver to Janssen an accurate and complete Internal Revenue Service Form W-9.

1.5.3 Subject to Section 1.5.2, any Tax required to be withheld on amounts payable under this Agreement will be paid by Janssen on behalf of BTO to the appropriate governmental authority, and Janssen will furnish BTO with proof of payment of such Tax. Any such Tax required to be withheld will be an expense of and borne by BTO. If any such Tax properly owing by BTO is assessed against and paid by Janssen, then BTO will indemnify and hold harmless Janssen from and against such Tax, except to the extent attributable to Janssen’s acts or omissions.

1.5.4 Subject to Section 1.5.2, Janssen and BTO will cooperate with respect to all documentation required by any taxing authority or reasonably requested by Janssen to secure a reduction in the rate of applicable withholding Taxes.

1.5.5 Indirect Taxes. Amounts payable under this Agreement do not include any sales, use, excise, value added or other applicable taxes, tariffs or duties. If any taxing authority imposes a VAT, GST, sales, use, service, consumption, business or similar tax with respect to the work undertaken under this Agreement, then Janssen agrees to pay that amount if specified in a valid invoice or supply exemption documentation. For avoidance of doubt, BTO will not be entitled to pass on to Janssen, and Janssen will not be obligated to pay or bear, any tax that is based on BTO’s real, personal or intangible property (whether owned or leased), corporate structure, franchise, continuing business operations, income, gross receipts, capital stock, net worth or imposed with respect to BTO’s engagement of employees or independent contractors or that BTO incurs upon subcontracting any work hereunder, in whole or in part, to any affiliated or non-affiliated third party. BTO is solely responsible, to the extent required by applicable law, for identifying, billing, and collecting the taxes payable by Janssen in all relevant federal, state, county, municipal and other taxing jurisdictions and for filing all required tax returns in a timely manner. To the extent that BTO does not provide Janssen a valid invoice (i.e., an invoice compliant with this Agreement and the applicable Research Plan and the rules and regulations of the jurisdiction of both BTO and Janssen, including separate identification of the tax where legally required, then BTO shall be responsible for any penalty resulting directly from such noncompliance. The parties will cooperate in good faith to minimize taxes to the extent legally permissible.

2. GOVERNANCE

2.1 A Joint Steering Committee (“**JSC**”) shall be established [***]. The JSC will be responsible for (a) overseeing and assisting the Project Team in coordinating research activities under this Agreement (including the Research Plan), (b) resolving any matter relating to research in which the parties are unable to reach consensus, and/or (c) approving plans, budgets, and/or resource allocation for research including updating the Research Plan. [***]. The JSC may conduct meetings in any manner convenient to its members and confirmed by consensus. For the avoidance of doubt, the JSC shall have no authority to amend this Agreement or the terms hereunder without the express written consent of both Janssen and BTO.

2.2 The parties will discuss and review day-to-day activities related to the Research Plan through technical, clinical, regulatory and commercial project representatives appointed by each party (the “**Project Team**”). The Project Team will meet [***] unless the parties agree that more or less frequent meetings are required. The Project Team may elevate or otherwise seek input on issues from the JSC.

3. INFORMED CONSENT AND IRB APPROVAL

3.1 The Research Plan will outline the responsibility of both parties with regard to informed consent and IRB approvals.

4. INTELLECTUAL PROPERTY

4.1 Nothing in this Agreement shall affect the ownership of, or be construed to grant any right or license to use, any intellectual property existing on the Effective Date.

4.2 As between the parties only, any deliverable or materials, including clinical samples provided by Janssen referred to in the Research Plan and any other results, reports, data, presentations, documents, prepared by BTO in the performance of Research Plan for Janssen and arising after the Effective Date, and any data use rights, copyrights and trademark rights relating thereto, but for clarity excluding rights in inventions, patent applications and patents relating thereto, shall be the property of Janssen (the “**Janssen Foreground IP**”); *provided however*, any inventions or improvements made to, and patent, trade secret and other intellectual property related to BTO’s proprietary fetal RBC antigen NIPT assay and laboratory developed test (LDT) associated therewith (the “**BTO Test**”) in the performance of the Research Plan, including without limitation, the contents of the validation study and associated report to be performed and provided by BTO, in all cases arising after the Effective Date, together with any and all trade secret rights, rights in inventions, patent applications, patents and any other intellectual property or proprietary rights relating thereto, shall be the property of BTO (collectively, “**BTO Foreground IP**”). Without limiting the foregoing, in no event will BTO Foreground IP include any trade secret right, rights in any invention, patent applications or patents or any other intellectual property or proprietary right of BTO developed or obtained before the Effective Date or at any time (i.e., before or after the Effective Date) outside of the scope of this Agreement. BTO hereby grants to Janssen a nonexclusive, non-transferable and non-sublicensable (except as otherwise expressly permitted by BTO in writing), fully paid-up license to use the BTO Foreground IP, excluding any invention or improvement to the BTO Test made during performance of the Research Plan or otherwise pursuant to this Agreement, solely for Janssen’s internal purposes to perform its obligations under this Agreement including Janssen’s IND submissions to the FDA in respect of the compound Nipocalimab (M281). To the extent that any such BTO Foreground IP is desired for Janssen to commercialize M281 with the BTO Test, Janssen acknowledges and agrees that a further commercial use agreement will need to be negotiated and concluded with BTO. For clarity, BTO has no obligation to grant to Janssen any other rights or licenses under any BTO technology or IP whatsoever, whether or not such technology or IP comprises BTO Foreground IP (as defined above). Without limiting the generality of the foregoing, the parties acknowledge and agree that neither party intends for BTO to grant to Janssen any right or license authorizing or enabling Janssen to perform the BTO Test on its own behalf.

4.3 Each party shall execute and deliver to the other party all documents or other instruments that may be necessary to enable the other party to own, register, publish or protect the rights assigned to it in this Section 4.

4.4 As between the parties only, all case report forms and other data (including without limitation, written, printed, and graphic information contained in any computer database or computer readable form) generated by BTO in the course of conducting the work set out in the Research Plan (the “**Data**”) will be owned and/or controlled as indicated in the Research Plan. The parties may utilize the Data in any way it deems appropriate, subject to and in accordance with applicable state and federal privacy laws, and further subject to any restrictions thereto outlined in the Research Plan and in accordance with this Agreement. Subject to Section 4, any data, result, information or work product comprising Janssen Foreground IP created in connection with the performance of the activities set out in the Research Plan will be considered a “work made for hire.” BTO may not use the Data owned and controlled by Janssen as outlined in the Research Plan for any commercial purposes, including the filing of a patent application or the filing of the Data in support of any pending or future patent application or for the benefit of any for-profit entity, including use of Janssen Data in support of research for or in collaboration with a for-profit entity.

This Section 4.4, with respect to the allocation of rights in Data and sharing of Data created pursuant to this Agreement will further be subject to the terms and conditions of the Confidential Disclosure Agreement, effective November 5, 2021, between Janssen Global Services, LLC and BTO.

5. CONFIDENTIALITY

5.1 Each party may receive certain technical, economic or business information of the other party that the other party considers proprietary. Such information shall be considered Confidential Information.

5.2 During the term of this Agreement and for a period of 5 years thereafter, each party shall keep each other’s Confidential Information in confidence and will not disclose it to any third party or use the Confidential Information for any purpose other than performing its duties under this Agreement.

5.3 Each party may disclose the other party’s Confidential Information to its employees and employees of its affiliates who have a need-to-know such Confidential Information, provided they are bound by obligations of confidentiality and non-use substantially as provided for above.

5.4 The obligations of confidentiality and non-use with respect to the information disclosed or developed does not apply to:

- (i) information which, at the time of disclosure is published, known publicly or is otherwise in the public domain; or
- (ii) information which, after disclosure, is published or becomes known publicly or otherwise becomes part of the public domain, through no fault of the receiving party; or
- (iii) information which, prior to the time of disclosure, is known to the receiving party, as evidenced by its written records; or

(iv) information which has been or is disclosed to the receiving party in good faith by a third party who was not, or is not, under any obligation of confidence or secrecy to the disclosing party at the time the third party discloses it to the receiving party.

5.5 Janssen and BTO may, but shall not be obligated to, coordinate to issue a joint press release before the commencement of subject sample collection. Upon the testing of the sample from the first subject in the Study, BTO may disclose or release publicly details of its participation in the Study in a press release or other public announcement which BTO agrees to submit to Janssen for its prior review and approval acting in good faith, such approval not to be unreasonably withheld, conditioned or delayed. Notwithstanding anything in this Agreement to the contrary, each party remains free at all times, without requirement to obtain the other party's prior approval, to disclose or release information that has been publicly disclosed by either party or by any third party including any governmental agency (such as the FDA, HHS or [clinicaltrials.gov](https://www.clinicaltrials.gov)). Except for the foregoing, neither party shall originate any publicity, news releases or other public announcements, written or oral, to the public, press or otherwise relating to this Agreement without the other party's prior written consent, such consent not to be unreasonably withheld, conditioned or delayed. However, no such consent will be required for either party to re-issue or disclose, in whole or in part, and in substantially the same form, any information previously released to the public that was approved by the other party in accordance with this Section 5.5 provided that such information being re-issued does not include any Janssen trademark, logo, or other proprietary mark.

6. TERMINATION

6.1 This Agreement will terminate thirty-six (36) months after the Effective Date unless terminated earlier as set forth below.

6.2 (i) Janssen may terminate this Agreement [***].

(ii) If this Agreement is terminated under Section 6.2, subject to Section 1.2 and 1.3 (as to the upfront payment and Milestone Payments being nonrefundable and non-creditable), BTO will return to Janssen any funds prepaid by Janssen that are associated with activities in the Research Plan that have not yet been conducted at the time of termination (the **"Unused Prepaid Funds"**). Upon termination under Section 6.1 or 6.2, BTO will submit a final invoice for any and all samples tested and other research activities performed and not previously invoiced and Janssen will pay to BTO the amounts due under such final invoice and any other outstanding invoices under the procedures outlined in Section 1.4.

6.3 (i) This Agreement will terminate automatically should BTO not maintain the Certification outlined in Section 9.7.

(ii) If this Agreement is terminated under Section 6.3, both parties will cease activities immediately and BTO will return to Janssen the Unused Prepaid Funds (in the manner described in Section 6.2(ii)). Neither party shall incur any additional costs that will be paid by the other party or make any other payment to the other Party other than those outlined herein upon termination under Section 6.3.

6.4 Upon termination of this Agreement, BTO shall promptly provide to Janssen any results of activities under the Research Plan and all information associated with those activities that have not yet been provided to Janssen. Janssen will be notified of and be responsible for incurred expenses up to the agreed milestone aligned with the services conducted.

6.5 Article 5 (Confidentiality) and any other provision of this Agreement that, by its terms, is intended to survive termination of this Agreement, shall survive such termination.

7. REGULATORY

7.1 Performance Evaluation / Investigational Testing (investigational device).

7.1.1 BTO will be responsible for regulatory submissions as required and will be responsible for compliance with investigational testing regulations in order to perform the BTO Test on subject samples in the United States in accordance with the requirements of the Regulatory Authority when using BTO's Investigational Use Device or Device for Performance Study – i.e. the BTO Test.

7.1.2 Submissions and Certifications.

(i) BTO will be solely responsible for regulatory submissions to the Regulatory Authority as required in order to perform the BTO Test on subject samples as provided to BTO by Janssen in the Study for the United States in accordance with the requirements of the Regulatory Authority.

(ii) BTO is solely responsible for ensuring that the appropriate certifications are in place for any lab locations performing the BTO Test, compliant with the requirements of the Regulatory Authority.

7.2 Regulatory Documentation.

7.2.1 BTO shall provide Janssen with copies of the Regulatory Documentations.

7.2.2 BTO hereby grants Janssen its Affiliates and third-party contractors performing work under this Agreement a royalty-free, non-exclusive license, without the right to sublicense except as specifically provided in this Agreement to use the Regulatory Documentation for internal business purposes, as well as cross-referencing during Janssen's interaction with any Regulatory Authority.

8. INDEMNIFICATION

8.1 Janssen shall indemnify, defend and hold harmless BTO, its directors, officers, employees, agents and representative (collectively herein, "**BTO Indemnitees**") against any and all losses, costs, claims, suits, expenses, damages and awards, including reasonable attorneys' fees for defending those claims or lawsuits (collectively herein, "**Losses**" or "**Loss**") in connection with any third party claim or lawsuit arising out of:

- (a) the gross negligence or willful misconduct of Janssen, or any third party engaged by Janssen, in performing the Study, including but not
- (b) limited to, any contract research organization, clinical trial site or investigator participating in the conduct of the Study;
- (c) any illness or injury of any subject in the Study; or

(d) the development, commercialization or other exploitation by Janssen or any of its affiliates or sublicensees or its or their respective distributors or contractors of Nipocalimab (M281) or any related compound(s) and/or product(s) but solely to the extent that the marketing authorization for such compound or product was obtained with data from the Study and included the subject sample test data from the BTO Test performed by BTO pursuant to this Agreement.

8.2 BTO shall indemnify, defend and hold harmless Janssen, its directors, officers, employees, agents and representative (collectively herein, “**Janssen Indemnitees**”) against any and all Losses in connection with any third party claim or lawsuit arising out of:

(a) the gross negligence or willful misconduct of BTO, or any third party engaged by BTO, in the performance of its obligations in the Study as set forth in this Agreement; or

(b) the gross negligence or willful misconduct of BTO, or any third party engaged by BTO, in the design, validation or performance of the BTO Test; or

(c) the infringement or misappropriation of any patent or trade secret owned or possessed by a third party arising from the performance of the Assay in the Study in accordance with this Agreement.

8.3 If a party (the “**Indemnitee**”) intends to claim indemnification under this Section 8 (Indemnification), it will notify the other party (the “**Indemnitor**”) in writing within [***] of any third party claim for which the Indemnitee intends to seek such indemnification. The failure of the Indemnitee to deliver written notice to the Indemnitor within a reasonable time after the commencement of any such action will only relieve the Indemnitor of any obligation to the Indemnitee under this Section with respect to any such action to the extent such failure prejudices the Indemnitor’s ability to defend such third party claim. The Indemnitee will permit the Indemnitor to control the litigation or settlement of such third party claim and cooperate fully with Indemnitor in all related matters, provided that unless agreed by Indemnitee (a) counsel appointed by Indemnitor to defend Indemnitee will not take any position that if sustained would cause Indemnitee not to be indemnified by Indemnitor, and (b) no settlement will involve any terms binding on Indemnitee except payment of money to be paid by Indemnitor.

9. MISCELLANEOUS

9.1 Notices. For a notice or other communication between the parties under this Agreement to be valid, it must be in writing and delivered (a) by hand, (b) by a national transportation company (with all fees prepaid), or (c) by email or other electronic format. A valid notice or other communication under this Agreement will be effective when received by the party to which it is addressed as follows:

To BTO:

BillionToOne, Inc.
1035 O’Brien Drive
Menlo Park, CA 94025
Attn: [***]
Email: [***]

with a copy to: BillionToOne, Inc.

1035 O'Brien Drive
Menlo Park, CA 94025
Attn: General Counsel
Email: [***]

To Janssen:

Janssen Research and Development
1400 McKean Rd, Spring House, PA 19477
Attn: [***]
Email: [***]

with a copy to:

Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933
Attn: Chief Intellectual Property Counsel
Email: [***]

9.2 Entire Agreement. This Agreement constitutes the entire understanding between the parties as to the subject matter of this Agreement and supersedes all other agreements, whether written or oral, between the parties.

9.3 Amendments. No amendment to this Agreement will be effective unless it is in writing and signed by both parties.

9.4 No Assignment. Neither party may assign any of its rights or delegate any of its obligations under this Agreement without the prior written consent of the other party, other than (i) to an affiliate, (ii) to any successor in connection with a change of control of that party, or (iii) to the successor if that party sells or otherwise disposes of all or substantially all of its assets relating to its then current business. Any assignment not in accordance with this Section 9.4 will be void.

9.5 Relationship of the Parties. Both parties are acting as independent contractors under this Agreement. The parties do not intend that anything in this Agreement creates an employment, agency, joint-venture, or partnership relationship between the parties or any of their agents or employees, or any other legal arrangement that would impose liability upon one party for the act or failure to act on behalf of the other party. Neither party has authority to enter into any contracts or incur liabilities on behalf of the other party.

9.6 No Nonparty Beneficiaries. No provision of this Agreement grant rights to anyone not a party to this Agreement.

9.7 Compliance with Laws and Standards. In performing under this Agreement, each party shall comply with all Applicable Laws and generally recognized standards for good scientific conduct. Further, BTO agrees to remain in good standing under this Agreement that it shall maintain its certification as a CLIA-certified lab (the "**Certification**").

9.8 Waiver. No waiver of any provision of this Agreement will be effective unless it is in writing and signed by the party granting the waiver. No failure or delay in exercising any right or remedy under this Agreement operates as a waiver of that right or remedy. A waiver granted on one occasion will not operate as a waiver on future occasions.

9.9 Severability. The parties intend as follows:

(i) that if any provision of this Agreement is held to be unenforceable, then that provision will be modified to the minimum extent necessary to make it enforceable, unless that modification is not permitted by law, in which case that provision will be disregarded;

(ii) that if modifying or disregarding the unenforceable provision would result in failure of an essential purpose of this Agreement, the entire agreement will be held unenforceable;

(iii) that if an unenforceable provision is modified or disregarded in accordance with this Section 9.9, then the rest of the Agreement will remain in effect as written; and

(iv) that any unenforceable provision will remain as written in any circumstances other than those in which the provision is held to be unenforceable.

9.10 Counterparts. This Agreement may be executed by signatures delivered by facsimile transmission or delivered electronically in optically scanned form; and/or it may be simultaneously executed by the parties in multiple counterparts, each of which will be considered to be an original instrument, and all of which taken together, where each party has executed at least one counterpart, will constitute one and the same instrument.

9.11 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, United States of America.

9.12 Data Privacy. BTO shall comply with Janssen's Data Safeguards policy as set forth in Exhibit B, as well as Protection of Personal Information as set forth in Exhibit C.

[Signature Page Follows]

The parties have caused this Agreement to be executed by their respective duly authorized officers as of the Effective Date, each copy of which will for all purposes be deemed to be an original.

BillionToOne, Inc.

Janssen Research & Development, LLC

By: /s/ Oguzhan Atay
Name: Oguzhan Atay
Title: CEO

By: /s/ David Lee
Name: David Lee
Title Authorized Signatory

Date:

Date:

Attachment:

- EXHIBIT A: Research Plan
- EXHIBIT B: Data Safeguards
- EXHIBIT C: Protection of Personal Information

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

First Amendment to the Collaboration Agreement

This Amendment (the “**First Amendment**”) to the Collaboration Agreement, dated as of July 14, 2023 (the “**Effective Date**”), is by and between BillionToOne, Inc., having offices at 1035 O’Brien Dr., Menlo Park, California 94025 (“**BTO**”) and Janssen Research & Development, LLC, having offices at 920 Route 202, Raritan, New Jersey 08869 (“**Janssen**”). BTO and Janssen are sometimes referred to herein individually as a “Party” and collectively as the “Parties.”

WHEREAS, the Parties have entered into a Collaboration Agreement dated January 6, 2023 (the “**Agreement**”);

WHEREAS, the Parties have agreed to amend the Agreement by executing this First Amendment; and

NOW, THEREFORE, in consideration of the foregoing premises and the representations and mutual covenants herein contained, and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, BTO and Janssen hereby agree to amend the Agreement as set forth in Sections A through I below:

A. The “Applicable Laws” definition shall be deleted and replaced in its entirety with the following:

“**Applicable Law**” or “**Applicable Laws**” means any and all national federal, state or local or foreign or multinational law, statute, standard, ordinance, code, rule, regulation, resolution, guidance or promulgation, the ICH E6 (R1, R2) guidelines, or any Government Order, or any license, franchise, permit or similar right granted under any of the foregoing, or any similar provision having the force or effect of law, in each case, as in effect at time when, and in the countries where, the Study is being conducted, including, but not limited to cGCP and/or CLIA.

B. The “Regulatory Authority” definition shall be deleted and replaced in its entirety with the following:

“**Regulatory Authority**” means regulatory agencies which regulate the exploitation of Therapeutic Products or IVDs and/or the conduct of clinical studies or research programs, as applicable to this Agreement and the Services being performed including, but not limited to, the Department of Health and Human Services (“DHHS”), the FDA, the European Medicines Agency (EMA), the National Competent Authorities of the EU member states, the U.K. Medicines and Healthcare Products Regulatory Agency (MHRA), Health Canada, the Australian Therapeutic Goods Administration, the Japan Pharmaceuticals and Medical Devices Agency (PMDA), and other comparable government agencies in other countries where the Study is conducted and/or that are involved in the granting of Regulatory Approval for a drug or biologic product including the Therapeutic Products or IVDs.

C. Section 1.5.2 of the Agreement shall be deleted and replaced in its entirety with the following:

1.5.2 Janssen will make all payments to BTO under this Agreement without deduction or withholding for Taxes except to the extent that any such deduction or withholding is required by Applicable Laws in effect at the time of payment. If Janssen determines that any such deduction or withholding will be required under Applicable Laws, it will promptly notify BTO in writing and provide documentation of the deduction or withholding for Taxes that BTO may reasonably request so that BTO may take full advantage of protections against double-taxation as may be available under Applicable Laws, including any treaties with the country whose Applicable Laws are requiring Janssen to deduct and withhold, and to whose taxation authority Janssen is paying the sums deducted and withheld from payments due to BTO. On the date of execution of this Agreement, BTO will deliver to Janssen an accurate and complete Internal Revenue Service Form W-9.

D. Section 4.2 of the Agreement shall be deleted and replaced in its entirety with the following:

4.2 As between the parties only, any deliverable or materials, including clinical samples provided by Janssen referred to in the Research Plan and any other results, reports, data, presentations, documents, prepared by BTO in the performance of Research Plan for Janssen and arising after the Effective Date, and any data use rights, copyrights and trademark rights relating thereto, but for clarity excluding rights in inventions, patent applications and patents relating thereto, shall be the property of Janssen (the “**Janssen Foreground IP**”); provided however, any inventions or improvements made to, and patent, trade secret and other intellectual property related to BTO’s proprietary fetal RBC antigen NIPT assay and laboratory developed test (LDT) associated therewith (the “**BTO Test**”) in the performance of the Research Plan, including without limitation, the contents of the validation study and associated report to be performed and provided by BTO, in all cases arising after the Effective Date, together with any and all trade secret rights, rights in inventions, patent applications, patents and any other intellectual property or proprietary rights relating thereto, shall be the property of BTO (collectively, “**BTO Foreground IP**”). Without limiting the foregoing, in no event will BTO Foreground IP include any trade secret right, rights in any invention, patent applications or patents or any other intellectual property or proprietary right of BTO developed or obtained before the Effective Date or at any time (i.e., before or after the Effective Date) outside of the scope of this Agreement. BTO hereby grants to Janssen a non-exclusive, non-transferable and non-sublicensable (except as otherwise expressly permitted by BTO in writing), fully paid-up license to use the BTO Foreground IP, excluding any invention or improvement to the BTO Test made during performance of the Research Plan or otherwise pursuant to this Agreement, solely for Janssen’s internal purposes to perform its obligations under this Agreement including Janssen’s submission(s) to a Regulatory Authority in respect of the compound Nipocalimab (M281). To the extent that any such BTO Foreground IP is desired for Janssen to commercialize M281 with the BTO Test, Janssen acknowledges and agrees that a further commercial use agreement will need to be negotiated and concluded with BTO. For clarity, BTO has no obligation to grant to Janssen any other rights or licenses under any BTO technology or IP whatsoever, whether or not such technology or IP comprises BTO Foreground IP (as defined above). Without limiting the generality of the foregoing, the parties acknowledge and agree that neither party intends for BTO to grant to Janssen any right or license authorizing or enabling Janssen to perform the BTO Test on its own behalf.

E. Section 6.2 of the Agreement shall be deleted and replaced in its entirety with the following:

- (i) Janssen may terminate this Agreement [***].

F. Section 7.3 shall be added following Section 7.2 of the Agreement:

Section 7.3 Change of Methodology. From time to time, BTO may be required or may choose to change an existing methodology or process due to circumstances beyond its control, such as modifications or the discontinuance of existing equipment or devices. BTO may make such changes provided; however, all such changes must be reported pursuant to Applicable Laws including reporting such changes to CDRH under the IDE and to the EU National Competent Authorities or other Health Authorities. BTO shall not make any change, including implementing changes in technology that (a) adversely affects the function or performance of the Services including the Clinical Trial Laboratory Services being performed hereunder; (b) increases Janssen's costs or fees; (c) adversely impacts any project or Research Plan; or (d) to BTO's knowledge, after conducting a reasonable inquiry, impacts the way in which Janssen conducts its business or operations which impact Janssen considers to be adverse, in each of the foregoing cases (a) through (d) without first obtaining the approval of Janssen, which approval Janssen will consider in good faith and in timely fashion. Notwithstanding the foregoing, BTO may make temporary changes if it is unable to contact Janssen to obtain such approval after making reasonable efforts. BTO shall document and promptly report such temporary changes to Janssen. Any changes herein will require mutual written agreement of both Parties.

G. Section 9.13 shall be added following Section 9.12 of the Agreement:

Section 9.13 Anti-Corruption. Neither party shall perform any actions that are prohibited by local and other anti-corruption laws (collectively "Anti-Corruption Laws") that may be applicable to one or both parties to the Agreement. Without limiting the foregoing, neither party shall make any payments, or offer or transfer anything of value, to any government official or government employee, to any political party official or candidate for political office or to any other third party related to the transaction in a manner that would violate Anti-Corruption Laws.

H. Exhibit A.1 shall be added following Exhibit A of the Agreement.

I. Exhibit C of the Agreement shall be deleted and replaced in its entirety with Exhibit C.

J. Effect of Amendment; Counterparts. Except as expressly modified by this First Amendment, all terms and conditions set forth in the Collaboration Agreement between the parties dated January 6, 2023, shall remain in full force and effect. This First Amendment may be executed by signatures delivered by facsimile transmission or delivered electronically in optically scanned form; and/or it may be simultaneously executed by the parties in multiple counterparts, each of which will be considered to be an original instrument, and all of which taken together, where each party has executed at least one counterpart, will constitute one and the same instrument.

[SIGNATURE PAGE TO FOLLOW]

This First Amendment of the Agreement is signed on the dates set forth below by duly authorized representatives of BTO and Janssen, respectively.

BillionToOne, Inc.

Janssen Research & Development, LLC

By: /s/ Oguzhan Atay

By: /s/ William Hait

Name: Oguzhan Atay

Name: William Hait

Title: Chief Executive Officer

Title: Authorized Signatory

Date: July 14, 2023

Date: July 14, 2023

Attachment:

EXHIBIT A.1: Research Plan for EU IVDR & ROW Regulatory Activities

EXHIBIT C: Protection of Personal Information

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDMENT #2 TO COLLABORATION AGREEMENT FOR HUMAN LABORATORY SERVICES

This Amendment #2 (hereinafter “**Amendment**”) is signed as of the signature date(s) below and made effective as of the date of last signature below (the “**Amendment Effective Date**”), and entered into by and between Janssen Research & Development, LLC having a business address at 920 Route 202, Raritan, New Jersey 08869, (hereinafter referred to as “**Company**” or “**Janssen**”) and BillionToOne, Inc. having a business address at 1035 O’Brien Dr., Menlo Park, California 94025, (hereinafter referred to as “**Provider**” or “**BTO**”), which may be hereinafter referred to collectively as the “**Parties**” and individually as the or a “**Party**”. This Amendment amends the Collaboration Agreement with an Effective Date of January 6, 2023, by and between Company and Provider, as previously amended (the “**Collaboration Agreement**”). All terms not otherwise defined herein shall have the meanings ascribed to such terms in the Collaboration Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth below, the Parties, intending to be legally bound, hereby agree as follows:

1. The following Section 9.14 is hereby inserted into the Collaboration Agreement as follows:
Human Laboratory Services. The Parties shall comply with the Human Laboratory Services Agreement as set forth in Exhibit D.
2. The attached Exhibit D, Human Laboratory Services Agreement, is hereby inserted into the Collaboration Agreement and incorporated therein.
3. Section 2.3 in Exhibit A of the Collaboration Agreement shall be deleted and replaced in its entirety with the following: Clinical trial testing activities are outlined in Exhibit D, Human Laboratory Services Agreement, including Exhibit D.1, Scope of Work for Laboratory Services, appended thereto.
4. Except as specifically amended hereby, all terms of the Collaboration Agreement remain in full force and effect. In the event of any conflict between the Collaboration Agreement and this Amendment, the provisions of this Amendment shall prevail for Clinical Trial Laboratory Services as defined in Exhibit D, Human Laboratory Services Agreement.
5. Counterparts. This Amendment may be executed in counterparts where execution in two or more counterparts is valid and enforceable, and each such counterpart shall be an original and all such counterparts together shall constitute the entire Amendment. Electronically executed and electronically transmitted signatures shall have the full force and effect of an original signature. Facsimile signatures and photocopied signatures transmitted by email shall be deemed to be originals for all purposes under this Amendment where facsimile and photocopied signatures are valid and enforceable. This Amendment and any subsequent amendments to this Human Laboratory Services Agreement may be signed electronically as long as (a) electronic signatures are valid and effective in the jurisdiction in which such instrument is signed, and (b) electronic signatures are permitted by Company’s policies as in effect from time to time and authenticated in accordance with such policies.

IN WITNESS WHEREOF, the Parties have executed this Amendment by their duly authorized officers or representatives.

Janssen Research & Development, LLC

By: /s/ Carolyn Cuff

Name: Carolyn Cuff

Title: Vice President

Date: August 11, 2023

BillionToOne, Inc.

By: /s/ Shan Sakakibara

Name: Shan Sakakibara

Title: Chief Product Officer

Date: Aug 11, 2023

HUMAN LABORATORY SERVICES AGREEMENT

WHEREAS, Company wishes to obtain from Provider pursuant to the terms of this Exhibit D, Human Laboratory Services Agreement, and the Collaboration Agreement, certain clinical laboratory services, which may include, human tissue testing and analysis, as further identified in Exhibit D.1 to this Exhibit D;

WHEREAS, Provider has the knowledge, capacity and means required to perform such services, has qualified personnel to perform such services and wishes to provide such services, pursuant to the terms of this Exhibit D, Human Laboratory Services Agreement, and the Collaboration Agreement, certain clinical laboratory services;

NOW THEREFORE, in consideration of the mutual covenants and agreements set forth below, the Parties, intending to be legally bound, hereby agree as follows:

1. Definitions

- 1.1 “**Affiliate**” of a Party means any entity that directly or indirectly controls, is controlled by or is under common control with such Party. Control, controls or controlled with respect to an entity shall mean the possession of at least 50% of the voting stock or other ownership interest of such entity, or the power to direct or cause the direction of the management and policies of such entity or the power to elect or appoint at least 50% of the members of the governing body of such entity through the ownership of the outstanding voting securities or by contract or otherwise.
- 1.2 “**Applicable Law**” or “**Applicable Laws**” means any and all national, federal, state or local or foreign or multinational law, statute, standard, ordinance, code, rule, regulation, resolution, guidance or promulgation, the ICH guidelines, or any Government Order, or any license, franchise, permit or similar right granted under any of the foregoing, or any similar provision having the force or effect of law, in each case, as in effect at a given time when, and in the countries where, the Study is being conducted and following the Study to comply with the obligations in this Human Laboratory Services Agreement that survive the termination or expiration, including, but not limited to cGCP and/or CLIA.
- 1.3 “**CAP**” means accreditation issued by the College of American Pathologists.
- 1.4 “**cGCP**” means good clinical practice as defined by the quality standards detailed by the ICH E6 guidelines or FDA, and other Applicable Laws intended to ensure the integrity of clinical data on which product approvals are based and to help protect the rights, safety, and welfare of human subjects.
- 1.5 “**CLIA**” means the Clinical Laboratory Improvement Amendments of 1988, as may be amended, replaced or supplemented from time-to-time.
- 1.6 “**Clinical Trial Laboratory Services**” means the biomedical laboratory testing services in support of a Study, including human tissue testing and analysis of clinical trial samples (as further identified in Exhibit D.1 to this Human Laboratory Services Agreement), and related services provided or to be provided by Provider under this Human Laboratory Services Agreement, as detailed in the Scope of Work.

- 1.7 “**Company Confidential Information**” means the Confidential Information (as defined in the Collaboration Agreement) provided to Provider and/or Provider Party by Company or supplied on its behalf, or otherwise acquired by Provider and/or Provider Parties, in connection with this Human Laboratory Services Agreement but in all cases subject to Section 7 (Confidentiality) and/or Section 8 (Intellectual Property) of this Human Laboratory Services Agreement. For the avoidance of doubt, Company Confidential Information includes Company Materials and Deliverables subject to Section 7 (Confidentiality) and/or Section 8 (Intellectual Property) of this Human Laboratory Services Agreement.
- 1.8 “**Company Material(s)**” means Samples, physical embodiments of any and all specimens, including, without limitation, all human biological samples and materials provided in connection with a Study, other biological or chemical samples and materials, including Products and other substances, reagents and kits required or useful to perform the Clinical Trial Laboratory Services and either (i) delivered to Provider by or on behalf of Company or (ii) created, developed, designed and/or used in the course of performing the Clinical Trial Laboratory Services, including those specified in the Scope of Work, as well as alternative forms or derivatives thereof.
- 1.9 “**Company’s Records and Information**” has the meaning set forth in Section 11.1.
- 1.10 “**Corrective and Preventive Actions**” or “**CAPA**” shall mean action(s) taken to resolve a deviation or observation and eliminate the cause of a deviation or observation related to the Clinical Trial Laboratory Services.
- 1.11 “**Deliverables**” means all deliverables created by Provider and/or Provider Party in connection with the performance of Clinical Trial Laboratory Services, including, without limitation, all data, documentation, records, Company Records and Information, reports, presentations, and results, and all derivatives of any of the foregoing or Company Confidential Information generated by or on behalf of Provider or a Provider Party or supplied or delivered to Company by or on behalf of Provider and/or any Provider Party under this Human Laboratory Services Agreement, but in all cases, subject to Section 7 (Confidentiality) and Section 8 (Intellectual Property) of this Human Laboratory Services Agreement.
- 1.12 “**Equipment**” means any technical hardware and machinery (including laboratory instruments and other laboratory equipment and computer hardware), as well as commercial reagents and consumables.
- 1.13 “**Facility**” or “**Facilities**” means the facilities of Provider used for the Clinical Trial Laboratory Services. The approved facility and/or facilities for Clinical Trial Laboratory Services will be set forth on the Scope of Work.
- 1.14 “**FDA**” means the United States Food and Drug Administration, or any successor agency thereto.

- 1.15 “**FD&C Act**” means the United States Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §321 et seq., the Public Health Act, each as amended, and the regulations promulgated thereunder.
- 1.16 “**Functional**” has the meaning set forth in Section 20.6.
- 1.17 “**Government Order**” means any order, writ, judgment, injunction, decree, stipulation, ruling, determination or award entered by or with any governmental authority or Regulatory Authority.
- 1.18 “**HIPAA**” means the Health Insurance Portability and Accountability Act of 1996.
- 1.19 “**Human Laboratory Services Agreement**” means this Human Laboratory Services Agreement, Exhibit D, as it may be amended from time to time in accordance with its terms, and the Exhibits and attachments hereto, including, without limitation, the Scope of Work, all of which are an integral part of this agreement and are deemed incorporated by reference herein.
- 1.20 “**ICH**” means the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use, which includes quality, safety, efficacy, and multidisciplinary joint safety/efficacy guidelines, with the particular guidelines applicable to the Clinical Trial Laboratory Services being E6.
- 1.21 “**JJNET**” has the meaning set forth in Section 11.4.
- 1.22 “**Operational Manual**” has the meaning set forth in Section 3.10.
- 1.23 “**Operational Plans**” shall mean, collectively, the documents, whether paper or electronic, that supplement this Human Laboratory Services Agreement by defining in greater detail the applicable operating procedures, work practices, guidelines, policies, system requirements, safety requirements and security requirements and the Party that is responsible for following or complying with a particular procedure, guideline, work instruction, project plan, workflow or specification to complete or deliver, or facilitate the completion or delivery of, the Clinical Trial Laboratory Services or Deliverables under this Human Laboratory Services Agreement, which have been reduced to a writing and approved by each Party, if any. The Operational Plans may include, without limitation, the Operational Manual described in Section 3.10 and Trial Specific Documents described in Section 2.2.
- 1.24 “**Party**” or “**Parties**” means one or more legal entities subject to this Human Laboratory Services Agreement.
- 1.25 “**Personal Information**” means data that identifies, can be used to identify, relates to, or is capable of being associated with, or could reasonably be linked, directly or indirectly, with an individual or household, as defined by Applicable Law.
- 1.26 “**Product**” or “**Products**” means any product, drug, drug delivery technology, compound, medical device, delivery system, diagnostic product, biologic product, or combination product which is the subject of and is being tested in a clinical study or research program for which Provider is performing Clinical Trial Laboratory Services under this Human Laboratory Services Agreement.

- 1.27 “**Protocol**” or “**Protocols**” means a formal document detailing the conduct of a Study and describing the objective(s), design, methodology, statistical considerations and organization of the Study.
- 1.28 “**Provider Personnel**” shall mean all Provider personnel providing Clinical Trial Laboratory Services under this Human Laboratory Services Agreement, including Provider’s employees, agents and other personnel and the personnel of subcontractors including Affiliates of Provider that are subcontractors, under this Human Laboratory Services Agreement.
- 1.29 “**Provider Party**” or “**Provider Parties**” means all Provider Personnel, and all Affiliates of Provider that are permitted subcontractors under this Human Laboratory Services Agreement, and all other approved third party subcontractors of Provider providing Clinical Trial Laboratory Services under this Human Laboratory Services Agreement, and all employees and agents of such approved third party subcontractors.
- 1.30 “**QA**” has the meaning set forth in Section 3.4.1.
- 1.31 “**Regulatory Approval**” means the technical, medical and scientific licenses, registrations, authorizations and approvals of any national, supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, necessary for the use, import and export of Products in a regulatory jurisdiction.
- 1.32 “**Regulatory Authority**” means regulatory agencies which regulate the conduct of clinical studies or research programs, as applicable to the Services including, but not limited to, the Department of Health and Human Services (“**DHHS**”), the FDA, the European Medicines Agency (EMA), the National Competent Authorities of the EU member states, the U.K. Medicines and Healthcare Products Regulatory Agency (MHRA), Health Canada, the Australian Therapeutic Goods Administration, the Japan Pharmaceuticals and Medical Devices Agency (PMDA), and other comparable government agencies throughout the world, including regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity in other countries where the Study is conducted and is involved in the granting of Regulatory Approval for a drug or biologic product in such Study countries.
- 1.33 “**RIM Requirements**” has the meaning set forth in Section 11.
- 1.34 “**Root Cause**” shall mean the source or reason for an actual or potential nonconformity, defect or undesirable situation, or the situation which, if eliminated, would prevent recurrence of the nonconformity, defect or undesirable.
- 1.35 “**Samples**” means any and all samples, and, where relevant, associated preclinical and clinical data and other data, identified in the Scope of Work.
- 1.36 “**Scheduled Downtime**” has the meaning set forth in Section 10.3.
- 1.37 “**Scope of Work**” means Exhibit D.1, which details the Clinical Trial Laboratory Services to be provided as described more fully in Section 2.1 below.

- 1.38 “**Study**” means a clinical trial or trials of a Product in human patients and for which Provider is performing Clinical Trial Laboratory Services in accordance with this Human Laboratory Services Agreement.
- 1.39 “**Technology**” means any technology, processes, methodology and related know-how and information transferred by or on behalf of Company and/or its Affiliates to Provider for use in the performance of the Clinical Trial Laboratory Services.
- 1.40 “**Term**” has the meaning set forth in Section 5.
- 1.41 “**Third Party**” or “**Third Parties**” means any person other than a Party or any of its Affiliates.
- 1.42 “**Third Party Request**” has the meaning set forth in Section 11.3.
- 1.43 “**Trial Specific Documents**” has the meaning set forth in Section 2.2.

2. Performance of Services

- 2.1 **Performance of Services; Provider Personnel.** Provider shall perform, and shall cause all Provider Parties to perform, all Clinical Trial Laboratory Services, including, but not limited to, delivering any Deliverables, in compliance with the terms and conditions of this Human Laboratory Services Agreement, the Scope of Work, all Applicable Laws, Protocols, Operational Plans, and all written instructions of Company consistent with the scope of this Human Laboratory Services Agreement.
- 2.2 **Data Management:** If required by the Company, Provider and Company will enter into discussions to prepare and finalize separate Study specific documents, such as a data transfer agreement (or data specifications) (DTA), etc. (“**Trial Specific Documents**”) detailing among other things, the format, content, frequency and method of data transfer, with Company and Provider each having the final approval rights; however, Provider is required to deliver data in a compatible format (such as SAS, ASCII, CSV file formats). Provider and Company shall cooperate with each other in the preparation of such Trial Specific Documents and achieving mutual agreement and sign-off prior to initial data transmission. Each such Trial Specific Document shall be deemed an Operational Plan under this Human Laboratory Services Agreement and accordingly subject to the requirements upon Operational Plans hereunder.
- 2.3 **Company Materials.**
If required under the Scope of Work, Company will provide to Provider and/or Provider Party directly, or through an Affiliate, or a Third Party working on behalf of or performing services for Company, the Company Materials required to perform the Clinical Trial Laboratory Services. In addition, Company may provide Technology to be used in connection with the Clinical Trial Laboratory Services. Provider acknowledges that nothing contained in this Human Laboratory Services Agreement grants Provider and/or any Provider Party any right to or any license under any intellectual property rights, including without limitation, any patent rights or know-how relating to the Company Materials (including their preparation or use) or

the Technology owned, licensed or otherwise controlled by Company or its Affiliates, except solely for purposes of performing the Clinical Trial Laboratory Services or as otherwise provided under this Human Laboratory Services Agreement.

Provider shall verify the integrity of the Company Materials upon receipt according to procedures set forth in the Scope of Work. Provider shall not, and shall ensure that Provider Parties do not, modify or produce any modified or unmodified derivatives of the Company Material, and will not attempt to analyze the Company Material for its chemical or physical composition except as expressly provided for in the Scope of Work or with Company's prior written consent.

Provider agrees to maintain control over all Company Materials and Technology that are received or produced hereunder, and acknowledges that Company Materials and Technology may not be transferred, distributed or released to any person or entity other than Company or an entity designated in writing by Company.

Provider shall ensure compliance with the required storage and handling conditions for the Company Materials. The Company Materials will be stored by Provider and/or Provider Parties in accordance with its standard operating procedures (SOPs) at such temperatures and conditions as specified in the Scope of Work or as instructed by Company in writing with appropriate temperature and environmental monitoring and recording.

All Company Materials and Technology, (a) will be used only in furtherance of the Clinical Trial Laboratory Services in accordance with this Human Laboratory Services Agreement and the health and safety procedures applicable to such Company Materials, (b) will not be used or delivered to or for the benefit of any Third Party without the prior written consent of Company and (c) will be used in compliance with all Applicable Laws.

Provider will ensure that Company Materials are segregated and identified as Company Materials.

The Company Materials and Technology will remain the sole property of Company and all right, title and interest in and to Company Materials and Technology will remain with Company at all times.

- 2.4 **Specifications and Protocols.** If required under the Scope of Work, Company will be responsible for providing all specifications, Protocols, and standards to Provider, as required to enable Provider to perform the Clinical Trial Laboratory Services. Provider shall review all such specifications, Protocols, and standards as provided by Company and ensure all are thoroughly understood by all Provider Parties.

3. Quality Assurance

3.1 Intentionally Omitted.

- 3.2 **Facility.** Provider shall and cause each Provider Party to ensure all Clinical Trial Laboratory Services are performed only at Facilities specified in the Scope of Work and in accordance with the terms of this Human Laboratory Services Agreement, and in full compliance with Applicable Law, and the specifications. Provider will not change the location of a Facility or use any additional facility for the performance of Clinical Trial

Laboratory Services without Company's prior written approval. If there is a change in location of a Facility or use of any additional facility that is not approved for such by Company in writing, Provider will continue to perform Clinical Trial Laboratory Services at the existing Facility until the new facility is fully qualified for such purpose. Provider and Provider Parties shall maintain the Facility and all Equipment required for the Clinical Trial Laboratory Services in a state of repair and operating efficiency consistent with the requirements of Applicable Law and the applicable Regulatory Approvals and specifications. All maintenance activities will be performed at Provider's sole cost.

3.3

Audits, Inspections and Regulatory Matters.

- 3.3.1 **Recordkeeping.** Provider agrees to keep true and complete written records of the Clinical Trial Laboratory Services performed hereunder in accordance with cGCP. Provider shall maintain all data collected in its original form during the performance of the Services in a format immediately retrievable at all times for at least [***] after the completion of the Clinical Trial Laboratory Services (or such longer period as is required by Applicable Laws or this Human Laboratory Services Agreement). Provider agrees to maintain and manage its written and electronic records of the Clinical Trial Laboratory Services in compliance with all applicable legal and regulatory requirements, including, but not limited to, all applicable requirements of the FDA and other Regulatory Authorities, HIPAA and equivalent international requirements in the countries outside of the United States where the Study is conducted, including the ICH E6 guidelines, the requirements of the European Medicines Agency (EMA), and the European Union General Data Protection Regulation (GDPR). Unless otherwise directed by Company or its designee, Provider shall and shall ensure Provider Parties retain all data and records so that such data and records are protected, segregated from the records of Provider's other clients, and available for inspection by Company or its designee (including any Regulatory Authority) during the term of this Human Laboratory Services Agreement and for a period of [***] following the termination of this Human Laboratory Services Agreement until Provider transfers such data and records to Company or its designee. In the event that Provider wishes for any reason to withdraw from its responsibility for maintaining the records as provided above, Provider shall notify Company and follow its instructions for the transfer of the records to Company or its designee which instructions will be given to Provider within [***] business days after Provider's notice to Company. Following Provider's transfer of the records to Company or its designee, Provider and/or Provider Parties will assist the Company and its designee with questions relating to the completeness and organization of the records so transferred, including in connection with any Regulatory Authority inspection or audit relating to such records. If Company fails to instruct Provider of its wishes within the above-stated [***] business days following Provider's notice, then Company will be deemed to have authorized Provider to transfer the records to a Third Party storage facility and to have agreed to be solely responsible for all costs and expenses associated with such storage arrangement.
- 3.3.2 **Third Party Storage.** If Provider stores any of Company's data or records at a Third Party storage facility, Provider will furnish Company with the name and address of the facility, a description of the materials stored there (including both the type and the quantity of materials) and the applicable box numbers, bar codes and other identifying information. In addition, Provider will use commercially

reasonable efforts to cause the Third Party that operates the storage facility to agree in writing that Company is a beneficiary of the Third Party's obligations to Provider and that Company has the right at any time, upon doing nothing but paying accrued storage charges for its materials, to obtain its materials from the storage facility without the consent of Provider and free of any lien by the Third Party.

- 3.3.3 **Audit by Company.** During the Term of this Human Laboratory Services Agreement and for a period of [***] thereafter, Provider will ensure that representatives of Company have reasonable access to Provider's and Provider Parties' premises, during regular business hours, for the purpose of examining the records of Clinical Trial Laboratory Services performed or systems audit on any of the software systems and procedures being used by Provider or Provider Parties in performing the Clinical Trial Laboratory Services, and/or reviewing resulting data and records to determine that the Clinical Trial Laboratory Services are being conducted in accordance with this Human Laboratory Services Agreement and that the Provider's and each Provider Parties' Facilities meet the relevant cGCP requirements. Routine audits and inspections will be scheduled at least [***] days in advance at a date and time mutually agreed to by Company and Provider. Routine audits and inspections shall occur no more than [***] and be conducted during Provider's regular business hours and last no longer than [***] business days. Audits that are "for cause" will be scheduled at least [***] business days in advance upon mutual agreement of Company and Provider. If any audit or inspection results in findings that require follow-up or action, Provider and Provider Parties agrees to dedicate appropriate resources to pursuing and completing the follow-up or action within a commercially reasonable timeframe. To the extent that any follow-up or actions are not the result of findings for cause or to address Provider's failure to comply with the terms of this Human Laboratory Services Agreement, Company and Provider shall amend this Human Laboratory Services Agreement to reflect a mutually agreed reasonable fee for the additional efforts.

3.4 **Quality Assurance and Regulatory Matters.**

- 3.4.1 **Quality Audit.** Company's Quality Assurance Departments ("QA"), or a Third Party quality assurance contractor designated by the Company's QA, may conduct QA audits involving the performance of the Clinical Trial Laboratory Services (including processes and systems used in such performance) as part of this Human Laboratory Services Agreement, in accordance with applicable policies and procedures of Company and Provider during regular business hours and will be scheduled at least [***] days in advance at a date and time mutually agreed to by Company and Provider. QA audits shall occur no more than [***] and be conducted during Provider's regular business hours and last no longer than [***] business days. Both Parties shall take all reasonable steps in advance of such QA audit to ensure documents to be audited are available during such QA audit. Any audit report and associated findings involving Provider or Provider Party shall be the Confidential Information of Provider and must not be shared with any third party without the prior written consent of Provider. Company is allowed to share such audit report with any of its Affiliates who are contractually or otherwise legally bound by confidentiality obligations owed to Provider that are no less protective than the confidentiality provisions under Section 7 (Confidentiality) of this Human Laboratory Services Agreement.

If any audit or inspection results in findings that require follow-up or action, Provider and Provider Parties agree to dedicate appropriate resources to pursuing and completing the follow-up or action within a commercially reasonable timeframe. Following completion of the QA audit, the full audit report will be forwarded to Provider by Company's contact responsible for the performance of the Clinical Trial Laboratory Services. After Provider's receipt of the audit report, if the audit report identifies a material quality issue, the Parties will conduct, in accordance with the Operational Plans, a Root Cause investigation of the issues for which Provider is responsible and Provider will provide, within a timeframe mutually agreed by the Parties in writing, a CAPA plan on issues for which Provider is responsible. Provider will implement the CAPA plan and resolve any issues identified by the agreed upon date. If Provider cannot meet the agreed upon date of the CAPA plan, then Provider shall, on or prior to the agreed upon date, advise Company in writing as to the reason Provider needs additional time and request a revised target date, and such revised target date may be accepted or rejected by Company in its sole discretion.

Once the audit is closed by the Company's QA, Provider may retain one copy of the audit report which shall be subject to the confidentiality provisions of the Collaboration Agreement.

3.4.2 **Provider's Audit Obligations.** Company shall (a) promptly, but in any event within [***], notify Provider upon learning of any governmental agency (including a Regulatory Authority) inspection, audit or investigation of Company and/or any Third Party associated with the Clinical Trial Laboratory Services or the Deliverables, whether such inspection, audit or investigation is scheduled or unscheduled; and (b) immediately provide Provider with copies of any correspondence from or to any such governmental agency (including a Regulatory Authority) related to the Clinical Trial Laboratory Services, or the Deliverables. Company or Company's authorized representative, who may be accompanied by one or more representatives of any governmental agency which regulates Company may, during normal business hours during the Term of this Human Laboratory Services Agreement and for a period of [***] following any termination or expiration of this Human Laboratory Services Agreement, inspect and audit the books and records of Provider and/or Provider Parties with respect to the Clinical Trial Laboratory Services performed for the purpose of evaluating compliance with the Human Laboratory Services Agreement and any Applicable Laws.. Provider shall retain all applicable books and records for [***] subsequent to the expiration or termination of this Human Laboratory Services Agreement, or such longer period as required by Company's records and retention schedule in Section 11 or as is required Applicable Law. If any audit results in findings that require follow-up or action, Provider agrees to dedicate appropriate resources to pursuing and completing the follow-up or action within a commercially reasonable timeframe. If any governmental authority audit or inspection identifies any deficiencies, Provider and/or Provider Party shall remedy such deficiencies within the period mandated by the applicable governmental authority or, if no such period is mandated, within [***] business days; provided, however, that if any such deficiencies cannot reasonably be remedied within such period, Provider and/or Provider Party shall prepare and present a written plan to remedy such deficiencies as soon as possible (including but not limited to, a timeline for resolving such deficiencies) as soon as possible; and the failure by Provider and/or Provider Party to prepare and present such a plan or to remedy such deficiencies with such period, as the case may be, shall be deemed a material breach of this Human Laboratory Services Agreement.

- 3.5 **Remote Access.** In connection with an audit under Sections 3.3 or 3.4 of this Human Laboratory Services Agreement, Provider agrees, and shall ensure each Provider Party agrees, to authorize remote audit and remote access to any and all Provider and/or Provider Party's documents, records, electronic IT and database systems, and including but not limited to tools, specifically related to the performance of the Human Laboratory Services Agreement, as mutually agreed to by Provider and the Company. In addition, the Parties will ensure use of secure electronic exchange methods as mutually determined by Provider and the Company, for the purpose of verifying compliance with the terms and conditions of this Human Laboratory Services Agreement. Parties will ensure that (a) remote access is restricted to identified and authorized employees only; (b) remote access is used solely for verifying compliance with the terms and conditions of this Human Laboratory Services Agreement; (c) remote access will be restricted to access that is directly related to the performance of obligations under the terms and conditions of this Human Laboratory Services Agreement; (d) remote access to documentation will be provided only of the terms and conditions of this Human Laboratory Services Agreement during the timeframe and in a manner mutually determined by Provider and the Company, which may include, without limitation, secure electronic transmission, as further mutually determined by Provider and the Company and finalized by the Parties, and (e) remote access shall comply with all Applicable Laws and policies.
- 3.6 **Provider Audit.** Should Provider, Provider Parties or any Third Party conduct any audit or inspection of its own Facilities and/or those of any Third Party, Provider and/or Provider Parties shall promptly notify Company of any critical findings relating directly to the Clinical Trial Laboratory Services and shall provide copies of the audit reports as they relate to the Clinical Trial Laboratory Services, and summaries of such reports, provided, however, that except for a governmental authority and CAP, no Third Party may conduct any audit or inspection of any materials or data owned by Company or generated as result of the Clinical Trial Laboratory Services under this agreement without Company's prior written consent. The audit reports and summaries delivered to Company under this section will be in English or translated into English. Provider will give Company the opportunity to comment on any CAPA plan prepared by Provider on major or critical issues identified in any Provider-conducted audit or inspection relating to the Clinical Trial Laboratory Services and will promptly deliver to Company the final version of such CAPA plan.
- 3.7 **Notification of Regulatory Inspection.** Provider and Provider Parties shall (a) promptly, but in any event within [***], notify Company upon learning of any Regulatory Authority inspection, audit or investigation of Provider and/or any Third Party associated with the Product, Provider's laboratory-developed test, the Clinical Trial Laboratory Services or the Deliverables whether such inspection, audit or investigation is scheduled or unscheduled; and (b) immediately provide Company with copies of any correspondence from or to any Regulatory Authority related to the Product, the Clinical Trial Laboratory Services, or the Deliverables including, but not limited to, any warning letters, as well as the results, including an audit or inspection report, of any Regulatory Authority inspection, audit or investigation. Provider and Company will mutually agree which party will control the response to any Regulatory Authority inspection, audit or investigation relating to the Product, the Clinical Trial Laboratory Services or the Deliverables. To the extent not

prohibited by law or by the applicable Regulatory Authority, Company will be given the opportunity to have one or more representatives of Company and/or one or more representatives of Company's Third Party vendor(s) who provide Clinical Trial Laboratory Services relating to the Scope of Work present during any Regulatory Authority inspection of Provider or any Provider Parties specifically relating to any Clinical Trial Laboratory Services. The documents delivered to Company under this section will be in English or translated into English.

- 3.8 **Regulatory Inspection; Regulatory Communications.** Provider agrees that, during any inspection, audit or investigation by the FDA or any other Regulatory Authority concerning the Clinical Trial Laboratory Services, Provider and Provider Parties will not disclose Company Confidential Information and Company Materials that are not required by Applicable Law to be disclosed to such Regulatory Authority, in Provider's discretion. Unless prohibited by Applicable Law or by the Regulatory Authority having jurisdiction, Provider shall cooperate with Company in the preparation of any communications related to the Clinical Trial Laboratory Services in this Human Laboratory Services Agreement with Regulatory Authorities and any follow-up thereto.
- 3.9 **Regulatory Obligations.** Company will not require Provider or Provider Parties to perform any assignments or tasks in a manner that would violate any Applicable Laws. In addition, each Party acknowledges that, other than as provided above in Section 3.7 (Notification of Regulatory Inspection) and Section 3.8 (Regulatory Inspection; Regulatory Communications), it may not direct the manner in which the other Party complies with government or regulatory inspections. Provider represents that, to the extent it does not conflict, contradict, or otherwise interfere with Provider's independent duty to comply with Regulatory Authorities' requirements or regulations, it will consider any actions that Company reasonably believes are necessary for Provider and/or Provider Parties to comply with the regulatory obligations.
- 3.10 **Operational Manual.** The operational manual ("Operational Manual") will be developed and agreed upon by Provider and Company and may not be modified without written consent of both Provider and Company. To the extent of any conflict or inconsistency between the Operational Manual and any term of this Agreement, the terms of the Operational Manual will govern with respect to the specific technical subject matter addressed by the Operational Manual and this Agreement shall govern with respect to all other matters.
4. **Price and Payment.** The Collaboration Agreement, Section 1.4 shall apply to this Human Laboratory Services Agreement including the Scope of Work and the performance of the Clinical Trial Laboratory Services. Provider shall not incur, and Company shall not be responsible for paying, any amounts associated with travel or expenses except as approved by Company in advance in writing.
5. **Term.** The term of this Human Laboratory Services Agreement will be as set forth in section 6.1 of the Collaboration Agreement unless sooner terminated in accordance with the terms of this Human Laboratory Services Agreement (collectively, the "Term").
6. **Termination**
- 6.1 **Termination Rights.** In addition to the termination rights provided for in the Collaboration Agreement the following provisions apply to this Human Laboratory Services Agreement.

- 6.1.1 **Notification of Breach.** If Provider and/or Provider Party materially breaches any term of this Human Laboratory Services Agreement, Provider shall immediately notify Company upon discovering such material breach.
- 6.1.2 **Termination for Breach.** If either Party (in case of Provider, including any Provider Party) is in default of any of its material obligations under this Human Laboratory Services Agreement, the non-breaching Party may terminate this Human Laboratory Services Agreement after providing [***] days' written notice to the breaching Party of its intent to terminate, stating the grounds therefor, unless the breaching Party is able to satisfactorily cure such default within such [***] day period or such longer period as agreed in writing by the Parties; provided however, that such [***] day cure period shall not apply, and the non-breaching Party may terminate with immediate effect, (i) upon failure of the breaching Party to comply with Applicable Laws, (ii) upon breach of its intellectual property or confidentiality obligations herein by the breaching Party or (iii) if a cure for the breach is not possible. Notwithstanding any termination of this Human Laboratory Services Agreement as a result of a breach, the terminating Party shall be entitled, in accordance with Applicable Law and this Human Laboratory Services Agreement, to exercise any other remedies available to it at law or in equity.
- 6.1.3 Either Party shall have the right to terminate this Human Laboratory Services Agreement as set forth in Section 9.3 (Notice).
- 6.2 **Rights and Obligations upon Termination.** In addition to the termination rights and obligations provided for in the Collaboration Agreement, including in Section 6.4 and 6.5,
- 6.2.1 Upon termination of this Human Laboratory Services Agreement, Provider will conduct an orderly wind-down of the affected Clinical Trial Laboratory Services and will return or destroy, at Company's reasonable instructions, all affected Products, all Deliverables, including any work-in-progress and all full and partial copies thereof, and any Company Materials or Equipment belonging to Company at Company's cost and expense. In addition, Provider shall, and ensure that each Provider Party shall, deliver to Company all information supplied by Company, including, but not limited to Technology, and all results, documentation, materials and Deliverables acquired or generated as a result of the applicable Clinical Trial Laboratory Services.
- 6.2.2 Upon termination of this Human Laboratory Services Agreement, Provider shall submit a final reconciliation to Company in accordance with the pricing set forth in the Collaboration Agreement for all work done by Provider in accordance with this Human Laboratory Services Agreement prior to termination.
- 6.2.3 Upon receipt of a notice of termination as provided herein, both Parties shall cooperate with each other and use all commercially reasonable efforts to affect a smooth transition. Upon delivery a notice of termination by either Party, Provider shall use all reasonable efforts to avoid incurring additional costs and expenses.

- 6.3 **Payment upon Termination.** Upon any termination (other than a termination by Company due to Provider's material breach), Company shall pay Provider the fees for Clinical Trial Laboratory Services provided in accordance with this Human Laboratory Services Agreement and shall reimburse Provider in accordance with this Human Laboratory Services Agreement [***]. In no event shall Company be responsible for any amounts in the aggregate greater than (i) the total that would have been due under as set forth in the Scope of Work or (ii) the value of the work done by Provider in accordance with this Human Laboratory Services Agreement prior to termination, whichever is less. Any overpayment by Company shall be promptly refunded by Provider. [***].
7. **Confidentiality & Publication.** The confidentiality provisions of the Collaboration Agreement, including section 5, "**Confidentiality**" shall apply to this Human Laboratory Services Agreement including the Scope of Work and the performance of the Clinical Trial Laboratory Services. Provider shall have the right to publish aggregated data and results that compare concordance between pre-birth testing and post-birth testing; provided, however, that Provider shall provide Company the opportunity to review any proposed publication or other proposed disclosure describing said concordance data and results [***] days prior to submission for publication or other proposed disclosure; and provided, further, that at least [***] months have elapsed since the Company completed the Study. Company shall have the right to approve any portion of the publication that includes information on Nipocalimab or the Study. If Company believes patentable subject matter is disclosed in Provider's proposed publication or other disclosure and so notifies Provider, the proposed publication will be withheld for a reasonable period of time not to exceed [***] days to permit Company to prepare and file the relevant patent applications. If Company notifies Provider that Company Confidential Information is disclosed in the proposed publication or other disclosure, Provider shall remove such Company Confidential Information prior proceeding with publication or other disclosure.
8. **Intellectual Property Rights.** The intellectual property provisions of the Collaboration Agreement, including section 4, "**Intellectual Property**" shall apply to this Human Laboratory Services Agreement including the Scope of Work and the performance of the Clinical Trial Laboratory Services. Notwithstanding any provision in this Human Laboratory Services Agreement to the contrary, the term "**Scope of Work**" will be interpreted as the equivalent of the term "**Research Plan**" as that term is defined and used in the Collaboration Agreement, and accordingly, the provisions of the Collaboration Agreement that apply to the Research Plan and Exhibit A to the Collaboration Agreement shall be deemed to also apply to the Scope of Work and Exhibit D.1 and the Clinical Trial Laboratory Services performed pursuant to this Human Laboratory Services Agreement, mutatis mutandis. In the event of any conflict or inconsistency between the provisions of the Collaboration Agreement and the provisions in this Human Laboratory Services Agreement, the provisions of the Collaboration Agreement shall control and govern with respect to Intellectual Property Rights and the Human Laboratory Services Agreement shall control and govern performance of the Clinical Trial Laboratory Services.
9. **Compliance with Applicable Law**
- 9.1 **Healthcare Compliance.** Janssen Research & Development LLC ("JRD") and Provider hereby each represents and warrants to the other, and hereby each covenants with the other that, its respective obligations under this Human Laboratory Services Agreement, including the Clinical Trial Laboratory Services will be performed in compliance with all Applicable Laws, including without limitation, the FD&C Act, as amended, and applicable regulations, the Medicare/Medicaid Anti-kickback Statute, Health Insurance Portability and Accountability Act of 1996 (HIPAA), the False Claims Act, applicable state fraud and abuse laws, the AMA Guidelines on Gifts to Physicians from Industry, the Economic Espionage Act of 1996 and applicable laws and government regulations relating to services and the privacy, professional confidentiality and security thereof.

- 9.2 **Disbarment and Disqualification.** Company and Provider hereby each represents and warrants to the other, and hereby each covenants with the other, that:
- 9.2.1 It is not excluded, debarred, suspended or otherwise been made ineligible, and upon written request, it shall, within ten (10) calendar days, provide written confirmation that it has complied with the foregoing obligation.
 - 9.2.2 It is not excluded from participation in any state or federal healthcare program, as defined in 42 U.S.C. §1320a-7b(f) for the provision of items or services for which payment may be made by a federal healthcare program;
 - 9.2.3 It has not been debarred, nor is subject to a pending debarment, nor will use in any capacity in connection with the Clinical Trial Laboratory Services any person who has been debarred pursuant to section 306 of the FD&C Act, 21 U.S.C. § 355a;
 - 9.2.4 It has not been convicted of a criminal offense related to the provision of healthcare items or services which could lead to debarment or is subject to any such pending action, or is the subject of a conviction or pending action described in Section 9;
 - 9.2.5 It has not contracted with any employee, contractor, agent, vendor or vendor's affiliate knowing that the contracting party is excluded from participation in any state or federal healthcare program in any jurisdiction;
 - 9.2.6 No final adverse action or exclusion, as described in 42 U.S.C. § 1320a-7a(e) and 42 U.S.C. § 1320a-7a(g), has occurred or is pending against it or contractors; and
 - 9.2.7 It shall not violate the statutes, regulations and written directives of the Medicare, Medicaid and all other United States federal health care programs (as defined in 42 U.S.C. §1320a-7b(b)-(f)) or the statutes, regulations and written directives of the FDA, with respect to the performance of its obligations under this Human Laboratory Services Agreement.
- 9.3 **Notice.** Provider shall promptly notify Company in writing of any adverse action, discovery of contract with an excluded entity or individual, or exclusion, or if Provider or any Provider Party is debarred, excluded or otherwise disqualified or if any action or investigation is pending or threatened relating to the debarment, exclusion of Provider, a Provider Party of any person performing Clinical Trial Laboratory Services or if any other aspect of Section 9.2 becomes untrue at any time. At any time during the term of this Human Laboratory Services Agreement Provider may request Company provide written confirmation of the representations and warranties in Section 9.2, and upon such request, Company shall provide such written confirmation. In the event that either JRD or Provider becomes debarred, excluded or otherwise disqualified, then the other (i.e., the entity not debarred, excluded or otherwise disqualified) will have the option to terminate this Human Laboratory Services Agreement upon written notice to the other (i.e., the entity debarred, excluded or otherwise disqualified).

10. **Disaster Recovery**

- 10.1 **Data Safeguards.** Provider shall, and shall cause Provider Parties throughout the Term of this Human Laboratory Services Agreement, to employ all reasonable and appropriate industry standard measures and processes to ensure that all data collected and stored by Provider and/or Provider Parties in the course of providing the Clinical Trial Laboratory Services is safeguarded against loss, damage and destruction arising from any cause, including, but not limited to: theft, fire, flood, earthquake, lightening and electrical disruption. Such measures and processes shall include, but not be limited to (a) remote storage of archived hard-copy documents and computer back-up media in locked containers and facilities with advanced fire-suppression systems, and (b) current back-up, recovery, and business continuity and disaster recovery plans which are periodically validated for all business systems. Back-up location(s) must be located in a different city or village from the primary data storage location. Provider will develop, maintain, test and implement a business continuity and disaster recovery plan in respect of the Clinical Trial Laboratory Services. Provider's business continuity and disaster recovery plan must be reviewed by Provider at least annually, to confirm that the plan (including contacts and process steps) is accurate, and updated as appropriate following each review. Provider's business continuity and disaster recovery plan must include measures and processes that would enable the Company to (i) continue to access Provider's systems, including Company data maintained in Provider's systems, (ii) access all technical documentation necessary for Company's use of the Clinical Trial Laboratory Services, and (iii) access appropriate implementation guidelines and other implementation support. Provider's business continuity and disaster recovery plan will include, if and to the extent requested and approved by Company and in compliance with Exhibit B of the Collaboration Agreement, as amended by this Amendment, provisions whereby Provider will supply certain Provider Parties' reviewers with laptop computers so that they may perform the Clinical Trial Laboratory Services remotely in the event of a business interruption at a Provider's or Provider Parties' Facility at which Clinical Trial Laboratory Services are performed or any difficulty traveling to a Provider's or Provider Parties' Facility. The applicable Company parties will be informed within twenty-four (24) hours of the Provider's execution of its disaster recovery plan, and if such notification is not in writing, Provider will deliver a written notification as promptly as possible but in any event within forty-eight (48) hours of the execution. Notification will include a description of the event, the status of the system, expected system unavailability, any issues with the Clinical Trial Laboratory Services and planned remedies. The Company parties may declare a disaster if they reasonably conclude that Provider has unnecessarily delayed in making the declaration. In the event of a disaster, the Company parties, in their discretion, may choose to transition the Services to a Company disaster recovery site or to a Third Party disaster recovery site and, in such event, Provider shall, and shall cause the Provider Parties to, fully cooperate in the transition. Provider will ensure continued operation with minimal disruption.
- 10.2 Intentionally Omitted.
- 10.3 **Outages and Interruptions.** Provider shall notify Company and appropriate project lead in writing a minimum of five (5) days in advance of any planned power outages or other system down time ("**Scheduled Downtime**") which could affect the provision of the Clinical Trial Laboratory Services and their expected duration. Notification will include any risks to the Clinical Trial Laboratory Services and a plan for the mitigation of that risk. Provider shall provide prompt telephone notification to the Company point of contact set forth in the Scope of Work or otherwise agreed by the Parties as soon as Provider becomes aware of any unscheduled down time which could affect the provision of the Clinical Trial Laboratory Services and will provide periodic updates during the unscheduled down time regarding Provider's progress in restoring the Clinical Trial Laboratory Services to full availability. Provider shall, and shall cause Provider Parties to, work with Company to resolve any

11. **Records and Information Management Requirements (“RIM Requirements”)**
- 11.1 Company’s Records and Information. All records and information, in any format, that Provider or Provider Parties creates, edits or receives on behalf of Company or Company’s affiliates in performance of the Clinical Trial Laboratory Services will be referred to herein as “**Company’s Records and Information.**” For avoidance of doubt, “Company’s Records and Information” does not include records and information created by Provider as part of Provider’s business processes (e.g., invoices, internal reports, etc. and records or information created outside of the scope of this Human Laboratory Services Agreement).
- 11.1.1 Provider and Provider Parties shall maintain, manage and protect Company’s Records and Information pursuant to this Agreement (i) in accordance with Company’s reasonable records retention requirements for one (1) year from the end of the Clinical Trial Laboratory Services and then Provider shall transfer Company’s Records and Information to Company in accordance with Section 11.6, Transfer; and (ii) in accordance with all Applicable Laws.
- 11.1.2 Provider and Provider Parties shall not transfer Company’s Records and Information to any other entity unless approved by Company in writing.
- 11.1.3 Provider and Provider Parties shall use reasonable efforts to manage Company’s Records and Information such that Company’s Records and Information is not intermingled with records and information managed by Provider or Provider Parties for other customers.
- 11.1.4 Provider and Provider Parties shall retain electronic data backups of Company’s Records and Information (for disaster recovery purposes, record retention requirements, or delivery of Clinical Trial Laboratory Services).
- 11.2 **Preservation and Production.** Provider and Provider Parties shall comply with any reasonable request from Company to preserve Company’s Records and Information (or parts thereof). Provider shall deliver promptly Company’s Records and Information requested to be searched, retrieved, and produced, all as part of the services Provider provides under this Human Laboratory Services Agreement in accordance with Section 11.8 (Format of Company’s Records and Information), but subject to the records retention procedures set forth in Sections 3.3.1 and 3.3.2.
- 11.3 **Third Party Requests.** Within [***] business days of Provider and/or Provider Parties receiving a request, demand, notice, subpoena, order, or other legal request (“**Third-Party Request**”) for Company’s Records and Information, Provider shall notify Company and provide Company with a copy of the Third-Party Request (unless legally prohibited). Provider shall confer with Company to identify, document, and implement procedures to comply with the request. Provider and Provider Parties shall take all reasonable steps to protect Company’s legal rights when responding to a Third-Party Request.

- 11.4 **Training.** All employees and contractors of Provider with access to the Johnson & Johnson Enterprise Network (JJNET) shall annually complete Records and Information Management training as reasonably specified by Company.
- 11.5 **Destruction.** Provider and Provider Parties shall not destroy or permanently delete Company's Records and Information without Company's written approval, but subject to the records retention procedures set forth in Sections 3.3.1 and 3.3.2. Company shall confirm the Company's Records and Information is not subject to any pending preservation obligation or retention requirement. Following destruction in accordance with this Section 11.5, Provider and Provider Parties shall certify in writing that Company's Records and Information has been destroyed or permanently deleted as specified by the Company.
- 11.6 **Transfer.** When a transfer of Company's Records and Information from Provider is required, subject to the records retention procedures set forth in Sections 3.3.1 and 3.3.2, Provider shall (i) transfer Company's Records and Information to Company or an entity specified by Company in accordance with Section 11.8 (Format of Company's Records and Information), (ii) take no action on Company's Records and Information until written notification from Company confirming accurate and complete transfer is received, and (iii) obtain Company's written approval to destroy or permanently delete Company's Records and Information in accordance with Section 11.5 (Destruction).
- 11.7 **Termination.** Upon termination of this Human Laboratory Services Agreement and at Company's direction, but subject to the records retention procedures set forth in Sections 3.3.1 and 3.3.2, Provider shall (i) transfer Company's Records and Information to Company or an entity specified by Company in accordance with Section 11.6 (Transfer), or (ii) obtain Company's written approval to destroy or permanently delete Company's Records and Information in accordance with Section 11.5 (Destruction).
- 11.8 **Format of Company's Records and Information.** In consultation with Company, Provider and Provider Parties shall identify Company's Records and Information and implement documented procedures to deliver to Company or an entity specified by Company, Company's Records and Information and supporting documentation in the format directed by Company. To meet Company's records retention and other legal preservation obligations, Company may require Provider to provide Company's Records and Information in a structured format maintaining the relationships that exist in the database underlying Provider's application.
- 12. Indemnification**
- 12.1 Company shall indemnify, defend and hold harmless Provider, its directors, officers, employees, agents and representative (collectively herein, "**BTO Indemnitees**") against any and all losses, costs, claims, suits, expenses, damages and awards, including reasonable attorneys' fees for defending those claims or lawsuits (collectively herein, "**Losses**" or "**Loss**") in connection with any third party claim or lawsuit arising out of:
- (a) the gross negligence or willful misconduct of Company, or any third party engaged by Company, in/ the performance of the Study described in this Human Laboratory Services Agreement; or

- (b) any illness or injury of any subject in the Study described in this Human Laboratory Services Agreement; or
 - (c) the infringement or misappropriation of any patent or trade secret owned or possessed by a third party arising directly related to the use of the Product, either solely or in combination with the BTO Test, during the performance of the Study described in this Human Laboratory Services Agreement, except to the extent that such infringement or misappropriation is the subject of indemnification by Provider pursuant to Section 12.2(c).
- 12.2 Provider shall indemnify, defend and hold harmless Company, its directors, officers, employees, agents and representative (collectively herein, “**Janssen Indemnitees**”) against any and all Losses in connection with any third party claim or lawsuit arising out of:
 - (a) the gross negligence or willful misconduct of Provider, or any third party engaged by Provider, in the performance of the Clinical Trial Laboratory Services as described in this Human Laboratory Services Agreement; or
 - (b) the gross negligence or willful misconduct of Provider, or any third party engaged by Provider, in the design, validation or performance of the BTO Test; or
 - (c) the infringement or misappropriation of any patent or trade secret owned or possessed by a third party arising directly from the performance of the BTO Test alone, and not due to its combination with the Product, during the performance of the Clinical Trial Laboratory Services as described in this Human Laboratory Services Agreement.
- 12.3 If a party (the “**Indemnitee**”) intends to claim indemnification under this Section 12 (Indemnification), it will notify the other party (the “**Indemnitor**”) in writing within [***] days of any third party claim for which the Indemnitee intends to seek such indemnification. The failure of the Indemnitee to deliver written notice to the Indemnitor within a reasonable time after the commencement of any such action will only relieve the Indemnitor of any obligation to the Indemnitee under this Section with respect to any such action to the extent such failure prejudices the Indemnitor’s ability to defend such third party claim. The Indemnitee will permit the Indemnitor to control the litigation or settlement of such third party claim and cooperate fully with Indemnitor in all related matters, provided that unless agreed by Indemnitee (a) counsel appointed by Indemnitor to defend Indemnitee will not take any position that if sustained would cause Indemnitee not to be indemnified by Indemnitor, and (b) no settlement will involve any terms binding on Indemnitee except payment of money to be paid by Indemnitor.
- 12.4 The indemnification obligations in this Section 12 shall govern and control with respect to all third party claims arising from the performance by the parties of the Study and Clinical Trial Laboratory Services pursuant to this Human Laboratory Services Agreement and the indemnification provisions in Section 8 of the Collaboration Agreement will govern and control with respect to any and all other third party claims under the Collaboration Agreement.

13. **Privacy**
Provider shall, and shall cause each Provider Party to, comply with Company's policy on the protection of Personal Information attached to the Collaboration Agreement as Exhibit C, as updated from time to time by Company.
14. **Insurance**
Provider shall maintain in full force and effect valid and collectible insurance policies in connection with the Clinical Trial Laboratory Services, which policies shall be in compliance with Exhibit D.2 attached to this Human Laboratory Services Agreement.
15. **Subcontracting**
- 15.1 Subcontractors. Provider shall not subcontract any of its obligations under this Human Laboratory Services Agreement, including to an Affiliate.
- 15.2 Provider Personnel in China and India. Under no circumstances shall Provider use personnel in China or India to perform any Clinical Trial Laboratory Services under this Human Laboratory Services Agreement.
16. **Equipment**
- 16.1 **Equipment for Laboratory Services.** Provider will ensure, and will cause Provider Parties to ensure that all laboratory instruments used for testing performed under this Human Laboratory Services Agreement are qualified before use, maintained in good working order and calibrated on a regular basis. Provider shall also maintain all Equipment and Facilities used to perform the Clinical Trial Laboratory Services under this Human Laboratory Services Agreement in accordance with all Applicable Laws, including, without limitation, cGCP and/or CLIA.
17. **Company's Premises**. Provider shall not perform any Clinical Trial Laboratory Services on premises of Company or any of Company's Affiliates.
18. **Publicity**. The Collaboration Agreement, Section 5.5, under Confidentiality, shall apply.
19. **Assignment**. The Collaboration Agreement, Section 9.4, No Assignment, shall apply.
20. **Representations and Warranties**
- 20.1 **Performance of Services.** Provider represents and warrants that it and each Provider Party shall comply with, and that the Clinical Trial Laboratory Services shall be performed in accordance with, (i) this Human Laboratory Services Agreement, (ii) any applicable industry standards and practices including any cGCP and (iii) all Applicable Laws, including, but not limited to, those of the United States or any other country or jurisdiction applicable to the performance of the Clinical Trial Laboratory Services, including, without limitation, those set forth by the National Institutes of Health (NIH), U.S. Department of Agriculture (USDA), U.S. Food and Drug Administration (FDA), the U.S. Federal Trade Commission (FTC), the U.S. Occupational Safety and Health Administration (OSHA), European Medicines Agency (EMA), Central Drugs Standard Control Organization (CDSCO) and any other governmental or supra-governmental agencies, as applicable, and applicable environmental regulations and labor standards.

- 20.2 **No Conflict with Third Parties.** Provider represents and warrants that neither it nor any Provider Party has entered into and will not enter into any agreement or understanding with a Third Party, which could conflict or interfere with this Human Laboratory Services Agreement. Provider represents and warrants that it has, and Provider Parties have, the right to perform its duties and obligations for Company as provided in this Human Laboratory Services Agreement without conflict of interest to others and without violating any confidentiality obligations it may have to others. Provider represents and warrants that it has, and Provider Parties have obtained, in writing, all Third Party consents which are necessary or appropriate for the performance of the Clinical Trial Laboratory Services and shall make such consents available to Company upon request.
- 20.3 **Study Sponsor Responsibilities.** Company represents and warrants it will obtain any approvals required as a sponsor for performance of the Study. Company will make available evidence of such approvals upon request from Provider.
- 20.4 **Infringement.** Provider represents and warrants that, to the best of Provider's knowledge after reasonable inquiry, the performance of the Clinical Trial Laboratory Services as contemplated under this Human Laboratory Services Agreement does not infringe or misappropriate any intellectual property rights from and as of the Effective Date.
- 20.5 **Licenses and Permits.** Each Party represents and warrants that it will obtain and maintain, at its expense, any licenses, permits and/or certifications, and any regulatory and/or government approvals necessary for the performance of its obligations under this Human Laboratory Services Agreement, and shall ensure that its obligations are performed in accordance with such licenses, permits, certifications and approvals. At Company's reasonable request, Provider will provide Company with copies of all such approvals and submissions to Regulatory Authorities, as well as licenses, certificates and permits required for performance of the Clinical Trial Laboratory Services. At Provider's reasonable request, Company will provide Provider with evidence of all such approvals and/or submissions to Regulatory Authorities, as well as licenses, certificates and permits required for performance of the Study.
- 20.6 **Sanctions, Restrictions or Embargoes.** Each Party represents and warrants that no transactions or dealings under this Human Laboratory Services Agreement shall be conducted with or for an individual or entity that is designated as the target of any sanctions, restrictions or embargoes administered by the United Nations, European Union, United Kingdom or the United States of America.
- 20.7 **Software System.** If Provider or Provider Parties use software or a software system to provide the Clinical Trial Laboratory Services, Provider represents and warrants that either (i) it is the lawful owner of such system and any software which may be used in providing the Clinical Trial Laboratory Services hereunder, or (ii) such software has been lawfully licensed to or otherwise acquired by Provider and/or Provider Parties and Provider and/or Provider Parties are authorized to use such software in providing the Clinical Trial Laboratory Services hereunder. Provider and/or Provider Parties shall maintain the functionality and data integrity of any system used in performing the Clinical Trial Laboratory Services during the Term of this Human Laboratory Services Agreement. Provider and/or Provider Parties shall technically support and maintain any system used

in performing the Clinical Trial Laboratory Services. Provider represents and warrants that any internally developed software or any Third Party software used in performing the Clinical Trial Laboratory Services shall remain Functional, as defined, during the Term of this Human Laboratory Services Agreement. “**Functional**” shall mean that the material features, performance, configurations and other specifications and requirements for the software and its related software system as required to perform the Clinical Trial Laboratory Services identified in the Scope of Work are operational and running without interruption, excluding Scheduled Downtime. If the software or software system do not perform as warranted, Provider and/or Provider Parties will promptly correct, replace or modify the affected software or software system at Provider and/or Provider Parties’ expense (or identify and implement a reasonable alternative software), so as to provide Company with software of software systems that perform as warranted. Provider and Provider Parties shall maintain current during the Term of this Human Laboratory Services Agreement any Third Party software used in performing the Clinical Trial Laboratory Services using supported releases from the applicable Third Party software provider. Provider understands that the transfer of technical responsibility to an Affiliate or a Third Party does not release Provider from the above representations and warranties.

20.8 **21 C.F.R. Part 11 Compliance.** Provider represents and warrants that, to its knowledge following reasonable diligence, any software and software databases used by or on behalf of Provider or any Provider Parties in performing the Clinical Trial Laboratory Services and any systems and processes used by or on behalf of Provider or Provider Parties in performing the Clinical Trial Laboratory Services or recording the Deliverables are compliant with 21 C.F.R. Part 11. Provider agrees to provide documentation of such compliance to Company upon request. Provider agrees to notify Company promptly, and in any event within fifteen (15) business days, if any new software, database, system or process proposed to be used by or on behalf of Provider or any Provider Parties to perform the Clinical Trial Laboratory Services after the date hereof is not compliant, and will take all steps necessary to bring it into compliance or replace it with compliant software, databases, systems and processes at Provider’s sole cost and expense.

20.9 **Policy on Data Safeguards.** Provider shall, and shall cause the Provider Parties to, protect Company’s data in its possession or under its control from disclosure to or use by unauthorized Third Parties as provided in the Johnson & Johnson Policy on Data Safeguards, attached as Exhibit B, Data Safeguards, to the Collaboration Agreement. Provider represents and warrants that it shall and shall cause Provider Parties to comply with such policy attached to the Collaboration Agreement as Exhibit B, as updated from time to time by Company, however, Exhibit B shall be amended so that:

- (i) The last paragraph, starting “**“SISR’ means”**” shall be identified as section 5; and
- (ii) the last paragraph, starting “**“SISR’ means”**” shall be amended so that: (a) The first sentence states: “**SISR**” means the Johnson & Johnson Supplier Information Security Requirements in effect as of the Effective Date, as revised from time to time by Janssen and made available to BTO.” (b) The second sentence states: “BTO shall have 30 days after receipt of a SISR revision to object to any new requirements contained therein that would cause a material increase in BTO’s efforts to comply with such new requirements in connection with the Research Plan or this Human Laboratory Services Agreement.”

- 20.10 **Anti-Corruption Laws.** The Anti-Corruption provisions of the Collaboration Agreement shall apply to this Human Laboratory Services Agreement including the Scope of Work and the performance of the Clinical Trial Laboratory Services.
21. **Governing Law and Waiver of Jury Trial**
- 21.1 **Governing Law.** The Collaboration Agreement, Section 9.11, Governing Law, shall apply.
- 21.2 **Waiver of Jury Trial.** EACH PARTY HEREBY WAIVES: (1) ITS RIGHT TO TRIAL OF ANY ISSUE BY JURY, (2) WITH THE EXCEPTION OF RELIEF MANDATED BY STATUTE, ANY CLAIM OF LIABILITY TO PUNITIVE, EXEMPLARY, MULTIPLIED, INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES, AND (3) ANY CLAIM FOR ATTORNEYS' FEES, COSTS OR PREJUDGMENT INTEREST. Nothing contained in this section shall limit a Party's (i) obligation to indemnify the other for Third Party claims as described in this Human Laboratory Services Agreement, (ii) liability resulting from a breach of the confidentiality or intellectual property obligations set forth in the Collaboration Agreement, or (iii) liability for its own gross negligence, fraud or willful misconduct or to the extent prohibited by law.
22. **Notices.** The Collaboration Agreement, Section 9.1, Notices, shall apply to this Human Laboratory Services Agreement including the Scope of Work and the performance of the Clinical Trial Laboratory Services.
23. **Taxes.** The Collaboration Agreement, Section 1.5 shall apply to this Human Laboratory Services Agreement including the Scope of Work and the performance of the Clinical Trial Laboratory Services.
24. **Survival.** In addition to the surviving provisions of the Collaboration Agreement, the provisions of Sections 1 (Definitions), 2.3 (Company Materials), 3 (Quality Assurance), 6.2 (Rights and Obligations upon Termination), 6.3 (Payment upon Termination), 7 (Confidentiality & Publicity), 8 (Intellectual Property Rights), 9 (Compliance with Applicable Law), 10 (Disaster Recovery), 11 (Records and Information Management Requirements), 12 (Indemnification), 13 (Privacy), 14 (Insurance), 16 (Equipment), 18 (Publicity), 19 (Assignment), 20 (Representations and Warranties), 21 (Governing Law and Waiver of Jury Trial), 22 (Notices), 23 (Taxes), and 24 (Survival) shall survive the expiration or termination of this Human Laboratory Services Agreement by either Party for any reason.

Exhibits:

Exhibit D.1 – Scope of Work for Laboratory Services

Exhibit D.2 – Insurance Requirements

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT ACTUALLY TREATS AS PRIVATE OR CONFIDENTIAL.

DEVELOPMENT AND COMMERCIALIZATION AGREEMENT

between

Janssen Biotech, Inc.

and

BillionToOne, Inc.

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EXHIBITS

Exhibit 1.36:	Development Plan
Exhibit 2.3.3:	Protection of Personal Information
Exhibit 2.3.4:	Data Safeguards
Exhibit 2.9:	Approved BTO Third Party Contractors
Exhibit 5.2(a):	Commercialization Plan
Exhibit 14.6:	Compliance with Anti-Corruption Laws
Exhibit 14.7:	Health Care Compliance (“HCC”) Provisions for Suppliers that Interact and Contract with Health Care Providers (“HCPs”) for Services on Janssen’s Behalf

Janssen Biotech, Inc.
800 Ridgeview Drive
Horsham, PA 19044
(hereinafter referred to as “Janssen”)

and

BillionToOne, Inc.
1035 O’Brien Dr.
Menlo Park, CA 94025
(hereinafter referred to as “BTO”)

(BTO and Janssen are hereinafter individually referred to as “Party” and collectively referred to as “the Parties”)

RECITALS

Janssen is engaged in the research, development, manufacture and commercialization of pharmaceutical products, including nipocalimab, an anti-neonatal Fc receptor (FcRn) monoclonal antibody for treatment of Hemolytic Disease of the Fetus and Newborn (“HDFN”).

BTO performs diagnostic testing, develops diagnostic products and assays, which are used to detect, characterize, monitor and select treatments for different diseases, and either owns or has licensed intellectual property related thereto.

BTO and Janssen Research & Development, LLC (“JRD”), an Affiliate of Janssen, are parties to a clinical collaboration agreement entered into on January 6, 2023, as amended, regarding the BTO Assay to support Janssen’s Clinical Trial (“Prior Collaboration Agreement”), and as more fully described in Section 4, below.

Janssen wishes to engage BTO and BTO wishes to be engaged to collaborate on the development and commercialization of a companion diagnostic product for the Janssen Drug (as defined herein), including: (i) to support development and Regulatory Approval of the BTO CDx (as defined herein) in the Territory (as defined herein), and (ii) to commercialize such BTO CDx following its Regulatory Approval (as defined herein) and the Regulatory Approval of the Janssen Drug in the United States, and all activities as set forth below in this Agreement.

The Parties therefore agree as follow:

As used in this Agreement, the following terms shall have the following meanings:

- 1.1 “Affiliate” means any entity that, directly or indirectly (through one or more intermediaries) is controlled by, or is under common control with, a Party. For purposes of this Section 1.1, “control” means solely (a) the direct or indirect ownership of 50% or more of the voting stock or other voting interests or interest in the profits of the Party, or (b) the ability to otherwise control or direct the decisions of board of directors or equivalent governing body thereof.
- 1.2 “Agreement” means this Development and Commercialization Agreement and all of its Exhibits.
- 1.3 “Analytical Validation Data” means Data related to the analytical performance of the BTO Assay under the Development Plan generated through controlled laboratory studies designed to characterize assay performance parameters. Analytical Validation Data includes, but is not limited to, Data to support Development of the BTO CDx, and Data to support the limit of detection, limit of blank, accuracy, cross reactivity, reproducibility, guard band, bioinformatics pipeline validation and stability. Such data may be generated using contrived samples, reference materials, quality control materials or patient samples other than Clinical Samples for specific analytical characterization purposes. For clarification, Clinical Data obtained for demonstrating clinical performance, safety or efficacy is specifically excluded from Analytical Validation Data.
- 1.4 “Applicable Law” means all applicable provisions of any and all national, supranational, regional, state and local laws, treaties, statutes, rules, regulations, administrative codes, guidances, ordinances, judgments, decrees, directives, injunctions, orders, permits of or from any court, arbitrator, Regulatory Authority or governmental agency or authority having jurisdiction over or related to the subject item.
- 1.5 “Approved IVD” means, with respect to an IVD and country or territory, that such IVD has been granted Regulatory Approval for such country or territory for the intended use, including, for example, any required Pre-Market Approval (“PMA”) or De Novo 510K clearance in the case of the United States. The term “Approved IVD” is not intended, and shall not be construed, to include any IVD solely for research or investigational purposes.
- 1.6 “Assigned BTO Inventions” has the meaning set forth in Section 9.8.2.

- 1.7 “Assigned Janssen Inventions” has the meaning set forth in Section 9.8.3.
- 1.8 “Biomarker(s)” means the genes or gene variants that encode the proteins relating to fetal red blood cell antigens RhD, Rhc, RhC, RhE, and Kell.
- 1.9 “Breaching Party” has the meaning set forth in Section 13.2.2.
- 1.10 “BTO Assay” means BTO’s diagnostic assay for the detection the Biomarkers. BTO Assay is inclusive of positive and negative controls, and includes all components and information necessary to perform each assay/test for the detection of Biomarkers in Clinical Samples and other patient samples for the selection of patients who are eligible for treatment with the Janssen Drug for the Indication, including, as applicable for performance of the IVD, sample collection kits.
- 1.11 “BTO Background Technology” means Technology Controlled by BTO prior to the Effective Date used in the performance of this Agreement, but excluding BTO Development Technology and Joint Development Technology. BTO Background Technology includes, but is not limited to, BTO Technology concerning molecular diagnostic assays, including its sequencing platform to detect the presence of the Biomarkers. For purposes of this Agreement, BTO Background Technology is deemed BTO’s Confidential Information hereunder, subject to the exceptions specified in Section 12.2.
- 1.12 “BTO CDx” means a CDx, based on the BTO Assay, utilizing BTO Background or Development Technology for use with the Janssen Drug as a CDx for the Indication.
- 1.13 “BTO Data” means (i) Analytical Validation Data either Controlled by BTO or generated, compiled or acquired by either Party, its Affiliates or its Third Party contractors pursuant to this Agreement and during its Term, and (ii) Non-Clinical Trial Testing Data related solely to the BTO Assay Controlled by BTO or generated, compiled or acquired by BTO, its Affiliates or its Third Party contractors pursuant to this Agreement and during its Term.
- 1.14 “BTO Development Technology” means any Technology and related information that incorporates BTO Background Technology and any Technology conceived of or reduced to practice by any Party (including its Affiliates or Third Party contractors) pursuant to this Agreement and during its Term that (i) incorporates BTO Confidential Information or BTO Background Technology (and not Janssen Confidential Information or Janssen Background Technology), or was

generated by use of BTO Confidential Information or BTO Background Technology (and not Janssen Confidential Information or Janssen Background Technology), or (ii) comprises (A) the primers and probes of the BTO Assays, (B) the automated calling software for the reporting of mutations, or (C) the Analytical Validation Data. BTO Development Technology is deemed BTO Confidential Information, subject to the exceptions specified in Section 12.2. For purposes of clarity BTO Development Technology excludes BTO Background Technology, Janssen Background Technology, and Janssen Development Technology.

- 1.15 “BTO Indemnitees” has the meaning set forth in Section 11.1.
- 1.16 “Business Day” means any day other than a Saturday, Sunday, bank holiday or public holiday in the United States of America.
- 1.17 “Centralized Lab” means a single facility with regulatory approval and market authorization for a proprietary CDx. Such singular facility receives all test requisitions from physicians, performs all steps in the process, including wet lab work, data analysis and bioinformatics, and delivers all test results and related information to the prescriber and patient.
- 1.18 “Clinical Data” means Data generated, acquired, or obtained through the use of Clinical Samples or from Clinical Trial, Data relating to Clinical Samples or Clinical Trials, and Data relating to patient populations, patient population genetics, individual patient genetics, therapeutic use and efficacy of the Janssen Drug, including clinical outcome data (i.e., Data related to the performance of the Janssen Drug, including safety and toxicity Data).
- 1.19 “Clinical Samples” means the human biological samples, and derivatives thereof, obtained from a human subject participating in a Clinical Trial.
- 1.20 “Clinical Treatment” means the use of the Janssen Drug to treat a patient with the Indication.
- 1.21 “Clinical Trial” means any clinical investigation that tests the safety and efficacy of the Janssen Drug in human subjects and is sponsored by Janssen or its Affiliates.
- 1.22 “Clinical Trial Protocol” means a written description of one or more Clinical Trial(s), which generally includes information on the objectives, design, methodology, statistical considerations and organization of the Clinical Trial (and including amendments to such description). Janssen or its Affiliates may amend the Clinical Trial Protocol from time to time in its sole discretion and promptly inform BTO of any amendments that would materially affect the Development of the BTO CDx.

- 1.23 “Commercial Leader” has the meaning set forth in Section 7.4.1.
- 1.24 “Commercialization” means any and all activities directed to the preparation for sale of, offering for sale of, or sale of a product, including activities related to marketing, promoting, distributing and importing such product, and interacting with Regulatory Authorities regarding any of the foregoing. For clarity, when used in relation to the BTO CDx or other IVD, “Commercialization” includes activities directed to the preparation for the sale of, offering for sale of, or sale of a service using such BTO CDx or other IVD, including activities related to marketing and promoting such service, and interacting with Regulatory Authorities regarding any of the foregoing. When used as a verb, “to Commercialize” and “Commercializing” mean to engage in Commercialization, and “Commercialized” has a corresponding meaning.
- 1.25 “Commercialization Plan” has the meaning set forth in Section 5.2(a) and is attached as Exhibit 5.2(a). The Parties recognize that Exhibit 5.2(a) as of the Effective Date is a preliminary plan and will be modified as they proceed with the performance of this Agreement. The JSC may modify Exhibit 5.2(a) as provided in Section 7.2.
- 1.26 “Commercially Reasonable Efforts” means, efforts and resources commonly used (i) in the case of BTO, in the diagnostic assay and medical device industry for a diagnostic assay service, system, or product and (ii) in the case of Janssen, in the research-based pharmaceutical industry for a pharmaceutical product, (BTO’s diagnostic assay service, system, or product, and Janssen’s pharmaceutical product are individually a “product” and collectively “products” for purposes of this definition), in each case at a similar stage in its development life of similar market potential taking into account the competitiveness of alternative products, the patent and other proprietary position of the product, the likelihood of Regulatory Approval given the regulatory structure involved, the profitability of the product including the royalties payable to licensors of patent rights, and other relevant factors.
- 1.27 “Commercially Reasonable Efforts (CRE) Period” or “CRE Period” means the period from the Effective Date until: (1) the BTO CDx is no longer the only cell-free DNA (“cfDNA”) Companion Diagnostic for the detection of the Biomarkers approved by the Regulatory Authority in the Territory for the administration of Janssen Drug as a treatment for the Indication with no Regulatory Authority enforcement actions in place, and (2) BTO maintains at least [***] for its commercial use of the BTO CDx (the “Commercial Performance Minimum”), but in each of (1) and (2) no earlier than the end of the Exclusivity Period.

- 1.28 “Companion Diagnostic” or “CDx” means an IVD that provides information essential to the safe and effective use of a corresponding therapeutic product, for the selection of patients who are eligible for treatment with such corresponding therapeutic product for a corresponding indication or is otherwise necessary for the Regulatory Approval of a therapeutic product.
- 1.29 “Compelled Disclosure” has the meaning set forth in Section 12.3.
- 1.30 “Confidential Information” means, subject to the exceptions specified in 12.2 but without other limitation, any and all non-public Technology, information, inventions, methods, plans, processes, specifications, Know-How, compounds, materials, Data (i.e. Janssen Data or BTO Data), samples, business plans, financial information, marketing plans, reports, forecasts, or technical or commercial information that is provided hereunder by or on behalf of either Party or any of its Affiliates to the other Party or any of its Affiliates, whether disclosed in writing or orally, including without limitation any and all such information regarding, related to, arising from or associated with this Agreement, and the terms and conditions of this Agreement. As used herein, “BTO Confidential Information” refers to the Confidential Information of BTO and “Janssen Confidential Information” refers to the Confidential Information of Janssen.
- 1.31 “Control” or “Controlled” means with respect to a Party and with respect to any Technology or Data or Intellectual Property Rights thereto, or other tangible or intangible property (collectively “Property”) (i) ownership of, (ii) the right to grant a license to, or (iii) the ability to permit use of such Property without violating the terms of any arrangements or agreements with any Third Party and all of the foregoing by means other than the licenses or assignments of this Agreement, whether such ownership, right to grant a license to, or the ability to permit use of such Property exists on the Effective Date or is acquired after the Effective Date and during the Term.
- 1.32 “Data” means all data, tangible and intangible results, information, and reports generated, compiled or acquired by any Party, its Affiliates or its Third Party contractors either pursuant to this Agreement or outside of this Agreement.
- 1.33 “Development” means activities conducted by either Party, its Affiliates or Third Party contractors in performance of the Development Plan, and deliverables produced by the foregoing, as specified in the Development Plan.

- 1.34 “Development Technology” means any of Janssen Development Technology, Joint Development Technology, or BTO Development Technology.
- 1.35 “Development Leader” has the meaning set forth in Section 7.4.1.
- 1.36 “Development Plan” means the written description of the activities to be performed by each Party under this Agreement for the development and Regulatory Approval of the BTO CDx containing, among other things, the timelines/dates, deliverables and budget for the various stages of the development project, as set forth in Exhibit 1.36, as the same may be amended from time to time in accordance with the terms of this Agreement.
- 1.37 “Disclosing Party” has the meaning set forth in Section 12.1.
- 1.38 “Early Termination Fees” means the amount Janssen shall pay BTO for all then-current inventory of components and BTO Assays maintained under the Development Plan as of the effective date of termination.
- 1.39 “Exclusivity Period” means [***]
- 1.40 “FDA” means United States Food and Drug Administration, or any successor entity thereto performing similar functions.
- 1.41 “Failure of Continuous Supply” has the meaning set forth in Sections 5.3 and 6.1.2.
- 1.42 “Failure to Achieve a Milestone” shall include: (i) the FDA requires a bridging study necessitating re-testing of Clinical Samples from the Clinical Trial referenced in the Prior Collaboration Agreement and Janssen solely and reasonably determines that such re-testing would consume too much of the Clinical Samples, thereby precluding another collaborator of Janssen to pursue CDx for the Janssen Drug in the Territory, (ii) [***] (where such date shall be tolled for delay or adjustment greater than six months in the Development Plan for the Janssen Drug; provided that such tolling does not impact the sequence of Milestones and the date for this Milestone and the estimated date for the Regulatory Approval of the Janssen Drug shall not be greater than [***]), (iii) BTO does not satisfy the requirements for a Regulatory Submission Milestone before January 31, 2028 (where such date shall be tolled for delay in the Janssen Drug Regulatory Agency submission deadline for January 31, 2028), or (iv) the BTO CDx is not an Approved IVD by the later of either (a) December 31, 2029 or (b) within one (1) year after the Janssen Drug obtains Regulatory Approval for the Indication.

- 1.43 “First Commercial Sale” means (i) with respect to the BTO CDx, the first transfer in the Territory by BTO or its Affiliates, sublicensees or distributors of the BTO CDx, as a device or as a service, to a Third Party for monetary consideration, or (ii) with respect to Janssen Drug, the first commercial sale in any country in the Territory by Janssen or its Affiliates, sublicensees or distributors of the Janssen Drug to a Third Party for monetary consideration, in both (i) and (ii) after such BTO CDx or Janssen Drug has been granted Regulatory Approval for the sale and marketing of such product for the Intended Use or the Indication for which such Janssen Drug first receives such Regulatory Approval, respectively, by the competent Regulatory Authorities in the Territory.
- 1.44 “GCP” means Good Clinical Practice as defined in ICH GCP.
- 1.45 “GMP” means Good Manufacturing Practice as defined in 21 CFR Parts 210 and 211, and Parts 600 through 680.
- 1.46 “IDE” means an Investigational Device Exemption Application filed with the FDA, as described under 21 CFR Part 812.
- 1.47 “Indication” means, (i) for the Janssen Drug, Hemolytic Disease of the Fetus and Newborn (HDFN) for which the Janssen Drug can be used to treat, monitor or prevent HDFN, and (ii) for a BTO CDx, identifying patients at risk for HDFN, in each case the use of which is the subject of a Clinical Trial or is otherwise specified in a Regulatory Approval and for which a BTO CDx is intended to be Developed and obtain Regulatory Approval under this Agreement.
- 1.48 “Intended Use” means the use of a BTO CDx to facilitate prescription, administration, or dosing of the Janssen Drug to a patient for the treatment of the Indication.
- 1.49 “Intellectual Property Rights” means a Party’s Patent Rights and/or Know-How Rights whether such rights are Controlled by a Party or generated during the Term and pursuant to this Agreement.
- 1.50 “In Vitro Diagnostic” or “IVD” means a product or service for in vitro testing of patient or subject specimens, or other biological materials, for use in the diagnosis or evaluation of a disease, including to identify any genomic alterations or signatures, or for the prediction or monitoring of a response to any therapeutic agent or other prognostic use, whether used for research, exploratory purposes, or as a clinical diagnostic. The term “IVDs” includes “Investigation Use Only” products, Companion Diagnostics, and other IVDs.

- 1.51 “Janssen Background Technology” means Technology Controlled by Janssen prior to the Effective Date and used in performance of this Agreement, but excluding Janssen Development Technology and Joint Development Technology. For purposes of this Agreement, Janssen Background Technology is deemed Janssen’s Confidential Information hereunder, subject to the exceptions specified in Section 12.2.
- 1.52 “Janssen Data” means any and all (i) Clinical Data that is generated, compiled or acquired by either Party, its Affiliates, or its Third Party contractors during the Term and pursuant to this Agreement, (ii) Non-Clinical Trial Testing Data related to the Janssen Drug Controlled by Janssen or generated, compiled or acquired by Janssen, its Affiliates, or its Third Party contractors during the Term and pursuant to this Agreement, and (iii) Non-Clinical Trial Testing Data resulting from the bridging and concordance studies referenced in Section 14.4.2
- 1.53 “Janssen Development Technology” means any Technology and related information conceived of or reduced to practice by either Party (including its Affiliates or Third Party contractors) pursuant to this Agreement and during its Term that (i) incorporates Janssen Confidential Information or Janssen Background Technology (and not BTO Confidential Information or BTO Background Technology), or was generated by use of Janssen Confidential Information or Janssen Background Technology (and not BTO Confidential Information or BTO Background Technology), or (ii) relates to or arises from (A) the Janssen Drug or use thereof, (B) the Clinical Trial or use of Clinical Samples, or (C) data mining activities concerning any or all of (A) and (B). Janssen Development Technology is deemed Janssen Confidential Information hereunder, subject to the exceptions specified in Section 12.2. For purposes of clarity, Janssen Development Technology includes diagnostic uses of assays to facilitate prescription, administration or dosing of the Janssen Drug without the use of BTO Background Technology, and BTO Development Technology.
- 1.54 “Janssen Drug” means Nipocalimab (M281) and any combination of pharmaceutical products, or combination of pharmaceutical product(s) and delivery system(s), that constitutes, or contains, Nipocalimab (M281) for treatment or prevention of disease.
- 1.55 “Janssen Indemnities” has the meaning set forth in Section 11.2.
- 1.56 “Janssen Inventions” has the meaning set forth in Section 9.8.3.

- 1.57 “Joint Commercial Committee” or “JCC” has the meaning set forth in Section 7.5.1.
- 1.58 “Joint Data” means any Data generated during the Term and pursuant to this Agreement, other than Janssen Data or BTO Data.
- 1.59 “Joint Development Technology” means any Technology generated by either Party (including its Affiliates or Third Party contractors) during the Term and pursuant to this Agreement that is not BTO Development Technology, BTO Background Technology, Janssen Background Technology, or Janssen Development Technology. For purposes of clarity, Joint Development Technology excludes diagnostic, screening, and other uses of assays to facilitate prescription, administration or dosing of drugs other than the Janssen Drug for the Indication, developed without the use of BTO Development Technology, BTO Background Technology, Janssen Background Technology, or Janssen Development Technology. Joint Development Technology is deemed the Confidential Information of each and both Parties, subject to the exceptions specified in Section 12.2 and subject to the rights specified in Section 9.1.3.
- 1.60 “Joint Patent Right(s)” has the meaning set forth in Section 9.8.5.
- 1.61 “Joint Project Team” or “JPT” has the meaning set forth in Section 7.4.1.
- 1.62 “Joint Steering Committee” or “JSC” has the meaning set forth in Section 7.1.
- 1.63 “JPT Leads” has the meaning set forth in Section 7.4.1.
- 1.64 “Know-How” means any non-public technical, scientific or business information, practices, test and other procedures, processes, methods, know-how, techniques (including synthesis, purification and isolation techniques), designs and other knowledge, skills and materials, in written, electronic or other form, now known or hereafter developed, whether or not patentable or copyrightable, but in all cases excluding any patents.
- 1.65 “Know-How Rights” means a right to unpatented Technology under either the common law or the statutory protection of any county.

- 1.66 “Labeling” or “Label(s)” means, with respect to any product that is a BTO CDx or Janssen Drug, all written, printed or graphic matter (1) upon such product or any of its containers or wrappers, or (2) accompanying such product at any time while such product is held for sale after shipment or delivery for shipment in interstate commerce as required by the applicable Regulatory Authority in the Territory of Commercialization to the extent that such material specifically relates to the BTO CDx and to the extent relating to the safety, efficacy or intended use of the Janssen Drug or the interpretation of Data generated in the conduct of Clinical Trials concerning the Janssen Drug and as otherwise necessary for Commercialization of the BTO CDx. The term ‘accompanying’ is interpreted liberally to mean more than physical association with the product. It extends to posters, tags, pamphlets, circulars, booklets, brochures, instruction books, direction sheets, fillers, etc. The term ‘accompanying’ also includes such written, printed or graphic matter that is brought together with the product after shipment or delivery for shipment in interstate commerce and includes promotional and educational materials (any written, audio, or visual materials, in any media, provided or used for purposes of promoting or marketing the BTO CDx or the Janssen Drug, or educating or training potential customers or users of a BTO CDx or Janssen Drug).
- 1.67 “Losses” means liabilities, damages, penalties, fines, expenses and/or losses, including reasonable legal expenses and attorneys’ fees.
- 1.68 “Materials” has the meaning set forth in Section 2.4.1.
- 1.69 “MDR” shall have the meaning ascribed to it in Section 3.3.
- 1.70 “Milestone” shall have the meaning ascribed to it in Exhibit 1.36.
- 1.71 “Milestone Event” shall have the meaning ascribed to it in Exhibit 1.36.
- 1.72 “Milestone Payment” shall have the meaning ascribed to it in Exhibit 1.36.
- 1.73 “Non-Breaching Party” has the meaning set for in Section 13.2.2.
- 1.74 “Non-Clinical Trial Samples” means patient samples acquired from sources other than patient samples from a Clinical Trial.
- 1.75 “Non-Clinical Trial Testing Data” means Data generated, acquired or obtained by the use of Non-Clinical Trial Samples with a BTO Assay. For purposes of clarity, Non-Clinical Trial Testing Data excludes Clinical Data and Analytical Validation Data.

- 1.76 “Patent Right” means a Party’s rights to its Technology under any and all (i) patents, (ii) pending patent applications, including all provisional applications, substitutions, continuations, continuations-in-part, divisionals, renewals, and all patents granted thereon, (iii) all patents-of-addition, reissues, reexaminations and extensions or restorations by existing or future extension or restoration mechanisms, including patent term extensions, supplementary protection certificates or the equivalent thereof, and (iv) all foreign counterparts of any of the foregoing.
- 1.77 “Person” means any natural person, entity, corporation, unincorporated organization, partnership, association, joint stock company, joint venture, limited liability company, trust or government, or any agency or political subdivision of any government, or any other entity.
- 1.78 “Personal Data” has the meaning set forth in Section 2.4.3.
- 1.79 “Regulatory Submission” means any submission filed by BTO to the FDA seeking Regulatory Approval for marketing of the BTO CDx in the United States as will be included in Exhibit 1.36: Development Plan. The Regulatory Submission may be a Premarket Approval application, as defined in 21 CFR Part 814 or a De Novo 510K request as defined in 21 CFR 860.
- 1.80 “Project Manager” has the meaning set forth in Section 7.4.1.
- 1.81 “QSR” means the applicable FDA Quality System Regulations (21 CFR Part 820), as the same may be amended from time to time, and comparable regulations for other Regulatory Authorities.
- 1.82 “Receiving Party” has the meaning set forth in Section 12.1.
- 1.83 “Regulatory Approval” means and includes all licenses, permits, authorizations, clearances and approvals of (including, if required for sale in any country, pricing approval), and all registrations, filings and other notifications to any Regulatory Authority, governmental agency or department within the Territory (including applications therefor) necessary for the performance of the Development Plan in accordance with Applicable Law. This includes Regulatory Approval of (i) the BTO CDx , and (ii) for Commercialization of the Janssen Drug for the Indication.
- 1.84 “Regulatory Authority” means any national, supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity in the Territory involved in the reviewing, granting or revoking of Regulatory Approvals for IVDs or Janssen Drugs or otherwise enforcing the requirements to which such Regulatory Approvals are subject and with respect to the United States, means the FDA.

- 1.85 “Regulatory Leader” has the meaning set forth in Section 7.4.1.
- 1.86 “Samples” means biological material obtained from a human subject, including Clinical Samples and Non-Clinical Trial Samples, to be used in a BTO Assay to detect a Biomarker.
- 1.87 “Sponsor” means a Person who takes responsibility for and initiates a clinical investigation or who takes responsibility for a Regulatory Submission. By way of example Janssen is the Sponsor for the Clinical Trial and BTO is the Sponsor for the IDE.
- 1.88 “Tax” or “Taxes” means any present or future taxes, levies, imposts, duties, charges, assessments or fees of any nature (including any interest thereon).
- 1.89 “Technology” means any process, machine, article of manufacture, composition of matter, concepts and methods, that is Controlled by a Party or generated pursuant to this Agreement. Examples of Technology include but are not limited to Know-How (including trade secrets), as well as concepts, discoveries, formulae, ideas, inventions, improvements, materials, reagents, assays, research plans, assay development and manufacturing procedures.
- 1.90 “Term” means the term of this Agreement, as set forth in Section 13.1.
- 1.91 “Territory” means the United States of America and its territories and possessions.
- 1.92 “Third Party” means any Person other than Janssen or BTO (or their respective Affiliates).
- 1.93 “Third Party Claims” has the meaning set forth in Section 11.1.
- 1.94 “Trademarks” means all registered and unregistered trademarks (including all common law rights thereto), service marks, trade names, brand names, logos, taglines, slogans, certification marks, Internet domain names, trade dress, corporate names, business names and other indicia of origin, together with the goodwill associated with any of the foregoing and all applications, registrations, extensions and renewals thereof throughout the world, and all rights therein provided by international treaties and conventions.
- 1.95 “Unpaid Amounts” has the meaning set forth in Section 13.3.1(b)(i).
- 1.96 “USD” means the official currency of the United States of America, US Dollars (\$).

2

BTO CDx DEVELOPMENT

- 2.1 Overview. The Parties desire to: (i) undertake the Development of the BTO CDx; and (ii) to Commercialize the BTO CDx. For the avoidance of doubt, Janssen shall have the sole and exclusive responsibility for and right, at its sole discretion and authority, to design, develop, obtain Regulatory Approval for, and Commercialize the Janssen Drug.
- 2.2 Conduct of BTO CDx Development Activities. BTO, with Janssen's collaboration and cooperation, shall develop the BTO CDx pursuant to the provisions of the Development Plan, which shall set forth, among other things:
- 2.2.1 the roles and responsibilities of and Development activities to be performed by each Party under the Development Plan and associated performance standards, including, without limitation, each Party's responsibility for Regulatory Approval of the BTO CDx and post-Regulatory Approval commitments regarding the BTO CDx;
- 2.2.2 the Milestone payments to be made by Janssen;
- 2.2.3 the timelines for Development activities and the associated Milestones; and
- 2.2.4 target specifications for the BTO CDx.

The initial Development Plan, as mutually agreed by the Parties, is attached as Exhibit 1.36. As may be necessary from time-to-time and to pursue additional activities as the Parties may agree respecting Development of the BTO CDx in the territories not included in the initial Development Plan, the Joint Project Team ("JPT") may suggest appropriate revisions to the Development Plan to the Joint Steering Committee ("JSC") for its prior written review and approval. If the JSC approves such revisions, and the Parties consent in writing to such revisions, then the JPT shall revise the Development Plan accordingly with appropriate amendments. The revised Development Plan shall thereafter be the Development Plan for all purposes of this Agreement, unless further revised as provided in this Section 2.2. The Parties shall each use their Commercially Reasonable Efforts to perform their obligations under the Development Plan in compliance with Applicable Law. Each Party will reasonably assist and support the other Party with communications necessary for the conduct of Development ascribed to the other Party; provided that, this shall not imply any obligation to provide monetary compensation, incur costs or expenses, or perform activities that are not outlined in the Development Plan.

2.3 Materials (including Data).

- 2.3.1 In the event that a Party requires tangible Samples, components, Data and the like, to conduct the Development Plan that are in the possession of the other Party (collectively “Materials”), the Parties shall identify the needed quantity and type of such Materials in the Development Plan. Each Party will furnish to the other Party Materials identified in the Development Plan to the extent possible. BTO and Janssen will each comply with all Applicable Laws relating to Materials. Without limiting the foregoing, to the extent that such Materials include Samples and/or Personal Data, the Party providing the Materials, Samples, and/or Personal Data, represents and warrants that, based on information available to that Party that either the providing Party, its Affiliates or its Third Party contractors has obtained all informed consents required by Applicable Law with respect to such Materials or that it is not required under Applicable Law to obtain such informed consents.
- 2.3.2 Each Party receiving Materials hereunder shall use such Materials solely in connection with conducting the Development Plan, or to exercise a right or perform an obligation explicitly provided under this Agreement, and for no other purpose and such use shall be in full compliance with all Applicable Laws. Such receiving Party agrees to retain possession of the Materials and not to provide such Materials to any Third Party without the providing Party’s prior written consent, provided such consent is not required for providing Materials to a Third Party if such provision is necessary for the receiving Party to exercise a right or perform an obligation explicitly provided under this Agreement. All rights, title and interest in the Materials and any Intellectual Property Rights therein, shall remain the sole property of the Party providing such Materials notwithstanding the transfer to and use by the Party receiving such Materials.
- 2.3.3 Obligations Concerning Personal Data. As applicable to its performance hereunder, each Party shall (i) hold in confidence all Materials that it receives and that identifies or could be used to identify an individual (“Personal Data”), except as required or permitted under this Agreement or to the extent necessary to be disclosed to Regulatory Authorities as part of the review

process; (ii) comply with all Applicable Laws, as amended from time to time, with respect to the collection, use, storage, and disclosure of any Personal Data, including without limitation, the U.S. Health Insurance Portability and Accountability Act (HIPAA) and the regulations promulgated thereunder. BTO shall take all appropriate technical and organizational measures to protect Personal Data against loss, misuse, and any unauthorized, accidental, or unlawful access, disclosure, alteration, or destruction, including without limitation, implementation and enforcement of administrative, technical, and physical security policies and procedures applicable to Personal Data, and BTO shall comply with Exhibit 2.3.3, Protection of Personal Information. To the extent that BTO is permitted under the terms of this Agreement to share Personal Data with any Third Party, BTO shall assure that such Third Party complies in full with the provisions of this Section 2.3.3 and Exhibit 2.3.3.

- 2.3.4 BTO's Additional Obligations Concerning Janssen Data. In addition to the obligations respecting Personal Data as specified above, BTO shall comply with Janssen's Data Safeguards policy as set forth in Exhibit 2.3.4, Data Safeguards, for all Janssen Data, including Personal Data.
- 2.4 Access to Clinical Trial Protocol and Other Related Documents. As necessary and relevant for BTO to perform its Development activities and obtain Regulatory Approval for the BTO CDx, Janssen shall promptly, within timelines as agreed and revised from time-to-time by the JSC in accordance with Article 7, provide Regulatory Authorities access to or copies of the applicable sections of the current Clinical Trial Protocol(s) and Clinical Trial report(s), including the informed consent forms, relevant parts of the investigators brochure or any other Clinical Trial document, as applicable to the BTO Assay.
- 2.5 Delays. If it is expected that a delay might occur which may impact a Party's completion of any Development activities according to the schedule of the Development Plan, the Party anticipating the delay shall promptly bring it to the attention of the other Party and provide notice to the JPT within [***] of becoming aware of any risk of delay. The Parties acknowledge that BTO may incur certain project maintenance and stand-by costs during a delay in the Development Plan timeline related to the Janssen Drug. Parties shall discuss in good faith such delay and attempt to reach mutual agreement on any necessary adjustments or amendments to the Development Plan. Such discussions shall take place within the JPT, provided that any amendments to the Development Plan shall be made in accordance with the provisions in Article 7.

- 2.6 Reporting. The Parties shall keep each other promptly informed on an ongoing basis through the JPT and the JSC on the progress of the Development Plan, including forecasts of expected performance and completion of activities.
- 2.7 Documentation. All deliverable documents shall comply with Applicable Laws, including requirements in (i) the (EU) 2017/746 of the European Parliament (IVDR) and of the Council of 5 April 2017 on in vitro diagnostic medical devices and repealing Directive 98/79/EC and Commission Decision 2010/227/EU, to the extent that these regulations and directives apply to clinical studies, (ii) ISO 13485: requirements, (iii) QMSR (21 CFR 820) and (iv) applicable GMP and GCP standards, as defined as of the Effective Date and any subsequent updates hereto, in each case as reasonably interpreted by the JSC. Each Party must maintain and store documentation in a timely manner providing relevant Regulatory Authorities with reasonable access to requested information during audits.
- 2.8 Traceability. Traceability shall be provided regarding relevant documents during the Development Activities through verification to validate results, in accordance with Applicable Laws, including without limitation, (i) European Union Regulation 2017/746 (IVDR), (ii) ISO 13485 requirements, to the extent that these regulations and directives apply to clinical studies, (ii) QMSR (21 CFR 820) and (iii) applicable GMP and GCP standards, as in effect as of the Effective Date and any subsequent updates and/or amendments thereto.
- 2.9 Use of Third Parties and Affiliates. Unless otherwise expressly provided in this Agreement, the activities to be performed by a Party under this Agreement (other than any activities pertaining to the development and Commercialization of the Janssen Drug by Janssen, which, for the avoidance of doubt, shall be outside the scope of this Agreement) may be performed by an Affiliate of a Party and by a Third Party contractor on such Party's behalf, provided that a Third Party contractor may be used only if (i) the Party soliciting such performance shall obtain the other Party's prior written consent (such prior written consent shall not be unreasonably withheld), and (ii) the Third Party is bound and agrees to comply with the terms and conditions of this Agreement, including but not limited to Article 9 (Intellectual Property) and Article 12 (Confidentiality) of this Agreement, and (iii) such performance of activities by the Third Party is consistent with the rights and obligations of the Parties under this Agreement. The Party who solicits the performance of any Third Party contractor or uses an Affiliate, shall be liable for the breach of any of the provisions of this Agreement by such Third Party contractor or Affiliate. Notwithstanding the foregoing, Janssen hereby approves of BTO's use of the Third Party contractors listed on Exhibit 2.9.

3 REGULATORY MATTERS

3.1 BTO CDx Approvals.

- 3.1.1 General. As between the Parties, and subject to the other provisions of this Article 3 and the Development Plan or Commercialization Plan, BTO, at its own expense, shall have the sole right and responsibility to prepare, obtain and maintain Regulatory Approvals for, and to conduct communications with Regulatory Authorities regarding Regulatory Approvals for, the BTO CDx. BTO shall develop the BTO CDx under the Development Plan or Commercialize under the Commercialization Plan to comply with all Applicable Laws and fulfill all statutory requirements. BTO shall use Commercially Reasonable Efforts toward obtaining Regulatory Approval of the BTO CDx in the Territory in the time specified in the applicable Development Plan or Commercialization Plan. As it becomes available or known to Janssen, Janssen shall provide BTO with its relevant launch plans and its release timelines for each applicable Janssen Drug for the Territory specified in the Development Plan or Commercialization Plan. The Parties shall cooperate and assist each other reasonably in the Regulatory Approval process to coordinate and align their Regulatory Approval filings, or equivalents, and activities pertaining thereto, and subject to the other provisions of this Section 3.1.1. By way of non-limiting example, BTO shall be responsible for: (A) ISO13485 certification: design, development, manufacture, and servicing of next generation sequencing (“NGS”) fetal RBC antigen detection in vitro diagnostic test system; (B) FDA establishment, registration and device listing; (C) generation of all data and documentation required for the Regulatory Submission including but not limited to protocols, test reports, and raw data files related to: test protocols, test reports, specifications, test methods, test method validation, equipment IQ/OQ/PQ, manufacturing facility environmental controls, access controls, supplier management, personnel training records, analytical validation, clinical validation, manufacturing validations, risk analysis, labelling, quality system documentation, software validation, etc.; (D)

planning, preparation, and management of pre-submission meetings with FDA; (E) compiling the Regulatory Submission shell and submitting it to FDA; (F) compiling the Regulatory Submission and submitting it to FDA; (G) responding to all FDA requests for information within the timeline established by FDA; (H) hosting and managing pre-approval inspections and responding to audit findings within the timeline established by FDA; (I) the Regulatory Submission, including submission of supplements and annual reports and any other reports if required by FDA; (J) Compliance with FDA post-marketing surveillance requirements, including complaint handling, MDR reporting, recalls & correction and CAPA; (K) applicable FDA Quality System Regulations (21 CFR Part 820), as the same may be amended from time to time, and comparable regulations for other Regulatory Authorities; and (L) applicable GMP and GCP standards.

- 3.1.2 As between the Parties, all applications for Regulatory Approval, together with related documentation, generated by BTO or any of its Affiliates with respect to the BTO CDx anywhere in the world shall be owned by, and shall be the sole property and held in the name of, BTO or its designee. Janssen shall provide BTO with any applications for Regulatory Approval and other information in the Control and possession of Janssen or any of its Affiliates with respect to the Janssen Drug as may be necessary for BTO or any of its Affiliates to refer to such Janssen Drug to obtain or maintain Regulatory Approvals for the BTO CDx, developed under this Agreement. In addition to the foregoing, at BTO's request, Janssen shall perform and provide to BTO any analyses of Clinical Data that are reasonably necessary to perform any testing required to obtain or maintain Regulatory Approval of the BTO CDx, for use with the applicable Janssen Drug for the applicable Indication.
- 3.1.3 Pre-Submission Review. BTO shall provide Janssen with copies of all pre-submission communications from a Regulatory Authority with a minimum of [***] (or such shorter time period as may be required for BTO to comply with any applicable regulatory deadline) to review and comment on all regulatory filings that are required to be made to obtain Regulatory Approval of the BTO CDx in the Territory, in each case, to the extent any such filing involves a substantive discussion of such Janssen Drug or Janssen's Data. Janssen shall be entitled to review and comment on (and shall prioritize its review of) any regulatory filings and communications by BTO that are

reasonably likely to result in any material delay to, or otherwise have a material effect on obtaining or maintaining Regulatory Approval of the BTO CDx in the Territory or Regulatory Approval of such Janssen Drug in the Territory. BTO shall incorporate Janssen's reasonable comments with respect to the foregoing regulatory filings and communications to the extent relating to the safety, efficacy or intended use of such Janssen Drug or the interpretation of data generated in the conduct of Clinical Trials concerning the applicable Janssen Drug; *provided that* in no event shall BTO be obligated to delay the submission of any required regulatory response due to Janssen's failure to provide its comments in a timely manner.

- 3.1.4 Janssen Attendance at Meetings. To the extent legally permissible, BTO shall provide Janssen with a reasonable opportunity to attend any scheduled meeting with a Regulatory Authority regarding obtaining Regulatory Approval of the applicable BTO CDx solely to the extent such meeting includes (or is reasonably anticipated to include) a material discussion of such Janssen Drug or Janssen's related Data or is reasonably likely to result in any material delay to, or otherwise have a material effect on obtaining or maintaining, Regulatory Approval of such BTO CDx within the Territory or Regulatory Approval of such Janssen Drug within the Territory and for the Indication. At BTO's reasonable request, Janssen shall participate in any such scheduled meeting at Janssen's sole cost and expense.
- 3.1.5 Limitations on Review. Notwithstanding anything contained in this Section 3.1 or any other term or condition of this Agreement to the contrary, Janssen acknowledges and agrees that BTO shall have no obligation to provide or disclose to Janssen any documents, materials or other information (including applications for Regulatory Approval and supporting or related information) with respect to (A) any therapeutic product that is not the Janssen Drug, (B) any confidential or proprietary information of any Third Party, (C) BTO Background Technology, or (D) other Know-How, in each case ((A) through (D)), to the extent (I) they do not relate specifically to the BTO CDx developed pursuant to this Agreement or (II) they contain information that BTO protects as a trade secret and is not necessary for Janssen or its Affiliates to possess in order to refer to any such BTO Assay that is subject to the Development Plan and the Commercialization Plan or the BTO CDx in obtaining or maintaining Regulatory Approval for the Janssen Drug for the applicable Indication; provided, however, that nothing in this sentence is intended or shall be construed to limit (i)

any obligation of BTO hereunder to provide or disclose to Janssen any documents, materials or other information (including applications for Regulatory Approval and supporting or related information) that are necessary for Janssen or its Affiliates to possess in order to obtain or maintain Regulatory Approval for the Janssen Drug for which the BTO CDx is used or (ii) Janssen's rights or BTO's obligations under Section 3.4.2.

- 3.1.6 Pre and Post-Submission Copies. Within [***] after submission of any regulatory filing and communications that are made to obtain Regulatory Approval of the BTO CDx pursuant to the Development Plan or the Commercialization Plan, BTO shall provide Janssen with a copy of such submitted regulatory filing (for clarity, without any obligation to translate such filing into any language other than the language in which such filing was made). Additionally, BTO shall share with Janssen any FDA observations, audit-related findings, external audits with any observations, legal injunctions, or any issues that can impact the Janssen Drug approval timelines within [***] of receiving such feedback.

3.2 Janssen Drug Approvals

- 3.2.1 General. As between the Parties, and subject to the other provisions of this Article 3 and the applicable Development or Commercialization Plan, Janssen shall, at its own expense, have the sole right and responsibility to prepare, obtain and maintain Regulatory Approvals for, and to conduct communications with Regulatory Authorities regarding Regulatory Approvals for, the Janssen Drug.

- 3.2.2 Regulatory Documentation. As between the Parties, all applications for Regulatory Approval, together with related documentation, generated by Janssen or any of its Affiliates with respect to the Janssen Drug anywhere in the world shall be owned by, and shall be the sole property and held in the name of, Janssen or its designee. At Janssen's reasonable request, BTO shall provide Janssen with any applications for Regulatory Approval and other information in the Control and possession of BTO or any of its Affiliates with respect to the BTO CDx developed pursuant to this Agreement as may be necessary for, or reasonably requested by, Janssen or any of its Affiliates to refer to such BTO CDx that is the subject of the Development Plan and the Commercialization Plan or the BTO CDx in obtaining or maintaining Regulatory Approvals for the Janssen Drug for the

Indication. Janssen shall have the right to prepare and submit to Regulatory Authorities, and conduct communications with Regulatory Authorities regarding, clinical documentation specific to study risk determination of the BTO CDx developed or Commercialized under the applicable Development Plan or Commercialization Plan that is being used in the Clinical Trials; provided, however, that such right shall be without limitation to BTO's rights to prepare and submit to Regulatory Authorities, and conduct communications with Regulatory Authorities regarding, any study risk determination with respect to the BTO CDx that is the subject of the Development Plan and the Commercialization Plan, and further provided, however, that BTO's rights to prepare and submit such risk determination do not supersede BTO's obligations under Section 3.1 with respect to Janssen's right to review regulatory filings and participate in meetings with Regulatory Authorities.

- 3.2.3 Pre-Submission Review. Janssen shall provide BTO with a minimum of [***] (or such shorter time period as may be required for Janssen to comply with any applicable regulatory deadline) to review and comment on all regulatory filings that are required to be made to obtain Regulatory Approval of the applicable Janssen Drug in the Territory for use with the BTO CDx (and any filings of clinical documentation specific to risk determination of a BTO CDx developed under the applicable Development Plan or Commercialization Plan that is being used in Janssen's Clinical Trials), in each case, to the extent any such filing involves a substantive discussion of such BTO Assay or BTO CDx or BTO's related data. BTO shall be entitled to review and comment on (and shall prioritize its review of) any regulatory filings and communication by Janssen that are reasonably likely to result in any material delay to, or otherwise have a material effect on obtaining or maintaining Regulatory Approval of the applicable BTO CDx. Janssen shall incorporate BTO's comments with respect to the foregoing regulatory filings and communications to the extent relating to the BTO CDx subject to the Development Plan and the Commercialization Plan or the BTO CDx; *provided that* in no event shall Janssen be obligated to delay the submission of any required regulatory response due to BTO's failure to provide its comments in a timely manner.

- 3.2.4 Communications and Meetings with Authorities. To the extent legally permissible, Janssen shall provide BTO with a reasonable opportunity to attend any scheduled meeting with a Regulatory Authority that is anticipated to involve a Material Discussion of the BTO CDx, or BTO's related Data in the Territory. For purposes of this Section 3.2.4, a "Material Discussion" is a discussion of Analytical Validation Data, design specifications, pre-analytical specifications, manufacturing specifications, and manufacturing Data. At Janssen's reasonable request, BTO shall participate in any such scheduled meeting at BTO's sole cost and expense. To the extent legally permissible, if Regulatory Authorities outside the Territory seek a Material Discussion of the BTO Assay in the context of Janssen seeking Regulatory Approval of the Janssen Drug, then Janssen shall invite BTO to participate in the review of the information to be communicated to the Regulatory Authority. BTO acknowledges and agrees that the need to submit timely communications to Regulatory Authorities outside the Territory may not permit extensive advanced notice, but Janssen shall invite BTO to participate in the review of any such communications within a commercially reasonable period after the necessity for such a communication arises.
- 3.2.5 Limitations on Review. Notwithstanding anything contained in this Section 3.2 or any other term or condition of this Agreement to the contrary, BTO acknowledges and agrees that Janssen shall have no obligation to provide or disclose to BTO any documents, materials or other information (including applications for Regulatory Approval and supporting or related information) with respect to (i) any assay that is not a BTO CDx to be developed or Commercialized under this Agreement, (ii) any confidential or proprietary information of any Third Party, (iii) aspects of Janssen Drugs, or (iv) other confidential or proprietary information of Janssen, in each case (i) through (iv), to the extent (A) they do not relate specifically to the Janssen Drug for which a BTO CDx is Developed or Commercialized pursuant to this Agreement or (B) they contain information that Janssen protects as a trade secret; provided, however, that nothing in this sentence is intended or shall be construed to limit (I) any obligation of Janssen hereunder to provide or disclose to BTO any documents, materials or other information (including applications for Regulatory Approval and supporting or related information) that are necessary for BTO or its Affiliates to possess in order to obtain or maintain Regulatory Approval for the BTO CDx or (II) BTO's rights or Janssen's obligations under the last sentence of Section 3.1.2 or under Section 3.4.1.

- 3.2.6 Post-Submission Copies. Within [***] after submission of any regulatory filing and communications that are made to obtain Regulatory Approval of the Janssen Drug for the Indication(s) for use with the corresponding BTO CDx in the Territory, Janssen shall provide BTO with a copy of such submitted regulatory filing, limited to the portions of such filing that reference the BTO CDx (for clarity, without any obligation to translate such filing into any language other than the language in which such filing was made).
- 3.3 Notice of Events or Recalls. Subject to Sections 6.2 and 6.3, each Party will promptly inform the other Party of any field safety corrective actions, recalls, or removals of the BTO CDx for use with the Janssen Drug, or any similar material event concerning the BTO CDx or any field safety corrective actions, recalls, or removals of the Janssen Drug. Janssen shall have no liability for any costs or expenses respecting recalls of the BTO CDx absent any such recall attributed in whole or part to the Janssen Drug. In the event of a recall of the Janssen Drug in the Territory, BTO shall have no liability for any costs or expenses respecting such recalls of the Janssen Drug absent any such recall attributed in whole or part to the BTO CDx.
- 3.4 Rights of Reference.
- 3.4.1 Janssen shall, upon reasonable request, provide BTO with any appropriate letters or other similar documentation necessary to authorize such entity to cross-reference and rely (on a non-exclusive basis) upon the contents of Janssen's application for Regulatory Approval in the Territory and related documentation for the Janssen Drug which is the subject of the Development Plan or the Commercialization Plan, for the sole purposes of filing, obtaining and maintaining Regulatory Approval for the BTO Assay which is the subject of the applicable Development Plan or Commercialization Plan in the Territory.
- 3.4.2 BTO shall, and shall ensure that its Affiliates shall, upon reasonable request provide Janssen (and Janssen's designated Affiliates and (sub)licensees) with any appropriate letters or other similar documentation necessary to authorize such entity to cross-reference and rely (on a non-exclusive basis) upon the contents of BTO's or any of its Affiliate's (or, to the extent Controlled by BTO or any of its Affiliates, any of their respective (sub)licensee's) application for Regulatory Approval and related documentation for any BTO Assay which is the subject of the Development Plan or the Commercialization Plan, for the sole purposes of filing, obtaining and maintaining Regulatory Approvals for the Janssen Drug which is the subject of the applicable Development Plan or Commercialization Plan throughout the world.

- 4.1 Supply of the BTO Assay. The Parties acknowledge that BTO and Janssen Research & Development, LLC ("JRD"), an Affiliate of Janssen, have entered into Prior Collaboration Agreement. Nothing in this Agreement is intended to amend or modify the Prior Collaboration Agreement, except to the extent expressly stated as such.

COMMERCIALIZATION

5.1 Commercialization.5.1.1 Generally.

- (a) Commercialization shall be performed in accordance with the terms of this Agreement, including the Commercialization Plan. At least [***] prior to the First Commercial Sale, the JSC shall establish the JCC and BTO shall provide Janssen with its Commercialization Plan for review and discussion with Janssen. At least [***] prior to the First Commercial Sale of the Janssen Drug, the JCC shall commence discussions of the strategy for BTO to make or cause to be made commercially available the BTO CDx for the Territory. If BTO does not provide reasonable evidence to Janssen that it has satisfied each of the preceding obligations in this Section 5.1.1(a) within the time specified, any such failure will be deemed a Failure of Continuous Supply as provided in Section 5.3 with the consequent rights and obligations as provided under Section 5.3 in the event of such failure. If BTO and Janssen are unable to agree on a Commercialization Plan after good faith negotiations at least [***] prior to the First Commercial Sale, Janssen may terminate this Agreement pursuant to Section 13.2.9.
- (b) Upon receipt of Regulatory Approval to market a BTO CDx in the Territory, BTO shall use Commercially Reasonable Efforts to make the BTO CDx and the results thereof available in the Territory for testing patients for the Indication during the CRE Period.

5.2 Obligations and Roles.

- (a) As between the Parties, and subject to the role specified for Janssen in Section 5.2(b), BTO shall be responsible, and shall exercise its Commercially Reasonable Efforts, for the Commercialization of the BTO CDx in the Territory in which BTO has made such BTO CDx available pursuant to the

Commercialization Plan and undertaking the activities as set forth in the “Commercialization Plan, and shall continue using Commercially Reasonable Efforts to Commercialize the BTO CDx in the Territory subsequent to completion of the activities specified in the Commercialization Plan, during the CRE Period. The Commercialization Plan may include, by way of example, activities in the areas of marketing plans, pricing, market access, sales, reimbursement, training, medical affairs support, life cycle management, publications, medical congress support, medical education, field support and tools. BTO shall not provide or distribute any Labeling containing any information concerning the Janssen Drug unless such use satisfies the guidelines and approval process provided in Section 5.4. and related agreement by the Parties as provided in Section 5.4.

- (b) As between the Parties, Janssen may, at its discretion, separately and independently inform and educate Janssen’s customers and related parties (including but not limited to Janssen Drug prescribing physicians, other health care practitioners, patients, and payors) regarding the BTO CDx with materials prepared by Janssen in areas including, but not limited to, sales and marketing, medical affairs, reimbursement, and market access. Janssen shall not provide or distribute any Label containing any information concerning the BTO CDx unless such use satisfies the guidelines and approval process provided in Section 5.4 and related agreement by the Parties as provided in Section 5.4.

- 5.3 Inventory. During the CRE Period, BTO shall use Commercially Reasonable Efforts to build and maintain an inventory of the necessary components of the BTO CDx for use in the Territory sufficient to meet the anticipated demand for such BTO CDx in the Territory as set forth in forecasts provided by Janssen. BTO shall promptly inform Janssen of any issues that may negatively impact its ability to maintain the required inventory. Upon notice of such issues, or in the event that BTO does not satisfy the inventory requirements specified in this Section 5.3, the JSC shall promptly discuss possible solutions and the Parties shall, in good faith negotiate terms to implement solutions to the issues if practicable solutions are identified, provided that such JSC discussions and obligation to negotiate terms are not in lieu of, or shall in any way delay or prevent Janssen from implementing, Janssen’s rights hereunder respecting BTO failure to satisfy inventory requirements specified in this Section 5.3. In the event that BTO does not satisfy the inventory requirements specified in this Section 5.3 and does not provide reasonable written

assurances to Janssen providing reasonable evidence that it can meet the supply requirements of Section 6.1.2, such failure of inventory requirements shall be deemed a “Failure of Continuous Supply” under Section 6.1.2 with the consequent effect as specified in the event of such failure. For clarity, BTO’s failure to meet the inventory requirements, despite its use of Commercially Reasonable Efforts does not impact or limit Janssen’s rights under Section 6.1.2 but shall not be considered a breach or default of this Agreement by BTO unless BTO fails to use Commercially Reasonable Efforts as required hereunder.

- 5.4 Labeling. BTO shall incorporate Janssen’s comments with respect to Labeling of the BTO CDx (i) to the extent relating to the safety, efficacy or intended use of the Janssen Drug for the Indication or the interpretation of data generated in the conduct of Clinical Trials concerning the Janssen Drug and (ii) as otherwise reasonably necessary for Commercialization of the BTO CDx. Prior to Commercialization of the BTO CDx or the Janssen Drug, the Parties will work together in good faith to define guidelines and a process for reviewing and approving the Labeling.

6 INSPECTIONS, SUPPLY FAILURE, AND COMPLAINTS

6.1 Inspections: Failure of Continuous Supply

6.1.1 Inspections and Audits

- (a) Annually during the Term, commencing on the first (1st) anniversary of the Effective Date, Janssen shall: (i) first have the right to request (upon no less than [***] prior notice, unless a shorter period is mutually agreed to by the Parties) access to non-confidential, published results from BTO’s most recent (i.e., closest to the date of the request) FDA and/or ISO audits or inspections and other non-confidential information relevant to BTO’s obligations under this Agreement; and (ii) if such non-confidential published results are not reasonably satisfactory to Janssen, in Janssen’s good faith opinion, to assure Janssen of BTO’s performance and ability to perform and satisfy its obligations under this Agreement, Janssen may have such results evaluated by an independent Third Party with relevant industry experience, reasonably acceptable to BTO. If the Parties cannot agree on the selection of such independent Third Party, the issue shall be escalated to the JSC for resolution. If such Third Party expert confirms the results to be below industry standard, Janssen may inspect and audit (either by itself, pursuant to Janssen’s own audit procedures, or through a Third Party reasonably acceptable to BTO) BTO’s laboratory testing service operation, manufacturing operation, and related facilities upon reasonable notice (which shall be no less than [***] prior notice, unless a shorter period is mutually agreed to by the Parties), and during normal business hours.

- (b) In connection with any inspection or audit, BTO shall have no obligation to provide Janssen and/or a Third Party access to BTO confidential information related to any other BTO product or Technology under development that is not the BTO CDx subject to this Agreement.
- (c) During the Term of this Agreement, BTO shall inform Janssen within [***] of its first notification of any audit or inspection by any Regulatory Authority which directly relates to the BTO Assay subject to the Development Plan and Commercialization Plan or the BTO CDx. BTO shall promptly provide to Janssen in writing the results of any such audits or inspections, and of any audits or inspections that reasonably can be expected to materially impact the Intended Use of the BTO CDx described in this Agreement, once the audit or inspection report is received and processed internally at BTO, but in any event within [***] of BTO's receipt of the inspection report.
- (d) The duration of any inspection or audit by Janssen, or by a Third Party on behalf of Janssen, pursuant to this Section 6.1.1 shall not exceed [***] per site ("Audit Period"), unless Janssen provides a reasonable reason to extend such inspection or audit. Janssen shall issue to BTO a written report detailing Janssen's observations and conclusions of any such inspection or audit and BTO shall use Commercially Reasonable Efforts to institute reasonable corrective measures to address deficiencies identified in Janssen's inspection or audit.
- (e) Any representatives of Janssen participating in such inspection or audit shall comply with BTO's instructions and policies related to work-place safety, and Janssen representatives that are Third Parties participating in such inspection or audit shall enter into confidentiality agreements with BTO in a form reasonably acceptable to BTO.
- (f) The Parties acknowledge that BTO may be subject to extraordinary circumstances that may render an audit within the timelines mentioned in this Section 6.1.1 impossible, e.g., in case of already planned Regulatory Authority inspections or Third Party audits at the relevant BTO or subcontractor facilities. In such case the Parties shall discuss in good faith alternative audit dates as soon as possible after the relevant timelines. The extension of such audit date shall to the extent possible not exceed [***] calendar days.

- 6.1.2 Continuous Availability of the BTO CDx. During the CRE Period, BTO shall use Commercially Reasonable Efforts to maintain the continued availability of the BTO CDx in the Territory sufficient to enable the number of tests forecasted by Janssen to be needed for Commercialization of the Janssen Drug in each such country. BTO shall not be discharged from its obligation to maintain such continued availability of the BTO CDx hereunder due to any reasons related to the lack of commercial viability of the BTO CDx in the Territory; provided, however, BTO shall not be liable to Janssen or any Third Party in any way for failure to make the BTO CDx available for one or more reasons not within BTO's direct control. BTO shall provide Janssen at least [***] (or such shorter period as is reasonable under the particular circumstances) prior written notice of any possible shortfall in the BTO CDx that is expected. Upon Janssen's receipt of such prior written notice, or upon BTO's failure to supply the BTO CDx as required in this Section 6.1.2, the JSC shall promptly discuss possible solutions for any such possible shortfall or failure to supply and the Parties shall, in good faith negotiate terms to implement a solution to the possible shortfall or failure to supply if a practicable solution is identified, provided that such JSC discussions and obligation to negotiate terms are not in lieu of, or shall in any way delay or prevent Janssen from implementing, Janssen's rights hereunder regarding BTO's failure to supply the BTO CDx as required in this Section 6.1.2. BTO's failure to supply the BTO CDx as required in this Section 6.1.2 will be deemed a Failure of Continuous Supply for which Janssen shall have the termination rights under Section 13.2.3 and remedies under Section 13.3.1(b) whether or not BTO has used Commercially Reasonable Efforts to supply the BTO CDx, but will not be considered a breach or default of this Agreement unless BTO fails to use Commercially Reasonable Efforts as required hereunder.
- 6.2 BTO CDx Related Complaints, Corrections and Removals. BTO recognizes and accepts that Janssen does not have and will not establish a system for handling of BTO CDx complaints and adverse (device) events. In the event Janssen receives any product quality complaints and/or adverse (device) event reports pertaining to the BTO CDx, Janssen shall work diligently to forward to BTO the

complaint and/or report as soon as reasonably possible from receipt of such complaint or adverse event by Janssen, but in any event within [***] of such receipt. Janssen recognizes that BTO needs such information to comply with reporting requirements imposed by Applicable Laws. BTO shall be responsible for implementing and maintaining a post-market surveillance procedure and program in compliance with Applicable Laws. BTO shall provide Janssen with adverse event reports and complaint trending reports relating to the BTO CDx. BTO will notify Janssen promptly in the event of any field safety corrective actions, recalls, or removals in accordance with Section 3.3. The obligations in this Section 6.2 shall survive the expiration or termination of this Agreement for as long as any unexpired inventory of the applicable BTO CDx and the applicable Janssen Drug continue to be Commercialized and for one year thereafter.

- 6.3 Janssen Drug Complaints. Janssen recognizes and accepts that BTO does not have and will not establish a system for handling of Janssen Drug complaints. In the event BTO receives any product quality complaints and/or adverse event reports pertaining to the Janssen Drug, BTO shall work diligently to forward the complaint and/or report as soon as reasonably possible from receipt of such complaint or adverse event by BTO regulatory affairs, but in any event within [***] of such receipt. BTO recognizes that Janssen needs such information to comply with reporting requirements imposed by Applicable Laws. The obligations in this Section 6.3 shall survive the expiration or termination of this Agreement for as long as any unexpired inventory of the applicable BTO CDx and the applicable Janssen Drug continue to be Commercialized and for one year thereafter.
- 6.4 BTO CDx Testing Adverse Events. BTO will be solely responsible for reporting any and all applicable adverse events in relation to any testing respecting the BTO CDx, whether used in a performance study or commercialized, outside of the Clinical Trial, per the Applicable Laws of the countries where the testing is being conducted or if appropriate per the Applicable Laws of the countries where the samples, used for testing, originate from. Such reporting shall be in accordance with Applicable Law (including, if applicable, Article 80 of EU IVDR [Recording and reporting of adverse events that occur during performance studies] and Article 83 of EU IVDR for reporting for commercialized BTO CDx).
- 6.5 Clinical Studies Adverse Events. Janssen will be solely responsible for reporting any and all applicable adverse events in relation to any Clinical Trial to all applicable Regulatory Authorities of the Territory in which the Clinical Trial is being conducted.

- 6.6 Changes to Labeling. Each Party shall notify the other Party in writing or through the JSC of any relevant proposed changes, e.g., based on notifications from Regulatory Authorities to the Labeling for their respective products under this Agreement (respectively Janssen Drugs for Janssen and BTO CDx for BTO) prior to implementing such proposed changes. Relevant proposed changes shall, for the purpose of this Section 6.6, mean changes that are related to or have the potential to impact the other Party's corresponding product. Such relevant proposed changes will be implemented by the responsible Party as required or at the discretion of the responsible Party if not required, provided however that BTO shall not make any such relevant proposed changes without Janssen's prior written approval.

7 GOVERNANCE

- 7.1 Joint Steering Committee. The Parties shall form a joint steering committee (the "Joint Steering Committee" or "JSC"), which shall have the primary role in monitoring and ensuring the overall success of the Development Plan and Commercialization Plan, including Development and Commercialization of the BTO CDx. The JSC shall be comprised of [***]. The JSC shall meet for the first time within [***] calendar days after the Effective Date and thereafter at least twice a year during the Term, unless the Parties or the JSC decide that more or less frequent meetings are required; *provided, however*, that in the event of an exigent situation, including a situation in which a decision by the JSC is required, a meeting shall be held within [***] calendar days after written request for such meeting by any Party; *further provided, however*, that if a matter requires more prompt attention by the JSC in the reasonable judgment of a Party, that Party may call a meeting with [***] calendar days written notice to the other Party that describes the reason for urgency. The JSC shall be led by [***]. In the event of an impasse, the matter shall be resolved pursuant to Section 7.3. JSC meetings may be conducted in person, by telephone or by videoconference as agreed by the JSC co-chairs. Each Party shall provide the other Party with written notice of its representatives appointed to the JSC promptly after the Effective Date of this Agreement. Each of BTO and Janssen may substitute or replace any of its representatives on the JSC at any time and for any reason upon written notice to the other Party. Additionally, upon invitation by the JSC, the JPT Leads (or other JPT or JCC members) may attend JSC meetings as non-voting members, and each JSC member may reasonably invite other guests to the meetings, in order to discuss special technical or commercial topics relevant to the applicable agenda; provided, that any guests are subject to the confidentiality provisions set forth in Article 12.

7.2 JSC Responsibilities. The JSC shall be responsible for (a) reviewing the progress of the Development and ensuring that the Development commences and proceeds according to the Development Plan; (b) coordinating the Development and Commercialization activities under the Development Plan and Commercialization Plan; (c) discussing and suggesting amendments to the Development Plan and Commercialization Plan to a higher decision level for both Parties; (d) exchanging information related to publication strategies and review of such information; (e) resolving issues or disagreements raised by the JCC, JPT or JPT Leads, subject to final approval by the Parties; (f) facilitating the transfer of information and data related to development, Commercialization and Regulatory Approval processes or other processes for completing activities respecting the Development Plan and Commercialization Plan; (g) facilitating the cooperation of the Parties, when requested, to provide information and support; (h) facilitating coordinated interpretation of Clinical Data and other Data; (i) discussing freedom to operate aspects and issues; (j) coordinating planned marketing activities; and (k) such other activities pertaining to the Development and Commercialization activities ascribed to the JSC in this Agreement or as mutually agreed between the Parties from time to time (including the formation or disbandment of any subcommittees (e.g., the JPT or JCC). The JSC shall keep accurate and complete confidential minutes of its meetings. The co-chairs for each meeting, or their respective designees, shall be responsible for taking such minutes and distributing a coordinated single draft agreed upon by the co-chairs to the other JSC members for their review and comment within [***] Business Days after the date of each meeting. The JSC members shall in good faith attempt as quickly as is reasonably possible to resolve any disputes as to the content of such minutes so as to have a final agreed version as quickly as is reasonably possible, but no later than [***] Business Days after the dispute is raised. Each of BTO and Janssen shall be responsible for all expenses incurred by its representatives on the JSC in connection with performing their duties hereunder, including all costs of travel, lodging and meals. For the avoidance of doubt, the JSC shall not have the authority to amend this Agreement and shall have authority to amend the Development Plan and Commercialization Plan only as expressly set forth herein, or with the written consent of the Parties.

7.3 JSC Decisions. All decisions of the JSC shall be made in good faith in the interest of furthering the purposes of this Agreement and the JSC members shall use their reasonable efforts to make decisions unanimously. If the JSC is unable to reach a unanimous decision at any meeting the Parties shall attempt to reach such unanimous decision over the next [***]. If a unanimous decision is not reached within such [***], either of the co-chairs of the JSC may refer the disagreement to a meeting between senior executives of BTO and Janssen designated for this purpose and who have the authority to resolve the dispute on behalf of the Party they represent, which meeting shall take place as soon as practicable, but in no event later than [***] after the date of the relevant referral. If the senior executives cannot resolve such disagreement over such matter in a mutually acceptable manner within [***] after such meeting (or if the matter is not referred to a senior executive meeting), then the JSC shall be deemed not to have made any decision regarding the applicable matter, except as may be otherwise set forth in this Agreement; provided, that either Party may submit the matter to be decided in accordance with Section 14.17. During any dispute resolution under this Section 7.3, the Parties shall continue their efforts as regards Development or Commercialization activities under the Development Plan or Commercialization Plan, if any, not related to the relevant dispute.

7.4 Joint Project Team: JPT Leads.

7.4.1 The Parties shall form a joint project team (the “Joint Project Team” or “JPT”), which shall have responsibility of monitoring and coordinating all development, regulatory, and other business and technical activities under this Agreement (including the Development Plan). The JPT shall be comprised of [***]. Each Party shall designate a project manager (the “Project Manager”) who will be the principal point of contact for a Party and shall be responsible for implementing and coordinating all activities and facilitating the exchange of information between the Parties regarding the Development Plan, generally. As the Development Plan progresses, the Parties anticipate that each Party shall designate from among its representatives on the JPT (or appoint to the JPT) a development leader, a regulatory leader, and a commercial leader (respectively, the “Development Leader”, the “Regulatory Leader” and collectively, the “JPT Leads”) each of whom shall be the principal point of contact for such Party for matters relating to his or her respective function, and shall be responsible for implementing and coordinating all activities and facilitating the exchange of information between the Parties for his or her function. Members of the JPT may also be members of the JSC.

- 7.4.2 BTO and Janssen shall each provide the other with the names of its JPT members, Project Manager (and JPT Leads, if appropriate) within 30 Business Days of the Effective Date. Each of BTO and Janssen may replace its JPT members, Project Manager and JPT Leads at any time and for any reason upon written notice to the other Party.
- 7.4.3 The JPT will perform the duties set forth in this Section 7.4, as well as additional responsibilities that may be assigned to them from time to time by the JSC. The JPT may delegate tasks and responsibilities to sub-managers, working groups and other team members as the JPT deems appropriate to efficiently and effectively perform its obligations hereunder.
- 7.4.4 Meetings of the JPT may be conducted in person, by telephone or by videoconference as agreed by the JPT or the Parties. Additionally, the JPT, Project Manager and the JPT Leads (or their designees) shall maintain close regular communications with each other as to the status of the ongoing and planned activities under the Development Plan.
- 7.4.5 The JPT, the Project Manager and the JPT Leads (or their designees) shall have no authority to amend this Agreement, the Development Plan, or the Commercialization Plan but may make recommendations regarding such amendments to the JSC.
- 7.4.6 The JPT, the Project Manager and the JPT Leads will cooperate with each other and work in good faith to resolve any disagreements between them or their respective teams. Any such disagreements that are not resolved by the JPT shall be referred to the JSC for resolution.
- 7.4.7 The JPT shall keep accurate and complete records of their activities and meetings and shall, from time to time as requested by the JSC, provide the JSC with appropriate updates and information to keep the JSC apprised of the progress of the Development Plan. All records of the JPT that are disclosed to the other Party and which relate to the Development Plan shall be available at all times to the JSC and to each Party on a confidential basis solely for use with respect to such Party's activities conducted pursuant to this Agreement.
- 7.4.8 Each Party shall be responsible for all expenses incurred by its JPT members in connection with performing their duties hereunder.

- 7.5.1 Formation. Once authorized by the JSC, the Parties will establish a joint commercial committee (the “Joint Commercial Committee” or “JCC”), comprised of a reasonable number of representatives from each Party, as appointed by each Party with written notice to the other Party. The JCC will include a cross-functional team of individuals with appropriate professional and technical qualifications, and ongoing familiarity with the aspects of the Agreement for which it is responsible and such other areas as may be necessitated by the duties prescribed to the JCC in Section 7.5.2 below. Either Party may change its representatives to the JCC from time to time, in its sole discretion, effective upon written notice to the other Party of such change.
- 7.5.2 Duties. The JCC will manage the delegated aspects of this Agreement and will confer on a regular basis regarding: (i) the status and progress of the activities performed pursuant to this Agreement, (ii) the development of the Commercialization Plan, (iii) tracking and managing the Agreement as it pertains to commercial activities, Milestones, and investment timelines, and (iv) otherwise managing adherence with this Agreement related to commercial matters. The JCC is responsible for all such aspects of this Agreement directed toward applicable commercial aspects that are not otherwise addressed by the JPT and subject to the JSC duties. Each Party shall designate an individual to serve as a “JCC Co-Chairpersons” for the JCC. The JCC Co-Chairpersons and each joint sub-program team will report to the JCC, at each meeting of the JCC, on the progress under this Agreement and otherwise with respect to the collaboration of the Parties hereunder.
- 7.5.3 Meetings. The JCC will meet in accordance with a schedule to be established by JCC members, as needed. During the meetings, the JCC shall review the progress of commercial activities performed pursuant to this Agreement, including key objectives and any operational challenges. The JCC may conduct meetings in person or by teleconference or video conference and may also act without a meeting when other means of communication are appropriate and uncontested by all members of the JCC. The JCC may establish procedures for its internal operation at meetings.

- 7.5.4 Management. The JCC Co-Chairpersons will set the agendas for each JCC meeting. The JCC Co-Chairpersons will have no greater authority than any other JCC representative. At each meeting, the JCC will elect a secretary selected by BTO who will prepare written minutes in the form of a memo promptly after such meeting, reporting in reasonable detail the actions and decisions taken by the JCC during such meeting, issues requiring resolution, and resolutions of previously reported issues. The said secretary shall catalogue and track such minutes and establish a shared document repository for the JCC to access the same. Such Within ten (10) calendar days of any said meeting, minutes are to be reviewed, commented on if needed, and updated per the JCC Co-Chairpersons' feedback, and sent prior to being sent to the JCC. The secretary will revise such minutes as necessary.
- 7.5.5 Decisions. Decisions of the JCC must be made by [***]. If the JCC is unable to agree on any matter, such matter will be referred to the JSC for resolution.
- 7.5.6 Sub-Project Teams. The JCC may, from time-to-time, establish sub project teams with specific subject matter expertise, with responsibility for management of day-to-day collaboration between the Parties with respect to the activities contemplated by this Agreement in such subject matter area.
- 7.5.7 The JCC shall have no authority to amend this Agreement, the Development Plan, or the Commercialization Plan but may make recommendations regarding such amendments to the JSC.
- 7.5.8 Each Party shall be responsible for all expenses incurred by its JCC members in connection with performing their duties hereunder.
- 7.6 Limits of Authority. Each of the JSC, JCC, and the JPT will only have the power and authority to determine, approve or resolve matters that it is expressly authorized to determine, approve or resolve under this Agreement ("Committee Matters"), and will not have any other power or authority (i) to enter into, amend, modify or waive compliance with this Agreement; (ii) to alter, increase or expand a Party's obligations under this Agreement; or (iii) to make any decision that expressly requires BTO's or Janssen's approval or agreement or the approval or agreement of both Parties under this Agreement. Each Party shall retain the rights, powers and discretion granted to it under this Agreement and no such rights, powers, or discretion shall be delegated to or vested in the JSC, the JPT, JCC, or any other committee, subcommittee or working group unless such delegation or

vesting of rights, powers, or discretion is expressly provided for in this Agreement or the Parties otherwise expressly so mutually agree in writing. Without limiting the foregoing, each Party acknowledges and agrees that the JSC, JCC, and the JPT shall not have authority to assume, create or incur any liability or any obligation of any kind, express or implied, against, or in the name of or on behalf of, either Party or waive any right on behalf of either Party. Each Party further acknowledges and agrees that the limitations on powers of the JSC, JCC, and the JPT set forth in this Section 7.6 or elsewhere in this Agreement shall apply also to each subcommittee or working group established by the JSC, JCC, or the JPT.

8 FEES AND PAYMENTS

- 8.1 Milestone Payments. Janssen shall compensate BTO for its performance of Development in accordance with the Milestone amounts as set forth in the Development Plan. BTO may issue an invoice for any Milestone within [***] from its completion. There will be no Milestone payments owed by Janssen for BTO's performance of any Commercialization of the BTO CDx.
- 8.2 Pass Through Costs and Travel Expenses. The Parties acknowledge that BTO may incur out-of-pocket costs and other direct expenses in connection with this Agreement. [***].
- 8.3 Additional Expenses Required for Additional Activities Required by Regulatory Authorities. In addition to the compensation under Section 8.1 and expenses contemplated in the Development Plan and Commercialization Plan, the Parties acknowledge that the Regulatory Authority may request the performance of additional activities not contemplated in the then-current Development Plan or Commercialization Plan. The JSC shall meet to discuss activities and the allocation of costs therefor. [***]. For sake of clarity and to the best of BTO's knowledge, the Development Plan as of the Effective Date contains activities that BTO reasonably expects to be sufficient for Regulatory Approval of the BTO CDx. Hence the Parties recognize, that BTO does not warrant or represent that such activities will in fact satisfy all regulatory requirements for Regulatory Approval of the BTO CDx.
- 8.4 Additional Expenses Required by Janssen. In addition to the compensation under Section 8.1, the Parties acknowledge that Janssen may request the performance of additional activities not contemplated in the then-current Development Plan or Commercialization Plan, including without limitation by requesting BTO to perform Commercialization activities for the BTO CDx beyond

the Commercialization activities that BTO would customarily undertake with respect to its other companion diagnostic products. The JSC shall meet to discuss such additional activities and the allocation of costs and compensation therefor. The Parties shall discuss in good faith any additional activities, and these will be captured in an amendment to this Agreement and to the Development Plan or Commercialization Plan.

- 8.5 Estimates. The scope of the Development and Commercialization Plan is BTO's best estimate based on present knowledge about the Development and past experience with the development of other similar products. Both Parties do, however, recognize that the development of the BTO CDx involves the use of biological material, and hence that a degree of uncertainty is inevitably connected with such estimates. It is anticipated that the specific Development activities shall evolve as a result of the scientific nature of such activities. The Parties shall discuss in good faith amendments to the Development Plan and Commercialization Plan based on amendments to the development plan for the Janssen Drug, including additional indications, and additional territories for the BTO CDx.
- 8.6 Payment Terms, Janssen Payments to BTO.
- 8.6.1 Undisputed BTO invoices shall be due and payable within [***] after Janssen's receipt thereof, however, the actual payment to BTO will not be made until the next scheduled payment run as set forth at [***]. BTO shall submit invoices electronically through a web-based system using the Accounts Payable website, [***]
- 8.6.2 The following applies to the web-based invoicing:
[***]
- 8.7 Taxes and Withholding.
- 8.7.1 Janssen will make all payments to BTO under this Agreement without deduction or withholding for Taxes except to the extent that any such deduction or withholding is required by applicable law in effect at the time of payment.
- 8.7.2 Any Tax required to be withheld on amounts payable under this Agreement will be paid by Janssen on behalf of BTO to the appropriate governmental authority, and Janssen will furnish BTO with proof of payment of such Tax. Any such Tax required to be withheld will be an expense of and borne by BTO. Janssen shall furnish to BTO evidence of true and complete payment of such Tax. If any such Tax properly owing by BTO is assessed against and paid by Janssen, then BTO will indemnify and hold harmless Janssen from and against such Tax.

8.7.3 Janssen and BTO will cooperate with respect to all documentation required by any taxing authority or reasonably requested by Janssen to secure a reduction in the rate of applicable withholding Taxes. On the date of execution of this Agreement, BTO will deliver to Janssen an accurate and complete documentation certifying that BTO is entitled to the applicable benefits under the Income Tax Treaty between United States and Belgium and as soon as practicable thereafter, an exemption certificate under the respective treaty between United States and Germany. The Parties hereby provide their consent to disclose this Agreement to the German tax authorities for purposes of obtaining such an exemption certificate.

8.8 Not to exceed. The cumulative amount of fees, Milestones, payments, expenses and costs, of any kind, incurred, and/or paid, and/or payable under this Agreement, per the Development Plan as of the Effective Date and as identified in Sections 8.1-8.7 of this Agreement, shall not exceed a total of \$13,000,000, excluding the "Optional Work" and "Regulatory Support" set forth in Exhibit 1.36 and any amounts due under the Prior Collaboration Agreement. However, if Janssen requests additional activities beyond those specified in the Development Plan, including but not limited to the Optional Work and/or Regulatory Support, then the cumulative amount payable by Janssen may exceed this amount.

9 INTELLECTUAL PROPERTY

9.1 Ownership of Technology.

9.1.1 BTO.

- (a) BTO shall retain sole and exclusive ownership of the BTO Background Technology, as well as Intellectual Property Rights thereto, and
- (b) BTO shall own all right title and interest in and to BTO Development Technology, as well as Intellectual Property Rights thereto. Janssen agrees to assign and hereby assigns its right title and interest in and to BTO Development Technology as well as Intellectual Property Rights thereto, conceived of, or conceived of and reduced to practice by Janssen's employees, Affiliates or Third Party contractors and shall take steps necessary, and cause its employees, Affiliates or Third Party contractors to take all steps necessary, to perfect this assignment.

9.1.2 Janssen.

- (a) Janssen shall retain sole and exclusive ownership of the Janssen Background Technology, as well as Intellectual Property Rights thereto, and
- (b) Janssen shall own all right title and interest in and to Janssen Development Technology as well as Intellectual Property Rights thereto. BTO agrees to assign and hereby assigns its right title and interest in and to Janssen Development Technology and Intellectual Property Rights thereto conceived of or conceived of and reduced to practice by BTO's employees, Affiliates or Third Party contractors and shall take steps necessary, and cause its employees, Affiliates or Third Party contractors to take all steps necessary, to perfect this assignment.

9.1.3 Joint.

- (a) The Parties do not contemplate the development of any Joint Development Technology in connection with the activities contemplated by this Agreement; provided, however, in the unlikely event that any Joint Development Technology is developed, Janssen and BTO shall jointly own all right, title and interest in and to Joint Development Technology, as well as Intellectual Property Rights thereto. As a joint owner, each Party may use Joint Development Technology for any purpose, without a duty of seeking consent from, or accounting to, the other Party.

9.2 Ownership of Data.

9.2.1 Janssen Data. All Janssen Data shall be owned solely by Janssen. Janssen may use Janssen Data for any purpose without the consent of BTO. BTO may use Janssen Data solely in accordance with the rights and licenses granted to BTO under Sections 3.4.1 and 9.3.1. Janssen Data shall be considered Confidential Information of Janssen.

9.2.2 BTO Data. All BTO Data shall be owned solely by BTO. BTO may use BTO Data for any purpose without the consent of Janssen. Janssen may use BTO Data solely in accordance with the rights and licenses granted to Janssen under Sections 3.4.2 and 9.3.2 and as otherwise expressly provided in this Agreement. BTO Data shall be considered Confidential Information of BTO.

9.2.3 Joint Data. Janssen and BTO shall jointly own all Joint Data. Each Party may use Joint Data as necessary to support its activities related to obtaining Regulatory Approval of their respective assays or drugs; however, any other proposed use or disclosure by a Party shall require the prior written consent of the other Party, such consent not to be unreasonably withheld.

9.3 Technology License Grants.

Technology Licenses to BTO. Subject to the obligations of Section 9 and the other terms and conditions in this Agreement, Janssen grants to BTO and its Affiliates and Third Party contractors performing work under this Agreement, for the Term and in the Territory, a royalty-free non-exclusive license, with no right to sublicense except as explicitly provided in this Agreement, under Janssen Intellectual Property Rights to

- (i) conduct all Development and Commercialization activities assigned to BTO under the Development Plan and Commercialization Plan using the Janssen Background Technology, Janssen Data, and Janssen Development Technology;
- (ii) include Janssen Background Technology, Janssen Data, and Janssen Development Technology in the Labeling for the BTO CDx sold or distributed for the Intended Use;
- (iii) use Janssen Background Technology, Janssen Data and Janssen Development Technology in the BTO CDx for the purpose of making, using and selling the BTO CDx for the Intended Use, and
- (iv) sublicense its rights under Sections 9.3(i), (ii) and (iii) to Third Parties for the limited purpose to distribute or manufacture the BTO BTO CDx for the Intended Use on BTO's behalf.

9.3.1 Technology Licenses to Janssen. Subject to the obligations of Section 9 and the other terms and conditions of this Agreement, BTO grants to Janssen for the Term and in the Territory:

- (a) a royalty-free, non-exclusive license, without the right to sublicense except as specifically provided in this Agreement, under BTO Intellectual Property Rights to
 - (i) include BTO Background Technology, BTO Data and BTO Development Technology in the Labeling for the Janssen Drug sold or distributed for the Clinical Treatment;
 - (ii) conduct all Development and Commercialization activities assigned to Janssen under the Development Plan and Commercialization Plan using BTO Background Technology, BTO Data and BTO Development Technology; and
 - (iii) sublicense its rights under Sections 9.3.1(a)(i) and (ii), to Third Parties to distribute or manufacture the Janssen Drug on its behalf.

9.4

Acknowledgments.

- 9.4.1 Subject to Section 14.4, BTO agrees and acknowledges that Janssen may, alone or in collaboration with a Third Party, develop and/or Commercialize a diagnostic test to assess patients for any indication including the Indication without any obligations or payment of any consideration to BTO; provided that, Janssen shall have no right or license to access, reference or utilize BTO Confidential Information, BTO Data, BTO Background Technology, BTO Development Technology, or BTO's Intellectual Property Rights to any of the foregoing, in connection with such development and/or Commercialization unless rights or licenses are granted pursuant to Article 13. Nothing herein shall be construed to prevent Janssen from using, either by itself or in collaboration with a Third Party, any information or technology which is publicly available (other than through breach of this Agreement by Janssen) and is not otherwise BTO Confidential Information and is not subject to an issued valid claim of a BTO patent that has not expired or been declared invalid by a court or other legal body of competent jurisdiction. Nothing in this Section 9.4.1 is intended to waive any rights held by BTO to seek damages under Applicable Law with respect to its provisional rights in any subsequently allowed patent claims, unless rights and licenses to the same are granted pursuant to Articles 9 and 13.

- 9.4.2 Janssen agrees and acknowledges that BTO may, at its sole discretion, develop and/or Commercialize a test as a companion diagnostic for any drug, or for any indication, including the Indication, for one or more Third Parties; provided that, BTO shall have no right or license to use any Janssen Confidential Information, Janssen Data, Janssen Background Technology, Janssen Development Technology, or Janssen's Intellectual Property Rights to any of the foregoing in connection with any such development and/or Commercialization activity. Nothing herein shall be construed to prevent BTO from using, either by itself or in collaboration with a Third Party, any information or technology which is publicly available (other than through breach of this Agreement by BTO) and is not otherwise Janssen Confidential Information and is not subject to an issued valid claim of a Janssen patent that has not expired or been declared invalid by a court or other legal body of competent jurisdiction., unless rights or licenses are granted pursuant to Article 13.
- 9.5 Further Actions. Each Party shall execute and deliver to the other Party all documents and give all declarations regarding the licenses granted in this Article 9, or otherwise granted under this Agreement, and reasonably cooperate with the other Party, to the extent such documents, declarations and/or cooperation are reasonably required to exercise the licenses and for the recording or registration of the licenses granted hereunder at the various intellectual property offices in the Territory for the benefit of such other Party.
- 9.6 No Other Licenses. Each Party disclaims all implied rights to the grant by any Party to the other Party of any license, right, title or interest in any Party's tangible property, or Intellectual Property Rights except as are expressly set forth in this Agreement. For purposes of clarity, unless otherwise stated in this Agreement, non-exclusive licenses to a Party's property expressly exclude the right to sublicense such Party's property.
- 9.7 Trademarks: Ownership, Approval, and Limited Use.
- 9.7.1 BTO shall own all right, title and interest in and to any Trademarks developed by or for BTO for use in connection with the Assays. BTO, however, shall not use or file any Trademarks that are identical to, confusingly similar, or likely to be associated with the Trademarks developed by Janssen for use in connection with the Janssen Drug.

- 9.7.2 Janssen shall own all right, title and interest in and to all Trademarks developed by or for Janssen for use in connection with the Janssen Drug. Janssen, however, shall not use or file any Trademarks that are identical to, confusingly similar, or likely to be associated with the Trademarks developed by BTO for use in connection with the Assay.
- 9.7.3 Approval of Trademark Use.
- (a) Each Party agrees to provide artwork for any packaging, Labeling, and promotional materials that display the other Party's Trademarks for approval prior to any use or distribution of such materials. Each Party shall respond in writing with its approval or requested changes, such approval not to be unreasonably withheld, within three (3) weeks after receipt of such artwork from the other Party. In the event that the Parties cannot agree upon the use of the other Party's Trademark in such artwork, Labeling, and promotional materials, the Parties shall first bring the matter to the Joint Steering Committee for resolution and if the Steering Committee cannot resolve the matter, the matter shall be submitted to the dispute resolution procedures of Section 14.17.
 - (b) Once a proposed use of the Trademarks has been approved by the Party that is the licensor, and provided that the Party that is the licensee does not make any changes to the presentation of the Trademarks in such approved product packaging, Labeling or promotional materials, the Party using the Trademarks under license may utilize the same approved presentation in other product packaging, labeling or promotional materials for substantially similar purposes in performance of this Agreement, unless the other Party gives written notice that such approval is no longer valid. Approval of use of a Trademark does not pre-empt the requirements of this Agreement for Labeling to be reviewed by a Regulatory Authority or Article 5 for review and approval of Labeling in general.
- 9.7.4 Reputation of Trademarks. Each Party will refrain from any use of the other's Trademarks in a manner that threatens to damage the goodwill associated with the respective Trademarks or which threatens to tarnish the reputation or otherwise reflect unfavorably upon the owner of the Trademarks. Any goodwill that is attributable to the non-owning Party's use of the owning Party's Trademark shall inure solely to the owning Party.

9.7.5 Limited Use Trademarks.

- (a) Janssen grants to BTO for the Term and in the Territory a royalty-free, non-exclusive limited right to use and authorize, Third Parties to use on BTO's behalf, Janssen's Trademarks related to the Janssen Drug solely in connection with the advertising and marketing of the BTO CDx for the Intended Use.
- (b) BTO grants to Janssen for the Term and in the Territory a royalty-free, non-exclusive limited right to use and authorize Third Parties to use on Janssen's behalf, BTO's Trademarks related to the BTO CDx solely in connection with the advertising and marketing of the BTO CDx for its Intended Use with the Janssen Drug.

9.8 Disclosure of Technology and Patentable Inventions.

- 9.8.1 In the event that any Development conducted by either Party, its Affiliates or Third Party contractors generate Development Technology each Party shall disclose such Development Technology to the other Party at the JSC meeting immediately following the generation of such Development Technology. In the event that such Development Technology is Janssen Development Technology or BTO Development Technology, the respective owner shall determine in its sole discretion, after consultation with the other Party, whether to prosecute, defend and maintain any Patent Rights claiming Patentable Inventions to such Party's Development Technology. In the event such Development Technology is Joint Development Technology applications for Patent Rights, to such Joint Development Technology, if any, shall be filed as per Sections 9.8.2.
- 9.8.2 The Parties through the JSC, shall promptly discuss and decide whether to seek Patent Rights to Joint Development Technology, Janssen shall at its cost have the first right but not the obligation to file applications for, prosecute, maintain, and obtain extensions for any Patent Rights claiming Joint Development Technology on behalf of itself and BTO. If Janssen decides not to exercise its right to file for such Patent Rights, Janssen shall promptly inform BTO in writing and BTO shall have the second right, but not the obligation to file applications for, prosecute, maintain, and obtain extensions for any Patent Rights claiming such Joint Development Technology at its own expense on behalf of itself and Janssen. The Party who elects to file for Patent Rights shall be known as

the “Filing Party” and the other Party shall be known as the “Non-Filing Party.” The Filing Party shall (i) provide the Non-Filing Party with a copy of any patent application claiming such Joint Development Technology and a proposed filing date, at least [***] before the proposed filing date in its priority country and (ii) consider in good faith comments from the Non-Filing Party provided such comments are provided to the Filing Party at least [***] prior to the proposed filing date. Thereafter, the Filing Party shall control the prosecution and maintenance of or acquisition of term extensions to such Patent Rights. If at any time the Filing Party no longer wishes the control of the prosecution and maintenance of or acquisition of term extensions to such Patent Rights, in a particular country, the Filing Party shall inform the Non-Filing Party at least [***] prior to the deadline to respond to any outstanding action with the relevant patent office. In the event that the Non-Filing Party wishes to assume control of the prosecution and maintenance of or acquisition of term extensions to such Patent Rights at its own expense, the Non-Filing Party shall, promptly upon receipt of notice from the Filing Party, inform the Filing Party and the Filing Party shall take all steps necessary to transfer control of the prosecution and maintenance of or acquisition of term extensions to such Patent Rights to the Non-Filing Party.

- 9.8.3 If either Janssen or BTO becomes aware of any infringement, anywhere in the world, of any issued patent within the Patent Rights to Joint Development Technology (“Joint Patent Rights”), it will promptly notify the other Party in writing to that effect.
- 9.8.4 Janssen shall have the first right, but not the obligation, to take action to obtain a discontinuance of infringement or bring suit against a Third Party infringer of any such Joint Patent Rights within [***] calendar days from the date of notice and to join BTO as a party plaintiff. In the event that BTO does not want to join as a party plaintiff, then BTO shall assign to Janssen such Joint Patent Rights sufficient for purposes of commencing and maintaining the suit. Janssen shall bear all the expenses of any suit brought by it claiming infringement of any Joint Patent Right. BTO will reasonably cooperate with Janssen, at Janssen’s expense, in any such suit. If, after the expiration of such [***]-day period (or, if earlier, the date upon which Janssen provides written notice that it does not plan to bring suit), Janssen has not obtained a discontinuance of infringement of the Joint Patent Right or filed suit against any such Third Party infringer of the Joint Patent Right, then BTO

shall have the right, but not the obligation, to bring suit against such Third Party infringer of the Joint Patent Right, provided that BTO shall bear all the expenses of such suit. Janssen will reasonably cooperate with BTO, at BTO's expense, in any such suit for infringement of a Joint Patent Right brought by BTO against a Third Party. In the event that Janssen does not want to join such suit as a party plaintiff, Janssen shall assign to BTO such Joint Patent Rights, sufficient for purposes of commencing and maintaining the action. In the event that both Janssen and BTO are joint plaintiffs any recoveries obtained by Janssen or BTO, as applicable, as a result of any proceeding against such a Third Party infringer shall be allocated as follows: In the event both Janssen and BTO are joint plaintiffs in any enforcement procedure and share the costs/expenses of such action: (a) such recovery shall first be used to reimburse each Party for all reasonable attorney fees and other litigation costs actually incurred in connection with such litigation by that Party, and (b) any remainder shall be equally shared by the Parties. In the event one Party elects not to be a Party plaintiff and fails to share in costs/expenses of any enforcement procedure, all recovery shall be allocated to the other Party bringing the enforcement action on its own behalf.

9.9 Third Party Licenses.

9.9.1 The Parties acknowledge that additional licenses or rights from Third Parties may be required in order to perform the Development and/or Commercialization of the BTO CDx in the Territory. The Parties shall use reasonable efforts to identify such requirements for their respective products prior to the filing for Regulatory Approval in the proposed Territory of sale. It shall be at each Party's sole discretion whether or not to enter into agreement with a Third Party regarding such licenses or rights for such Party to conduct the Development for which it is responsible and/or to use and/or Commercialize its respective product (*i.e.*, the BTO CDx being BTO's product and the Janssen Drug being Janssen's product). A Party's decision not to enter into such agreement shall in no event be deemed as a breach under this Agreement.

9.9.2 If a Party decides to enter into such an agreement (as described in Section 9.9.1 above), the responsibility and cost associated with obtaining such licenses or rights shall be allocated as follows:

- (a) Janssen shall negotiate and bear the cost of Third Party agreements for all Third Party patents relating to (i) the Janssen Drug, (ii) the use of the Biomarkers to indicate whether the Janssen Drug is an appropriate treatment for any potential patient, or (iii) either Party's use of Janssen Background Technology or Janssen Development Technology for purposes of the activities under the Development Plan.
- (b) BTO shall negotiate and bear the cost of Third Party licenses relating to the BTO Assay or either Party's use of BTO Background Technology, or BTO Development Technology for purposes of the activities under the Development Plan.

10 REPRESENTATIONS, WARRANTIES AND COVENANTS

10.1 General

10.1.1 BTO hereby represents, warrants and covenants to Janssen as follows as of the Effective Date:

- (a) it is a corporation or other legal entity duly organized and validly existing under the laws of the State of Delaware;
- (b) the execution, delivery and performance of this Agreement by BTO (i) has been duly authorized by all requisite corporate action and does not require any shareholder action or approval, (ii) will not violate or otherwise conflict with any material contract, license, franchise, permit or Applicable Law by which BTO is bound or to which it is otherwise subject and (iii) to its knowledge no BTO Background Technology or BTO Technology has been misappropriated from any Third Party or obtained without the proper consent of any Third Party;
- (c) it has the power and authority to execute and deliver this Agreement and to perform its obligations hereunder;
- (d) this Agreement is legally binding upon BTO, and is enforceable against it in accordance with the terms and conditions hereof, subject to bankruptcy, insolvency, reorganization, or similar laws affecting the rights of creditors generally and to equitable principles;
- (e) it shall at all times comply with all Applicable Laws relating to its activities under this Agreement; and
- (f) it will not divest, restructure or reorganize its Affiliates during the Term, with any intent in whole or in part to avoid, reduce or eliminate its or any of its Affiliates' obligations or commitments set forth in this Agreement.

10.1.2 Janssen hereby represents, warrants and covenants to BTO as follows as of the Effective Date:

- (a) Janssen is a corporation or other legal entity duly organized and validly existing under the laws of the Country of Belgium;
- (b) the execution, delivery and performance of this Agreement by Janssen (i) has been duly authorized by all requisite corporate action and does not require any shareholder action or approval, (ii) will not violate or otherwise conflict with any material contract, license, franchise, permit or Applicable Law by which Janssen is bound or to which it is otherwise subject and (iii) to its knowledge no Janssen Background Technology or Janssen Technology has been misappropriated from any Third Party or obtained without the proper consent of any Third Party;
- (c) it has the power and authority to execute and deliver this Agreement and to perform its obligations hereunder;
- (d) this Agreement is legally binding upon Janssen, and is enforceable against it in accordance with the terms and conditions hereof, subject to bankruptcy, insolvency, reorganization, or similar laws affecting the rights of creditors generally and to equitable principles;
- (e) Janssen shall at all times comply with all Applicable Laws relating to its activities under this Agreement;
- (f) it will not divest, restructure or reorganize its Affiliates during the Term, with any intent in whole or in part to avoid, reduce or eliminate its or any of its Affiliates' obligations or commitments set forth in this Agreement.

10.2 Debarment and Exclusion. Janssen and BTO each represent and warrant that to the best of its knowledge as of the Effective Date neither it nor any of its Affiliates, nor any of its or its Affiliates employees, subcontractors or agents ("Personnel") working on the subject matter of this Agreement ("Project Personnel"), has ever been, is currently, or is the subject of a proceeding that could lead to it or its Affiliates, or any of their Project Personnel, becoming, as applicable, a Debarred Entity or Debarred Individual, an Excluded Entity or Excluded Individual or a Convicted Entity or Convicted Individual, nor are they listed on the FDA's Disqualified/Restricted List for clinical investigators. Each Party further covenants, represents and warrants

that if, during the Term, it or any of its Affiliates, or any of its or its Affiliates Project Personnel, becomes or is the subject of a proceeding, or any action or investigation is pending or threatened, that could lead to that Party or its Affiliates, or their Project Personnel, with respect to the subject matter hereof, becoming, as applicable, a Debarred Entity or Debarred Individual, an Excluded Entity or Excluded Individual or a Convicted Entity or Convicted Individual, or added to FDA's Disqualified/Restricted List for clinical investigators, the Party shall immediately notify the other Party, and the Parties shall undertake discussions with respect to such notification. If a Party or that Party's Affiliates or their Project Personnel, with respect to the subject matter hereof, becomes, as applicable, a Debarred Entity or Debarred Individual, an Excluded Entity or Excluded Individual or a Convicted Entity or Convicted Individual, or added to FDA's Disqualified/Restricted List for clinical investigators, the other Party may upon 60 calendar days written notice terminate this Agreement. Such termination will be considered termination for breach. This provision shall survive termination or expiration of this Agreement. For purposes of this provision, the following definitions shall apply:

- 10.2.1 A "Debarred Individual" is an individual who has been debarred by the FDA pursuant to 21 U.S.C. §335a (a) or (b) or by another Regulatory Authority pursuant to another comparable regulation or statute from providing services in any capacity (including services or activities in performance of this Agreement) to a person that has an approved or pending drug product application.
- 10.2.2 A "Debarred Entity" is a corporation, partnership or association that has been debarred by the FDA pursuant to 21 U.S.C. §335a (a) or (b) or by another Regulatory Authority pursuant to another comparable regulation or statute from submitting or assisting in the submission of any abbreviated drug application, or is a subsidiary or Affiliate of a Debarred Entity.
- 10.2.3 An "Excluded Individual" or "Excluded Entity" is (i) an individual or entity, as applicable, who has been excluded, debarred, suspended or is otherwise ineligible to participate in federal health care programs such as Medicare or Medicaid by the Office of the Inspector General (OIG/HHS) of the U.S. Department of Health and Human Services, or (ii) is an individual or entity, as applicable, who has been excluded, debarred, suspended or is otherwise ineligible to participate in federal procurement and non-procurement programs, including those produced by the U.S. General Services Administration (GSA).

- 10.2.4 A “Convicted Individual” or “Convicted Entity” is an individual or entity, as applicable, who has been convicted of a criminal offense that falls within the ambit of 42 U.S.C. §1320a – 7(a), but has not yet been excluded, debarred, suspended or otherwise declared ineligible.
- 10.2.5 “FDA’s Disqualified/Restricted List” is the list of clinical investigators restricted from receiving investigational drugs, biologics or devices if FDA has determined that the investigators have repeatedly or deliberately failed to comply with regulatory requirements for studies or have submitted false information to the study sponsor.
- 10.3 Disclaimer. EXCEPT FOR THE EXPRESS REPRESENTATIONS AND WARRANTIES CONTAINED IN THIS AGREEMENT, NEITHER BTO NOR JANSSEN MAKES, AND EACH HEREBY EXPRESSLY DISCLAIMS, ANY AND ALL REPRESENTATIONS AND WARRANTIES, EITHER EXPRESS OR IMPLIED, WHETHER IN FACT OR IN LAW, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.
- 10.4 No Representations Regarding Approval or Commercial Success. Neither Party makes any representations or warranties as to: (a) whether the Janssen Drug or the BTO CDx will be approved for commercial sale by the applicable Regulatory Authorities; or (b) the commercial potential or success of the Janssen Drug or the BTO CDx.

11 INDEMNIFICATION; LIMITATION OF LIABILITY; INSURANCE

- 11.1 Indemnification by Janssen. Janssen shall indemnify, defend and hold harmless BTO, its Affiliates, and its and their respective officers, directors, employees, agents and representatives (collectively, “BTO Indemnitees”) from any and all Losses resulting from any Third Party suits, claims, actions or demands (collectively, “Third Party Claims”), to the extent arising out of or relating to:
- 11.1.1 any breach by Janssen of any Janssen obligation, covenant, agreement, representation or warranty contained in this Agreement; or
- 11.1.2 any violation of Applicable Law by Janssen, any of its subcontractors or licensees, or any of the Janssen Indemnitees in connection with the performance of Janssen’s obligations under this Agreement; or

- 11.1.3 any acts or omissions by Janssen, any of its subcontractors or licensees, or any of the Janssen Indemnitees in the conduct of the development (including Clinical Trials), manufacture, Commercialization, sale or use of the Janssen Drug; or
- 11.1.4 any errors, omissions, or misrepresentations in Janssen Drug data, information, or documentation provided or disseminated by Janssen, any of its subcontractors or licensees (other than any BTO Indemnatee), or any of the Janssen Indemnitees; or
- 11.1.5 the infringement or misappropriation of Third Party patent or other intellectual property rights concerning (i) the Janssen Drug, (ii) the use of the Biomarkers to indicate that whether the Janssen Drug is an appropriate treatment for any potential patient, or (iii) either Party's use of Janssen Background Technology or Janssen Development Technology as permitted under this Agreement;

provided, however, Janssen shall not be obligated to indemnify, defend or hold harmless a BTO Indemnatee under this Section 11.1 from any Third Party Claim or for any Losses incurred by a BTO Indemnatee to the extent arising out of or attributable to any act or omission by a BTO Indemnatee, which constitutes negligence, willful misconduct, or material breach of this Agreement.

- 11.2 Indemnification by BTO. BTO shall indemnify, defend and hold harmless Janssen, its Affiliates, and its and their respective officers, directors, employees, agents and representatives (collectively, "Janssen Indemnitees") from and against any and all Losses resulting from any Third Party Claims, to the extent arising out of or relating to:
 - 11.2.1 any breach by BTO of any BTO obligation, covenant, agreement, representation or warranty contained in this Agreement; or
 - 11.2.2 any violation of Applicable Law by BTO, any of its subcontractors or licensees, or any of the BTO Indemnitees in connection with the performance of BTO's obligations under this Agreement; or
 - 11.2.3 any acts or omission by BTO, any of its subcontractors or licensees, or any of the BTO Indemnitees in the conduct of the development, manufacture, Commercialization, sale or use of the BTO CDx and provision of the BTO CDx; or

- 11.2.4 any errors, omissions, or misrepresentations in BTO CDx data, information, or documentation provided or disseminated by BTO, any of its subcontractors or licensees (other than any Janssen Indemnitee), or any of the BTO Indemnitees.
- 11.2.5 the infringement or misappropriation of Third Party patent or other intellectual property rights concerning the BTO Assay, BTO CDx, or either Party's use of BTO Background Technology or BTO Development Technology as permitted under this Agreement;

provided, however, BTO shall not be obligated to indemnify, defend or hold harmless a Janssen Indemnitee under this Section 11.2 from any Third Party Claim or for any Losses incurred by a Janssen Indemnitee to the extent arising out of or attributable to any act or omission by a Janssen Indemnitee which constitutes gross negligence, willful misconduct, or material breach of this Agreement. For the avoidance of doubt, BTO shall not indemnify Janssen or any other Janssen Indemnitee for any delay in the Development Plan and Commercialization Plan timelines related to the BTO Assay that is subject to the Development Plan and Commercialization Plan or the BTO CDx, unless such delay is caused by BTO's uncured breach of this Agreement.

- 11.3 Control of Defense. If any Janssen Indemnitee or BTO Indemnitee (each, an "Indemnitee") is seeking indemnification under Section 11.1 or Section 11.2 of this Agreement, then Janssen or BTO, as applicable (the "indemnified Party") shall give written notice to the indemnifying Party of each Third Party Claim that may be subject to indemnification, within [***] after receiving notice of such Third Party Claim; provided, however, that failure of the indemnified Party to give such notice shall not affect the indemnification provided hereunder except to the extent (and only to the extent) the indemnifying Party shall have been actually and materially prejudiced as a result of such failure. Within a reasonable time after receiving such notice, the indemnifying Party may assume the defense of such Third Party Claim with counsel reasonably satisfactory to the indemnified Party by giving written notice thereof to the indemnified Party. The indemnified Party shall cooperate with the indemnifying Party in such defense. The indemnified Party may, at its option and expense, be represented by counsel of its choice in any action or proceeding with respect to such Third Party Claim as to which the indemnifying Party has assumed the defense. The indemnified Party may, at the indemnifying Party's expense, control the defense of any Third Party Claim that the indemnifying Party fails to assume within [***] of being notified by the indemnified Party of such Third Party Claim. The indemnifying Party shall not be liable for any litigation costs or expenses incurred by the

indemnified Party after the indemnifying Party assumes the defense of the Third Party Claim without the indemnifying Party's written consent to such costs or expenses, such consent not to be unreasonably withheld. The indemnifying Party shall not settle any Third Party Claim if such settlement (a) does not fully and unconditionally release the indemnified Party and its Indemnitees from all liability relating thereto, (b) adversely impacts the rights granted to the indemnified Party under this Agreement in a material way, (c) admits liability on the part of the indemnified Party, or (d) provides for relief other than money damages for which the indemnifying Party has acknowledged in writing that it shall be responsible, unless the indemnified Party otherwise agrees in writing. The indemnified Party shall not admit to any wrongdoing or consent to the entry of any judgment or enter into any settlement with respect to any Third Party Claim for which indemnification is sought hereunder without the prior written consent of the indemnifying Party.

- 11.4 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR ANY CLAIM FOR ATTORNEY FEES, COSTS AND PREJUDGMENT INTEREST OR CONSEQUENTIAL, INDIRECT, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES, OR ANY DAMAGES FOR LOST REVENUES, PROFITS OR BUSINESS OPPORTUNITIES, FOR ANY CAUSE OF ACTION, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT, WHETHER OR NOT THE OTHER PARTY WAS OR SHOULD HAVE BEEN AWARE OF THE POSSIBILITY OF THESE DAMAGES. THE FOREGOING LIMITATIONS OF LIABILITY SHALL NOT APPLY TO A PARTY'S INDEMNIFICATION OBLIGATIONS UNDER THIS ARTICLE 11.

11.5 Insurance.

- 11.5.1 Each Party shall maintain in full force and effect during the Term, and for a period of not less than [***] thereafter, valid and collectible insurance policies providing liability insurance coverage to protect against potential liabilities and risk arising out of activities to be performed under this Agreement.
- 11.5.2 During the Term and for the period that BTO makes or causes to make commercially available the BTO CDx for the Intended Use in the Territory, and for a period of not less [***] thereafter, (i) BTO shall maintain commercial general liability insurance with limits of [***] and (ii) BTO shall separately maintain product liability insurance with limits of [***].

- 11.5.3 During the Term of this Agreement and for the period that Janssen makes or causes to make the Janssen Drug commercially available for the Clinical Treatment in the Territory, and for a period of not less than [***] thereafter, (i) Janssen shall maintain commercial general liability insurance with a limit of [***] and (ii) Janssen shall separately maintain product liability insurance with limits of [***].
- 11.5.4 Where required by law, Janssen shall maintain liability coverage for any trial it Sponsors. Such coverage shall be in compliance with local regulations.
- 11.5.5 With the exception of Janssen's product liability (which is insured through a captive insurance company), all insurance required in these provisions shall be placed with an insurer with an A.M. Best Rating not less than A.
- 11.5.6 Upon written request, BTO and Janssen shall furnish the respective Party with certificates of insurance evidencing required coverage under this agreement.

12 CONFIDENTIALITY

- 12.1 Confidentiality Obligation and Restrictions on Use. As of and after the Effective Date, all Confidential Information disclosed, revealed or otherwise made available by one Party ("Disclosing Party") or its Affiliate to the other Party ("Receiving Party") or its Affiliate under, or as a result of, this Agreement, is furnished solely to permit the Receiving Party (or its Affiliate, as applicable) to exercise its rights, and perform its obligations, under this Agreement subject to the provisions of, this Agreement and may be used by the Receiving Party and its Affiliates only for such purposes. For clarity, Confidential Information disclosed by a Disclosing Party's Affiliate under, or as a result of, this Agreement, shall be deemed to be the Disclosing Party's Confidential Information for purposes of this Agreement. Subject to Section 13.3 (Consequences of Termination), the Receiving Party shall not use any of the Disclosing Party's Confidential Information for any other purpose unless otherwise expressly allowed under this Agreement or permitted in writing by the Disclosing Party, and shall not disclose, reveal or otherwise make any of the Disclosing Party's Confidential Information available to any other person, firm, corporation or other entity, without the prior written authorization of the Disclosing Party, *provided, however*, that the Receiving Party may disclose the Disclosing Party's Confidential Information to another person, firm, corporation or other entity as specified below in this Section 12.1, without the prior written authorization of the Disclosing

Party. As of the Effective Date, all exchanges of Confidential Information hereunder shall be governed by the provisions of this Agreement. In furtherance of the Receiving Party's obligations under this Article 12, the Receiving Party shall protect the Disclosing Party's Confidential Information to the same extent it protects its own Confidential Information of like kind and sensitivity. Without limiting the generality of this Section 12.1, the Receiving Party shall disclose any of the Disclosing Party's Confidential Information only to those of its Affiliates, and to its and their respective directors, officers, employees, licensors, licensees, sublicensees, contractors, collaborators, consultants, investigators, attorneys and financial advisors (collectively, "Representatives"), in each case that have a need to know the Disclosing Party's Confidential Information in order for the Receiving Party to exercise its rights and perform its obligations under this Agreement, and only if such Representatives have executed appropriate written agreements on confidentiality and non-use containing substantially similar terms regarding confidentiality and non-use as those set out in this Agreement or are otherwise bound by obligations of confidentiality effectively prohibiting the unauthorized use or disclosure of the Disclosing Party's Confidential Information for the period required by this Article 12. The Receiving Party shall, to the extent legally permissible, (i) promptly furnish the Disclosing Party with written notice of any known unauthorized use or disclosure of any of the Disclosing Party's Confidential Information by any Representatives of the Receiving Party, (ii) unless authorized by the Disclosing Party, be liable to the Disclosing Party for such unauthorized use or disclosure and (iii) take all actions that the Disclosing Party reasonably requests in order to prevent any further unauthorized use or disclosure of the Disclosing Party's Confidential Information.

For purposes of clarity and notwithstanding anything to the contrary in this Section 12.1, a Party owning Confidential Information under the terms of this Agreement that was produced by the other Party shall be deemed the "Disclosing Party" and the other Party the "Receiving Party" for purposes of this Article 12.

Also for the purpose of clarity and notwithstanding anything to the contrary in this Section 12.1, either Party may use Jointly Developed Technology for any purpose subject to the obligations of confidentiality and other terms and conditions of this Article 12 respecting Confidential Information of the other Party, except that neither Party shall be under any obligation to return or destroy Jointly Developed Technology as may be provided in this Agreement respecting the other Party's Confidential Information.

Exceptions.

12.2.1 Confidential Information shall not include information that:

- (a) is or becomes publicly available through no breach of this Agreement by the Receiving Party;
- (b) was known to the Receiving Party or its Affiliates prior to disclosure to any of them under this Agreement (as evidenced by the Receiving Party's or its Affiliates' written records); or
- (c) is disclosed, revealed or otherwise made available to the Receiving Party (or its Affiliate) by a Third Party that, to the Receiving Party's (or such Affiliate's) knowledge, is under no obligation of confidentiality relating to such information; or
- (d) was independently developed by or for the Receiving Party or its Affiliate without use of or reference to the Confidential Information of the other Party, as evidenced by the Receiving Party's or its Affiliates' written records; or
- (e) is of a nature and disclosed in a manner that would indicate to a reasonable person that such information is publicly available.

12.3

Compelled Disclosure. Excepting disclosures of a Party's Confidential Information in applications for Regulatory Approval as provided in Article 3 which disclosures are governed by Article 3, any Party may disclose Confidential Information to the extent it is required to be disclosed under any court order, securities regulation (including filings with the Securities Exchange Commission and stock exchanges, pursuant to Section 12.9.1), government enforcement action or Applicable Law (collectively "Compelled Disclosure"), provided that the Receiving Party, unless prohibited by the Compelled Disclosure, provides the Disclosing Party with (i) prompt notice of any Compelled Disclosure, including any orders or statutory provisions related thereto, no less than ten (10) Business Days before the date of the proposed disclosure, (ii) the text of the proposed disclosure a reasonable period (but no less than three (3) Business Days unless impossible) in advance of the anticipated date of disclosure, (iii) reasonable assistance to the Disclosing Party's efforts to limit the scope of the proposed disclosure to such Confidential Information which is necessary to satisfy such Compelled Disclosure and (iv) reasonable assistance to protect the Disclosing Party's Confidential Information that is subject to the Compelled Disclosure from disclosure to the public or to any other governmental or quasi-governmental body, in each instance the Disclosing Party shall respond to any request from the Receiving Party within three (3) Business Days of receipt thereof. The Disclosing Party shall bear any expenses of the Receiving Party in providing the assistance specified in this Section 12.3.

- 12.4 Comingled Disclosure. The Parties agree and acknowledge that the incorporation of one Party's Confidential Information or the comingling of both Parties' Confidential Information into one or more documents does not transfer ownership of such Confidential Information to the drafter or drafters of such documents.
- 12.5 Term of Confidentiality Obligations. All of the Receiving Party's obligations under Section 12.1 and Section 12.3 with respect to the protection of the Disclosing Party's Confidential Information shall survive for a period of seven (7) years following the expiration or termination of this Agreement for any reason.
- 12.6 Publicity. Without prejudice to Section 12.3, no public announcement or press release concerning the existence, terms or subject matter of this Agreement shall be made, either directly or indirectly, by any Party. Notwithstanding the foregoing, (i) either Party can continue to reference any previously approved announcements and press releases made prior to the Effective Date, (ii) either Party can refer to the Agreement to the extent that it has been made public, including in SEC filings, other public disclosures, and otherwise as allowed under this Section 12.
- 12.7 Non-Use of Names. Except as may be otherwise expressly provided in this Agreement, no Party (or its Affiliates) shall use, either directly or indirectly, the Trademarks of the other Party (or its Affiliates), or the name of the other Party or its Affiliates, or any of its or their respective officers, employees or board members in any publicity, or any marketing advertising documents (or other disclosures) unless (i) such use is consistent with, and permitted under, the Development Plan or Commercialization Plan, or (ii) a copy or transcript of the proposed disclosure, including the manner thereof, is submitted to and approved in advance in writing by the other Party (in its sole discretion).
- 12.8 Publications. Prior to Regulatory Approval of the BTO CDx for the Intended Use, no Party, its Affiliates or Third Party contractors shall submit a publication to a journal, paper, magazine or any other such similar disclosure relating to the Data, Development, or Commercialization of the BTO CDx's without the prior written agreement of the other Party, which permission shall not be unreasonably withheld. The Party desiring to publish such proposed publication shall submit a copy of the same to the other Party at least

***] prior to submission of the same to any publisher or reviewer. If the non-publishing Party's Confidential Information or Development Technology is disclosed in the draft, at the written request of the non-publishing Party, the publishing Party shall remove such Confidential Information or Development Technology or, at the option of the non-publishing Party, delay the submission of such proposed publication for ***] after receipt of the non-publishing Party's written request. If a ***] delay is requested, (i) the publishing Party may use this time to remove the non-publishing Party's Confidential Information and Development Technology, and then the publishing Party must then seek the permission of the non-publishing Party before submission; or (ii) the non-publishing Party may provide suggested edits to the publishing Party, provided, however, the publishing Party must ultimately seek the permission of the non-publishing Party before submission. If the non-publishing Party continues to deny permission after the 60-day delay period, the publishing Party may not submit the publication. If the publishing Party does not receive the non-publishing Party's written request within the ***] period of this Section 12.8, the publishing Party may submit or publish the proposed draft without further delay. The non-publishing Party's contribution shall be acknowledged in any publication by co-authorship or acknowledgment, in accordance with International Committee of Medical Journal Editors guidelines, and the publishing Party shall reasonably consider any comments that the other Party may have with respect to the proposed publication. The restrictions set forth in this Section 12.8 are not applicable to Janssen's publications that solely relate to the Janssen Drug or any Clinical Data associated therewith. Nothing in this Agreement shall be construed to prevent Janssen from publishing on the Janssen Drug, Janssen Data, any assay Controlled by Janssen, or publicly available information concerning any assay respecting the Janssen Drug, or to require Janssen to give notice to BTO of such publication, provided that in no event will any such publication include BTO Confidential Information without BTO's prior written permission.

12.9 SEC Filings.

12.9.1 A Party may disclose this Agreement and its terms, and material developments or material information generated under this Agreement, in securities filings with the U.S. Securities and Exchange Commission (or equivalent foreign agency) ("SEC") to the extent required by Applicable Laws regulating securities, after complying with the procedure set forth in this Section 12.9.1. The Party seeking to make such disclosure shall prepare a draft confidential treatment request and proposed

redacted version of this Agreement to request confidential treatment therefor, and the other Party shall promptly (and in any event, [***] after receipt of such confidential treatment request and proposed redactions) give its input in a reasonable manner in order to allow the Party seeking disclosure to file its request within the timelines prescribed by applicable SEC regulations. The Party seeking disclosure shall redact any portions of this Agreement reasonably requested by the other Party to be redacted prior to submitting such redacted version to the SEC. The Party seeking such disclosure shall seek to obtain confidential treatment of such agreement from the SEC as represented by such redacted version of this Agreement.

- 12.10 Further, each Party acknowledges that the other Party may be required by Applicable Laws, or may be required by the listing rules of any exchange on which the other Party's or its Affiliate's securities are traded, to make public disclosures (including in filings with the SEC or other governmental authority) of certain material developments or material information generated under this Agreement or any ancillary agreement and, without prejudice to Sections 12.1 through 12.3 as they apply to the Confidential Information of either Party, agrees that each Party may make such disclosures as required by Applicable Laws or such listing rules; provided that the Party seeking such disclosure shall provide the other Party with a copy of the proposed text of such disclosure sufficiently in advance of the scheduled release to afford such other Party a reasonable opportunity to review and comment thereon.
- 12.11 Notwithstanding anything to the contrary in this Agreement, either Party shall be permitted to disclose, on a confidential basis, the text and terms of this Agreement and the other Party's identity in connection therewith, to actual or *bona fide* potential acquirers or collaboration partners, and their respective consultants, auditors, attorneys and financial advisors, in each case, solely for purposes of due diligence or another legitimate business need, upon condition that (i) any such persons or entities are advised of the confidential nature of such information and are bound to the Party making such disclosure by obligations of confidentiality substantially equivalent to the terms of this Agreement except as to the duration thereof, which must be no less than three years after the date of such disclosure, and (ii) all confidential or proprietary scientific, technical or clinical information of the non-disclosing Party shall first be redacted from the copy of this Agreement being disclosed.

- 13.1 Term. This Agreement shall become effective as of the Effective Date. Unless earlier terminated pursuant to the provisions of this Article 13, this Agreement shall remain in full force and effect until such time as Janssen, its Affiliates or sublicensees ceases development and Commercialization of the Janssen Drug for the Clinical Treatment (the "Term"). For clarity, termination of this Agreement does not in itself terminate any other agreements between the Parties respecting related subject matter. Termination of any such other agreements will be in accordance with the terms of those agreements.
- 13.2 Termination of This Agreement Prior to Expiration of the Term. This Agreement may be terminated prior to the end of the Term in the circumstances set forth in any of Sections 13.2.2 through 13.2.5. The Parties shall provide written notices of such termination pursuant to the obligations of Section 14.15.
- 13.2.1 Intentionally Omitted.
- 13.2.2 Termination for Material Breach. If either Party commits a material breach or default of any of its obligations hereunder (such Party, the "Breaching Party"), the other Party hereto (the "Non-Breaching Party") may give the Breaching Party written notice of such material breach or default. Such written notice shall clearly identify the applicable breach and the Non-Breaching Party's intention to terminate this Agreement. If the Breaching Party fails to cure such breach or default within [***] after the date of the Non-Breaching Party's written notice thereof, this Agreement may be terminated by the Non-Breaching Party's second written notice to the Breaching Party sent after the end of the [***] cure period. Such second written notice terminates this Agreement upon the Breaching Party's receipt of such second written. If the Breaching Party indicates by written notice that it will be unable or is unwilling to cure the breach, this Agreement may be terminated by Non-Breaching Party's second written notice, which is effective to terminate this Agreement immediately upon the Breaching Party's receipt thereof.
- 13.2.3 Janssen Termination for Failure of Continuous Supply. If BTO commits a Failure of Continuous Supply, during the CRE Period, whether or not it has satisfied Commercially Reasonable Efforts as required under Sections 5.3 and 6.1.2, Janssen may give BTO written notice of such Failure of Continuous Supply. Such written notice shall clearly identify the basis for the Failure of Continuous Supply and Janssen's

intention to terminate this Agreement. If BTO fails to cure such Failure of Continuous Supply within [***] after the date of Janssen's written notice thereof, this Agreement may be terminated by Janssen's second written notice to BTO sent after the end of the [***] cure period. Such second written notice terminates this Agreement upon BTO's receipt of such second written. If BTO indicates by written notice at any time that it will be unable or is unwilling to cure the Failure of Continuous Supply, this Agreement may be terminated by Janssen's second written notice, which is effective to terminate this Agreement immediately upon BTO's receipt thereof.

- 13.2.4 Janssen Termination for Failure to Achieve a Milestone. If BTO commits a Failure to Achieve a Milestone during the CRE Period whether or not it has satisfied Commercially Reasonable Efforts as required under Sections 5.3 and 6.1.2, Janssen may give BTO written notice of such Failure to Achieve a Milestone. Such written notice shall clearly identify the basis for the Failure to Achieve a Milestone and Janssen's intention to terminate this Agreement. If BTO fails to cure such Failure to Achieve a Milestone within [***] after the date of Janssen's written notice thereof, this Agreement may be terminated by Janssen's second written notice to BTO sent after the end of the [***] cure period. Such second written notice terminates this Agreement upon BTO's receipt of such second written. If BTO indicates by written notice at any time that it will be unable or is unwilling to cure the Failure to Achieve a Milestone, this Agreement may be terminated by Janssen's second written notice, which is effective to terminate this Agreement immediately upon BTO's receipt thereof.
- 13.2.5 Termination for Insolvency. Each Party shall have the right to terminate this Agreement, immediately by giving written notice of termination to the other Party, if the other Party files a voluntary petition, or if an involuntary petition is granted in respect of the other Party and appeal proceedings are not commenced within 10 Business Days from the date of such petition or such petition is not discharged within sixty (60) days of the filing thereof under the bankruptcy provisions of Applicable Law, or the other Party is declared insolvent, undergoes voluntary or involuntary dissolution, or makes an assignment for the benefit of its creditors, or is unable to pay its debts as they come due, or suffers the appointment of a receiver or trustee over all, or substantially all, of its assets or properties (all such conditions are termed "Insolvency"). In the event of Insolvency, the provisions of Section 14.18 shall apply whether or not this Agreement is terminated under this Section 13.2.4.

- 13.2.6 Termination for Reasons Relating to the Janssen Drug. If (i) Janssen determines that the efficacy or safety of the Janssen Drug for the Clinical Treatment is insufficient and will not meet clinical or market needs, (ii) it is unlikely that there will be a sufficient market for the Janssen Drug (as documented by Janssen by written evidence) for the Indication, (iii) if there is adverse Regulatory Authority activity concerning the Janssen Drug used for the Clinical Treatment, (iv) Janssen voluntarily terminates the Clinical Trial for the Indication, (v) Janssen pauses the Clinical Trial for the Indication due to the expiration or termination of the Prior Collaboration Agreement before the end of the Clinical Trial, or (vi) if the Regulatory Authority determines that the testing of a patient with the BTO CDx is not required prior to or coterminous with prescribing the Janssen Drug, then Janssen may terminate this Agreement by providing written notice thereof to BTO. Such termination shall be effective [***] after BTO's receipt of such notice.
- 13.2.7 Termination for Failure to Amend the Prior Collaboration Agreement. If an amendment to the Prior Collaboration Agreement extending the term thereof is not executed by the parties thereto prior to October 31, 2025, Janssen may terminate this Agreement on ten (10) days' prior notice to BTO.
- 13.2.8 Termination for Reasons Relating to Lawsuits. If BTO is expressly precluded from using the BTO CDx in the Territory due to a final, non-appealable judgment or order by a court of competent jurisdiction or other governmental administrative body, which shall be deemed final and non-appealable upon the expiration of the applicable period for filing an appeal without any appeal having been filed, BTO shall provide Janssen with evidence of the finality and non-appealable nature of such judgment or order and may thereafter provide Janssen written notice of its intention to terminate this Agreement. For the avoidance of doubt, BTO shall have no obligation to appeal any such judgment or order, nor shall BTO be required to use the BTO CDx in contravention of the effective date of any bar imposed by such court or administrative body. Termination under this section 13.2.8 shall become effective no earlier than thirty (30) days after Janssen's receipt of such notice.

13.2.9 Termination for Failure to Agree on Commercialization Plan. If the Parties do not agree on the details of the Commercialization Plan as described in 5.1.1(a), Janssen may terminate this agreement on ten (10) days' prior notice to BTO.

13.3 Consequences of Termination or Expiration of this Agreement. Except as otherwise provided below, upon termination or expiration of this Agreement for any reason, all licenses granted to each Party by the other Party in this Agreement shall automatically terminate.

13.3.1 In the event that a Party terminates this Agreement, licenses are hereby granted, property shall be transferred, and payments shall be made as follows:

- (a) Intentionally Deleted.
- (b) If Janssen terminates this Agreement pursuant to Section 13.2.2 (Material Breach), Section 13.2.3 (Failure of Continuous Supply), or Section 13.2.5 (Insolvency) the following rights and obligations shall apply.
 - (i) [***]
- (c) If Janssen terminates this Agreement pursuant to Section 13.2.4 (Failure to Achieve a Milestone), Section 13.2.7 (Failure to Amend the Prior Collaboration Agreement) or 13.2.9 (Failure to Agree on Commercialization Plan), the following rights and obligations shall apply.
 - (i) [***]
- (c) If Janssen terminates this Agreement pursuant to Section 13.2.6 (Reasons Relating to the Janssen Drug):
 - (i) [***]
- (d) If BTO terminates this Agreement pursuant to Section 13.2.2 (Material Breach):
 - (i) [***]
- (e) If BTO terminates this Agreement pursuant to Section 13.2.4 (Insolvency):
 - (i) [***]
 - (ii) all licenses granted to BTO hereunder shall remain in effect pursuant to Section 13.2.

- (f) If BTO terminates this Agreement pursuant to Section 13.2.8 (Reasons Relating to Lawsuits), Janssen shall pay BTO the Unpaid Amounts and the Early Termination Fees and BTO shall have no further liability to Janssen under this Agreement.
- 13.4 Following any termination of this Agreement, each Party shall use its Commercially Reasonable Efforts to mitigate its termination costs. Any disputes with regard thereto shall be resolved by the JSC pursuant to Section 7.3 (JSC Decisions) and, if necessary, pursuant to Sections 14.18 (Governing Law) and 14.19 (Dispute Resolution).
- 13.5 Return of Confidential Information. Following any termination or expiration of this Agreement, and upon written request of the other Party, each Party shall, and shall cause its Affiliates to, return or destroy all of the other Party's Confidential Information it has received under this Agreement 30 calendar days after such written request, provided that the Confidential Information is not necessary for the receiving Party to be able to exercise its rights retained after termination or expiry of this Agreement. Notwithstanding the foregoing, subject to the use and disclosure restrictions under Article 12 (a) a single copy of such Confidential Information may be retained by a receiving Party for the sole purpose of determining the scope of obligations incurred under this Agreement and (b) the receiving Party shall not be required to destroy (i) any records required to be held by it in accordance with Applicable Law until expiration of the period of time required by Applicable Law, or (ii) computer records or files that have been created pursuant to the receiving Party's automatic archiving and back-up procedures and the removal of which is not technically reasonable, provided that such records will not be retained for longer than is required by a Party's archiving and back-up procedures. Upon written request of the other Party, the receiving Party will provide written confirmation of its fulfillment of its obligations under this Section 13.5.
- 13.6 No Further License Rights. Except for those license rights that are expressly provided in this Agreement, and only for the period of time expressly provided for such license rights, no other license rights are granted under this Agreement or survive the expiration or termination of this Agreement.

- 13.7 Survival. Termination of this Agreement for whatever reason in accordance with the provisions hereof or expiration of this Agreement shall not affect the accrued rights of the Parties and shall not limit remedies that may be otherwise available in law or equity. The provisions of Article 8 (Intellectual Property), Article 11 (Indemnification; Limitation of Liability; Insurance), Article 12 (Confidentiality), Article 13 (Term and Termination) and Article 14 (Miscellaneous) (together with any other provision that, either expressly or by its nature, is intended to survive) shall survive expiration or termination of this Agreement for any reason.

14 MISCELLANEOUS

- 14.1 Assignment. This Agreement may not be assigned by either Party in whole or in part without the prior written consent of the other Party, except that either Party may assign its rights under this Agreement to its Affiliate or in connection with the sale of all or substantially all of the assets to which this Agreement relates (for this purpose, the sale of Janssen's rights respecting the Janssen Drug or the sale of BTO's rights with respect to the BTO CDx shall be considered to be a sale of substantially all the assets and not require the other Party's consent to any assignment of this Agreement in whole or in part), provided that (a) BTO shall not assign this Agreement or sell its rights with respect to the BTO Assay to any direct competitor of Janssen offering a biosimilar or a FCN blocker or inhibitor intended to treat the same Indication without Janssen's prior written approval and (b) each Party shall require that the permitted assignee has the capacity to perform this Agreement and shall do so. This Agreement shall be binding upon the successors and permitted assigns of the Parties.
- 14.2 Affiliates. Both Parties shall have the right, in their sole discretion, to perform some or all of its obligations and exercise some or all of its rights under this Agreement through its Affiliates.
- 14.3 Relationship of the Parties. The status of a Party under this Agreement shall be that of an independent contractor. Nothing contained in this Agreement shall be construed as creating a partnership, joint venture or agency relationship between the Parties or as granting either Party the authority to bind or contract any obligation in the name of or on the account of the other Party or to make any statements, representations, warranties or commitments on behalf of the other Party.
- 14.4 Exclusivity Provisions.
- 14.4.1 Unless this Agreement is terminated by Janssen, during the Exclusivity Period, [***] The Exclusivity Period shall also terminate if (i) BTO does not obtain the status of an Approved IVD for the BTO CDx by the date upon which Janssen obtains Regulatory Approval for the Janssen Drug or (ii) if the BTO CDx

is recalled and the corrective action impacts the ability for Janssen to make the Janssen Drug commercially available by the Regulatory Authority. Upon the conclusion of the Exclusivity Period and at any time for activities not subject to the Exclusivity Period, yet at all times subject to the restrictions set forth in Article 8 (Intellectual Property), Janssen may develop a diagnostic test to detect the Biomarkers alone or in collaboration with a Third Party as a companion diagnostic for the Janssen Drug, without any obligations or consideration to BTO. BTO may collaborate with a Third Party to develop assays and/or products identical or similar to the BTO CDx, including but not limited to facilitation, prescription, administration, or dosing of drugs other than the Janssen Drug, provided that; neither Party shall use any, Confidential Information, Data, Background Technology, or Development Technology of the other Party in connection with any such development activity.

- 14.4.2 Bridging. The Parties acknowledge and agree that Janssen may seek to work with Third Parties for the development of a NGS cfDNA Companion Diagnostic for the administration of the Janssen Drug as a treatment for the Indication within the Territory, during the Exclusivity Period. Such activities with Third Parties are subject to Section 14.4.1, but such provision does not prevent Janssen or any of its Affiliates from directly or indirectly contracting with Third Parties to conduct bridging and concordance studies during the Exclusivity Period. In addition, such provision does not prevent Janssen or any of its Affiliates from directly or indirectly contracting with Third Parties to design, develop, manufacture, seek regulatory approval from regulators outside the Territory, and commercialize a NGS cfDNA Companion Diagnostic outside the Territory, during the Exclusivity Period. BTO shall support concordance studies at Janssen's request by offering its reasonable assistance, including (i) providing banked Non-Clinical Trial Samples purchased by Janssen with corresponding fetal fraction and fetal antigen and genotyping Data, and (ii) processing Samples with the BTO CDx and delivering Biomarker assay results, inclusive of the quantification values and cutoff thresholds, provided that any values, assay details, or algorithmic decisions that are BTO's Confidential Information will not be shared, in consideration of such payment as may be classified as optional work pursuant to the Development Plan.

- 14.5 At any time after the expiration of the CRE Period, if BTO reasonably believes that Commercialization of the BTO CDx is no longer commercially viable because the Commercial Performance Minimum is not being met for reasons beyond BTO's reasonable control, BTO may inform Janssen of its intent to discontinue Commercialization of the BTO CDx at least [***] days prior to the effective date of such intended discontinuation of Commercialization. Within [***] of such notice, at Janssen's request, BTO and Janssen will negotiate in good faith, for a period of at least [***] (the "Negotiation Period"), an amendment to this Agreement that would provide for support for BTO to continue Commercialization of the BTO CDx. During the Negotiation Period, at Janssen's request, BTO shall permit an independent certified public accounting firm selected by Janssen and reasonably acceptable to BTO (the "Auditor") to examine BTO's books and records (subject to the Auditor's execution of a non-disclosure agreement approved by BTO) relevant to verifying that [***]. Such audit shall be conducted at BTO's premises during normal business hours. The Auditor shall prepare a report with their conclusions [***]. BTO shall review the said report before its release to Janssen for the purpose of ensuring that it complies with the aforementioned confidentiality provisions. [***], the Parties are not able to agree on a solution, BTO may terminate this Agreement and discontinue Commercialization.
- 14.6 General Anti-Corruption Compliance Provision. Neither Party shall perform any actions that are prohibited by local and other anti-corruption laws (collectively "Anti-Corruption Laws") that may be applicable to one or both Parties to the Agreement. Without limiting the foregoing, neither Party shall make any payments, or offer or transfer anything of value, to any government official or government employee, to any political party official or candidate for political office or to any other third party related to the transaction in a manner that would violate Anti-Corruption Laws. BTO further agrees to comply with the provisions of Exhibit 14.6, attached hereto.
- 14.7 Health Care Compliance. BTO agrees to comply with the provisions of Exhibit 14.7, attached hereto.
- 14.8 Entire Agreement. Except for the Prior Collaboration Agreement, this Agreement contains the entire and only agreement between the Parties and supersedes and cancels all prior written or oral agreements, undertakings and negotiations between the Parties with respect to the subject matter hereof. Each Party confirms that it is not relying on any representations or warranties of the other Party except as specifically set out in this Agreement and therein. All exhibits referred to in this Agreement are hereby incorporated into and made a part of this Agreement.

- 14.9 Amendments. No amendments, changes, modifications or alterations of the terms and conditions of this Agreement shall be binding upon either Party unless made in writing and signed by both Parties.
- 14.10 Enforcement. The failure of either Party at any time to require performance of any provision hereof shall in no manner affect its rights at a later time to enforce the same.
- 14.11 Waiver. No term, provision or condition of this Agreement shall be waived unless such waiver is evidenced in writing and signed by the waiving Party.
- 14.12 Severability. If any part of this Agreement is declared invalid by any legally governing authority having jurisdiction over a Party, then such declaration shall not affect the remainder of the Agreement and the invalidated provision shall be revised in a manner that will render such provision valid while preserving the Parties' original intent to the maximum extent possible.
- 14.13 Joint Negotiation. This Agreement is the joint product of BTO and Janssen, and each provision hereof has been subject to the mutual consultation, negotiation and agreement of the Parties and their respective legal counsel and advisers and any rule of construction that a document shall be interpreted or construed against the drafting Party shall not be applicable.
- 14.14 Headings and Titles. Headings and titles in this Agreement are for convenience purposes only and shall not in any way influence the construction, performance and enforcement of any of its provisions.
- 14.15 Interpretation. Words in the singular shall be deemed to include the plural and vice versa and words of one gender shall be deemed to include the other genders as the context requires. The terms "hereof," "herein," and "herewith" and words of similar import shall, unless otherwise stated, be construed to refer to this Agreement as a whole (including all of the exhibits hereto) and not to any particular provision of this Agreement. Article, Section, and Exhibit references are to the Articles, Sections, and Exhibits to this Agreement unless otherwise specified. Unless otherwise stated, all references to any agreement shall be deemed to include the Exhibits, Schedules and Annexes, if any, to such agreement. The word "including" and words of similar import when used in this Agreement shall mean "including, without limitation," unless the context otherwise requires or unless otherwise

specified. Unless otherwise specified in a particular case, the word "days" refers to calendar days. References herein to this Agreement shall be deemed to refer to this Agreement as of its Effective Date and as it may be amended thereafter, unless otherwise specified. References to the performance, discharge or fulfillment of any liability in accordance with its terms shall have meaning only to the extent such liability has terms; if the liability does not have terms, the reference shall mean performance, discharge or fulfillment of such liability. If there is any inconsistency between this Agreement and its Exhibits or other ancillary documents this Agreement shall prevail.

- 14.16 Force Majeure. Neither Party shall lose any rights hereunder or be liable to the other Party for damages or losses on account of failure of performance by the defaulting Party, other than a failure to make payment, if the failure is occasioned directly or indirectly by government action, war, terrorism, fire, explosion, flood, strike, lockout, embargo, shortage of utilities, pandemic, act of God, or any other cause beyond the control and without the fault or negligence of the defaulting Party, provided that the Party claiming force majeure has exerted all Commercially Reasonable Efforts to avoid or remedy such force majeure; provided, however, that in no event shall a Party be required to settle any labor dispute or disturbance. Such excuse shall continue as long as the condition preventing the performance continues. Upon cessation of such condition, the affected Party shall promptly resume performance hereunder. Each Party agrees to give the other Party prompt written notice of the occurrence of any such condition, the nature thereof, and the extent to which the affected Party will be unable to perform its obligations hereunder. Each Party further agrees to use all Commercially Reasonable Efforts to correct the condition as quickly as possible and to give the other Party prompt written notice when it is again fully able to perform its obligations hereunder. Without limiting the foregoing, Janssen acknowledges that a force majeure event may necessitate BTO transferring, in whole or in part, and permanently or on a temporary basis, its activities under this Agreement to one or more equivalent and acceptable, as deemed by applicable Regulatory Authority(s), alternative locations other than the location(s) specified in the Development Plan or Commercialization Plan. BTO will promptly provide Janssen written notice of any such required transfer and Janssen hereby agrees to any such transfer.
- 14.17 Notices. Any notice, request, demand, waiver, consent, approval or other communication permitted or required under this Agreement shall be in writing, shall refer specifically to this Agreement and shall be deemed given only if delivered by hand or sent by internationally recognized overnight delivery service that maintains records of

delivery, addressed to the Parties at their respective addresses specified below or to such other address as the Party may have provided to the other Party. Such notice shall be deemed to have been given as of the date delivered by hand or transmitted by facsimile (with transmission confirmed) or on the second Business Day (at the place of delivery) after deposit with an internationally recognized overnight delivery service. This Section is not intended to govern the day-to-day business communications necessary between the Parties in performing their obligations under the terms of this Agreement. All notices under this Agreement will be deemed given when made to the address shown below:

If to BTO:

BillionToOne, Inc.
1035 O'Brien Dr.
Menlo Park, CA 94025
Attention: Chief Executive Officer

With a copy to:

BillionToOne, Inc.
1035 O'Brien Dr.
Menlo Park, CA 94025
Attention: General Counsel

If to Janssen:

Janssen Biotech, Inc.
Attention: [***]
800/850 Ridgeview Drive
Horsham PA 19044

With a copy to:

Janssen Biotech, Inc.
Attention: [***]
800/850 Ridgeview Drive
Horsham PA 19044

- 14.18 Governing Law. This Agreement is governed by and shall be construed in accordance with the laws of the State of New York, excluding any conflicts of law provisions.
- 14.19 Dispute Resolution. Any unresolved dispute, controversy or claim arising out of or related to this Agreement, or the interpretation, application, breach, termination or validity thereof, including any claim of inducement by fraud or otherwise ("Dispute"), shall be resolved in mediation and arbitration.

Before initiating arbitration, the Parties must first follow any explicit resolution procedure specified in this Agreement for a particular Dispute and, if such procedure is not successful or not specified, attempt to resolve the Dispute by confidential mediation. The mediation shall be held in New York, New York. Either Party may initiate mediation by written notice to the other Party of the existence of a Dispute.

The Parties shall use a professional mediator selected by agreement from American Arbitration Association, the CPR Institute for Dispute Resolution or like organization. The Parties shall select a mediator within 30 days of the notice and the mediation will begin promptly after the selection. The mediation will continue until the mediator, or either Party, declares in writing, no sooner than after the conclusion of one full day of a substantive mediation conference attended on behalf of each Party by a senior businessperson with authority to resolve the Dispute, that the Dispute cannot be resolved by mediation. In no event, however, shall mediation continue more than 60 days from initial notice by a Party to initiate mediation unless the Parties agree in writing to extend that period.

Any period of limitations that would otherwise expire between the initiation of mediation and its conclusion shall be extended until 20 days after the conclusion of the mediation.

The Parties may jointly opt out of the mediation procedure by written mutual agreement.

If the Parties fail to resolve the Dispute in mediation, and a Party desires to pursue resolution of the Dispute, the Dispute shall be submitted by either Party for resolution in arbitration pursuant to the then-current CPR Non-Administered Arbitration Rules ("CPR Rules") (www.cpradr.org), except where they conflict with these provisions, in which case these provisions control. The arbitration will be held in New York, New York. All aspects of the arbitration shall be treated as confidential, except to the extent disclosure of the existence of the arbitration is required by law. The arbitration tribunal shall consist of three arbitrators, of whom each party shall designate one. The third arbitrator, who will serve as chair, shall be selected by the two party-appointed arbitrators. Each arbitrator shall be a lawyer: (a) with at least 15 years' experience with a law firm of over 25 lawyers; or (b) with at least 15 years' experience in a corporate law department of over 25 lawyers; or (c) who was a judge of a court of general jurisdiction. Upon nomination, each arbitrator shall disclose any circumstance that might give rise to justifiable doubt regarding the candidate's independence or impartiality. Either Party may strike an arbitrator if that arbitrator has a conflict of interest or if their appointment creates the appearance of impropriety. Upon nomination, no arbitrator shall have any ex parte communications with either Party to the arbitration. Each arbitrator shall serve as a neutral in resolving the Dispute.

The Parties shall select the arbitrators within 30 days of initiation of the arbitration. The hearing will be concluded within nine (9) months after selection of the arbitrators and the award will be rendered within sixty (60) days of the conclusion of the hearing, or of any post hearing briefing, which briefing will be completed by both sides within forty-five (45) days after the conclusion of the hearing.

The hearing will be concluded in ten hearing days or less. Multiple hearing days will be scheduled consecutively to the greatest extent possible. The Parties agree to seek only limited discovery. The Parties agree to pursue no more than the following discovery in the aggregate from all Parties and non-parties to the action: a total of no more than fifteen (15) requests for documents (including subparts); and a total of no more than forty (40) hours of party deposition testimony, including both fact and expert witnesses, and no more than twenty (20) hours of non-party witnesses. Electronic discovery of individuals shall be limited to a total of five custodians.

The arbitrators shall decide the merits of any Dispute in accordance with the law governing this Agreement, without application of any principle of conflict of laws that would result in reference to a different law. The arbitrators may not apply principles such as “amiable compositeur” or “natural justice and equity.”

The arbitrators are required to allow the Parties to submit dispositive motions, and are required to decide such motions in advance of any hearing. The arbitrators shall decide such motions as would a United States District Court Judge sitting in the jurisdiction whose substantive law governs.

The arbitrators shall render a written opinion stating the reasons upon which the award is based. The Parties consent to the jurisdiction of the United States District Court for the district in which the arbitration is held for the enforcement of these provisions and the entry of judgment on any award rendered hereunder. Should such court for any reason lack jurisdiction, any court with jurisdiction may act in the same fashion.

Each Party has the right to seek from the appropriate court provisional remedies such as attachment, preliminary injunction, replevin, etc. to avoid irreparable harm, maintain the status quo, or preserve the subject matter of the Dispute. Rule 14 of the CPR Rules does not apply to this Agreement.

EACH PARTY HERETO WAIVES: (1) ITS RIGHT TO TRIAL OF ANY ISSUE BY JURY, (2) WITH THE EXCEPTION OF RELIEF MANDATED BY STATUTE, ANY CLAIM TO PUNITIVE, EXEMPLARY, MULTIPLIED, INDIRECT, CONSEQUENTIAL OR LOST PROFITS/REVENUES DAMAGES, AND (3) ANY CLAIM FOR ATTORNEY FEES, COSTS AND PREJUDGMENT INTEREST. THE FOREGOING WAIVERS SHALL NOT APPLY TO A PARTY'S INDEMNIFICATION OBLIGATIONS UNDER ARTICLE 11.

- 14.20 Insolvency. All rights and licenses granted under or pursuant to this Agreement by BTO to Janssen, and by Janssen to BTO respecting each Party's Intellectual Property Rights subject to license and other rights granted under this Agreement ("Subject IP Rights" of each Party), are, and shall otherwise be deemed to be, for all purposes of Section 365(n) of Title 11 of the U.S. Code ("Title 11"), licenses of rights to intellectual property as defined in Title 11. Each Party agrees during the Term of this Agreement to create and maintain current copies or, if not amenable to copying, detailed descriptions or other appropriate embodiments, of all its Subject IP Rights. If a case is commenced by or against a Party (the "Insolvent Party") under Title 11, then, unless and until this Agreement is rejected as provided in Title 11, the Insolvent Party (in any capacity, including debtor-in-possession) and its successors and assigns (including, without limitation, a Title 11 trustee) shall either perform all of the obligations provided in this Agreement to be performed by the Insolvent Party or provide to the other Party all its Subject IP Rights (including all embodiments thereof) held by the Insolvent Party and such successors and assigns, as the other Party may elect in a written request, immediately upon such request. If a Title 11 case is commenced by or against the Insolvent Party, this Agreement is rejected as provided in Title 11 and the other Party elects to retain its rights hereunder as provided in Title 11, then the Insolvent Party (in any capacity, including debtor-in-possession) and its successors and assigns (including, without limitation, a Title 11 trustee) shall provide to the other Party all its Subject IP Rights (including all embodiments thereof) held by the Insolvent Party and such successors and assigns immediately upon the other Party's written request therefor. All rights, powers and remedies of the other Party, as a licensee and grantee of rights hereunder, provided herein are in addition to and not in substitution for any and all other rights, powers and remedies now or

hereafter existing at law or in equity (including, without limitation, Title 11), or under the terms of this Agreement, in the event of the commencement of a Title 11 case by or against the Insolvent Party. The other Party, in addition to the rights, powers and remedies expressly provided herein, shall be entitled to exercise all other such rights and powers and resort to all other such remedies as may now or hereafter exist at law or in equity (including Title 11) in such event. The Parties agree that each Party, as a licensee of such Intellectual Property Rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code.

- 14.21 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Each Party acknowledges that an original signature or a copy thereof transmitted by electronic transmission shall constitute an original signature for purposes of this Agreement.

The Parties have caused this Agreement to be executed by their respective duly authorized officers as of the Effective Date.

BILLIONTOONE, INC.

By: /s/ Oguzhan Atay
Name: Oguzhan Atay
Title: Chief Executive Officer
Date: July 11, 2025

JANSSEN BIOTECH, INC.

By: /s/ Biljana Naumovic
Name: Biljana Naumovic
Title: Managing Director
Date: July 11, 2025

EXHIBITS:

Exhibit 1.36: Development Plan
Exhibit 2.3.3: Protection of Personal Information
Exhibit 2.3.4: Data Safeguards
Exhibit 2.9: Approved BTO Third Party Contractors
Exhibit 5.2(a): Commercialization Plan
Exhibit 14.6: Compliance with Anti-Corruption Laws
Exhibit 14.7: Health Care Compliance (“HCC”) Provisions for Suppliers that Interact and Contract with Health Care Providers (“HCPs”) for Services on Janssen’s Behalf

**BILLIONTOONE, INC.
INDEMNIFICATION AGREEMENT**

THIS INDEMNIFICATION AGREEMENT (this “Agreement”) dated as of _____, is made by and between BillionToOne, Inc., a Delaware corporation (the “Company”), and _____ (“Indemnitee”).

RECITALS:

- A. The Company desires to attract and retain the services of highly qualified individuals as directors, officers, employees and agents.
- B. The Company’s certificate of incorporation, as amended (the “Certificate of Incorporation”) authorizes the Company to indemnify its directors, officers, employees and agents as set forth therein.
- C. The Company’s bylaws (the “Bylaws”) require that the Company indemnify and advance expenses to persons who are or were serving as directors and officers of the Company (including persons who, while serving as directors or officers, are or were serving at the request of the Company as a director, officer, employee or agent of another enterprise), and permits the Company to indemnify and advance expenses to such other persons it has the power to indemnify and provide rights to an advance of expenses under the Delaware General Corporation Law, as amended (the “Code”), and such Bylaws expressly provide that the indemnification provided therein is not exclusive and contemplates that the Company may enter into separate agreements with its directors, officers and other persons to set forth specific provisions relating to indemnification and advancement of expenses.
- D. Indemnitee does not regard the protection currently provided by applicable law, the Company’s governing documents and available insurance as adequate under the present circumstances, and the Company has determined that Indemnitee and other directors, officers, employees and agents of the Company may not be willing to serve or continue to serve in such capacities without additional protection.
- E. The Company desires and has requested Indemnitee to serve or continue to serve as a director, officer, employee or agent of the Company, as the case may be, and has proffered this Agreement to Indemnitee as an additional inducement to serve in such capacity.
- F. Indemnitee is willing to serve, or to continue to serve, as a director, officer, employee or agent of the Company, as the case may be, if Indemnitee is furnished the indemnity provided for herein by the Company.
- G. [Indemnitee has certain rights to indemnification and/or insurance provided by (“[Venture Fund]”) which Indemnitee and [Venture Fund] intend to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided herein, with the Company’s acknowledgement and agreement to the foregoing being a material condition to Indemnitee’s willingness to serve on the Company’s Board of Directors.]¹

¹ NTD: To be included in affiliated-director indemnification agreements.

AGREEMENT:

NOW THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Definitions.

(a) Agent. For purposes of this Agreement, the term “agent” of the Company means any person who: (i) is or was a director, officer, employee or other fiduciary of the Company or a subsidiary of the Company; or (ii) is or was serving at the request or for the convenience of, or representing the interests of, the Company or a subsidiary of the Company, as a director, officer, employee or other fiduciary of a foreign or domestic corporation, partnership, joint venture, trust or other enterprise.

(b) Change in Control. For purposes of this Agreement, the term “change in control” shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) *Acquisition of Stock by Third Party.* Any Person (as defined below) is or becomes the Beneficial Owner (as defined below), directly or indirectly, of securities of the Company representing twenty percent (20%) or more of the combined voting power of the Company’s then-outstanding securities;

(ii) *Change in Board Composition.* During any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Company’s board of directors, and any new directors (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 1(b)(i), 1(b)(iii) or 1(b)(iv)) whose election by the board of directors or nomination for election by the Company’s stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute at least a majority of the members of the Company’s board of directors;

(iii) *Corporate Transactions.* The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the board of directors or other governing body of such surviving entity;

(iv) Liquidation. The approval by the stockholders of the Company of a dissolution, liquidation and winding up of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; and

(v) Other Events. Any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or in response to any similar item on any similar schedule or form) promulgated under the Securities Exchange Act of 1934, as amended, whether or not the Company is then subject to such reporting requirement, except the completion of the Company's initial public offering shall not be considered a change in control.

For purposes of this Section 1(b), the following terms shall have the following meanings: (A) "Person" shall have the meaning as set forth in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended; *provided, however*, that "Person" shall exclude (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, and (B) "Beneficial Owner" shall have the meaning given to such term in Rule 13d-3 under the Securities Exchange Act of 1934, as amended; *provided, however*, that "Beneficial Owner" shall exclude any Person otherwise becoming a Beneficial Owner by reason of (i) the stockholders of the Company approving a merger of the Company with another entity or (ii) the Company's board of directors approving a sale of securities by the Company to such Person.

(c) Disinterested Director. For purposes of this Agreement, the term "disinterested director" shall be a director of the Company who is not and was not a party to the proceeding in respect of which indemnification is sought by Indemnitee.

(d) Expenses. For purposes of this Agreement, the term "expenses" shall be broadly construed and shall include, without limitation, all direct and indirect costs of any type (including, without limitation, all reasonable attorneys', witness, or other professional fees and related disbursements, and other reasonable out-of-pocket costs), actually and reasonably incurred by Indemnitee in connection with the investigation, defense or appeal of a proceeding or establishing or enforcing a right to indemnification under this Agreement, the Code or otherwise, and amounts paid in settlement by or on behalf of Indemnitee, but shall not include any judgments, fines or penalties actually levied against Indemnitee for such individual's violations of law. The term "expenses" shall also include reasonable compensation for time spent by Indemnitee for which Indemnitee is not compensated by the Company or any subsidiary or third party (i) for any period during which Indemnitee is not an agent, in the employment of, serving as a director of the Company or its parent entity or subsidiary, or providing services for compensation to, the Company or its parent entity or subsidiary; and (ii) if the rate of compensation and estimated time involved is approved by the directors of the Company who are not parties to any action with respect to which expenses are incurred, for Indemnitee while an agent of, employed by, or providing services for compensation to, the Company or any subsidiary.

(e) Proceedings. For purposes of this Agreement, the term “proceeding” shall be broadly construed and shall include, without limitation, any threatened, pending, or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, and whether formal or informal in any case, in which Indemnitee was, is or will be involved as a party or otherwise by reason of: (i) the fact that Indemnitee is or was a director or officer of the Company; (ii) the fact that any action taken by Indemnitee or of any action on Indemnitee’s part while acting as director, officer, employee or agent of the Company; or (iii) the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, and in any such case described above, whether or not serving in any such capacity at the time any liability or expense is incurred for which indemnification, reimbursement, or advancement of expenses may be provided under this Agreement.

(f) Subsidiary. For purposes of this Agreement, the term “subsidiary” means any corporation or limited liability company of which more than 50% of the outstanding voting securities or equity interests are owned, directly or indirectly, by the Company and one or more of its subsidiaries, and any other corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary.

(g) Independent Counsel. For purposes of this Agreement, the term “independent counsel” means a law firm, or a partner (or, if applicable, member) of such a law firm, that is experienced in the matters relevant to the issue(s) concerning such indemnification claims, and neither presently is, nor in the past five (5) years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party, or (ii) any other party to the proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term “independent counsel” shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee’s rights under this Agreement.

2. Agreement to Serve. Indemnitee will serve, or continue to serve, as a director, officer, employee or agent of the Company or any subsidiary, as the case may be, faithfully and to the best of his or her ability, at the will of the Company or such subsidiary (or under separate agreement, if such agreement exists), in the capacity Indemnitee currently serves as an agent of the Company or such subsidiary, so long as Indemnitee is duly appointed or elected and qualified in accordance with the applicable provisions of the Bylaws or other applicable governing documents of the Company or such other subsidiary, as applicable, or until such time as Indemnitee resigns from such position; provided, however, that nothing contained in this Agreement is intended as an employment agreement between Indemnitee and the Company or any of its subsidiaries or to create any right to continued employment of Indemnitee with the Company or any of its subsidiaries in any capacity.

The Company acknowledges that it has entered into this Agreement and assumes the obligations imposed on it hereby, in addition to and separate from its obligations to Indemnitee under the Bylaws, to induce Indemnitee to serve, or continue to serve, as a director, officer, employee or agent of the Company and/or any subsidiary of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director, officer, employee or agent of the Company and/or any such subsidiary.

3. Indemnification.

(a) Indemnification in Third Party Proceedings. Subject to Section 10 below, the Company shall indemnify Indemnitee to the fullest extent permitted by the Code, as the same may be amended from time to time, if Indemnitee is a party to or threatened to be made a party to or otherwise involved in any proceeding, for any and all expenses, actually and reasonably incurred by Indemnitee in connection with the investigation, defense, settlement or appeal of such proceeding.

(b) Indemnification in Derivative Actions and Direct Actions by the Company. Subject to Section 10 below, the Company shall indemnify Indemnitee to the fullest extent permitted by the Code, if Indemnitee is a party to or threatened to be made a party to or otherwise involved in any proceeding by or in the right of the Company to procure a judgment in its favor, against any and all expenses actually and reasonably incurred by Indemnitee in connection with the investigation, defense, settlement, or appeal of such proceedings.

4. Indemnification of Expenses of Successful Party. To the extent that Indemnitee is a party to or a participant in and is successful (on the merits or otherwise) in defense of any proceeding or any claim, issue or matter therein, the Company shall indemnify Indemnitee against all expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. To the extent permitted by applicable law, if Indemnitee is not wholly successful in such proceeding but is successful, on the merits or otherwise, in defense of one or more but less than all claims, issues or matters in such proceeding, the Company shall indemnify Indemnitee against all expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with (a) each successfully resolved claim, issue or matter and (b) any claim, issue or matter related to any such successfully resolved claim, issue or matter. For purposes of this section, the termination of any claim, issue or matter in such a proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

5. Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of any expenses actually and reasonably incurred by Indemnitee in the investigation, defense, settlement or appeal of a proceeding, but is precluded by applicable law or the specific terms of this Agreement to indemnification for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled.

6. Advancement of Expenses. To the extent not prohibited by law, the Company shall advance the expenses incurred by Indemnitee in connection with any proceeding, and such advancement shall be made as soon as practicable but no more than forty-five (45) days after the receipt by the Company of a statement or statements requesting such advances (which shall include invoices received by Indemnitee in connection with such expenses but, in the case of invoices in

connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice). Advances shall be unsecured, interest free and without regard to Indemnitee's ability to repay the expenses. Indemnitee hereby undertakes to repay any advance to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. Advances shall include any and all expenses actually and reasonably incurred by Indemnitee pursuing an action to enforce Indemnitee's right to indemnification under this Agreement, or otherwise and this right of advancement, including expenses incurred preparing and forwarding statements to the Company to support the advances claimed. Indemnitee acknowledges that the execution and delivery of this Agreement shall constitute an undertaking providing that Indemnitee shall, to the fullest extent required by law, repay the advance if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. The right to advances under this Section shall continue until final disposition of any proceeding, including any appeal therein. This Section 6 shall not apply to any claim made by Indemnitee for which indemnity is excluded pursuant to Section 10(b).

7. Notice and Other Indemnification Procedures.

(a) Notification of Proceeding. Indemnitee will notify the Company in writing promptly upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any proceeding or matter which may be subject to indemnification or advancement of expenses covered hereunder. The failure of Indemnitee to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise.

(b) Request for Indemnification and Indemnification Payments. Indemnitee shall notify the Company promptly in writing upon receiving notice of any demand, judgment or other requirement for payment that is the subject to indemnification under the terms of this Agreement and shall request payment thereof by the Company. Indemnification payments requested by Indemnitee under Section 3 hereof shall be made by the Company as soon as practicable but no later than sixty (60) days after receipt of the written request of Indemnitee. Claims for advancement of expenses shall be made under the provisions of Section 6 herein.

(c) Application for Enforcement. In the event the Company fails to make timely payments as set forth in Sections 6 or 7(b) above, Indemnitee shall have the right to apply to any court of competent jurisdiction for the purpose of enforcing Indemnitee's right to indemnification or advancement of expenses pursuant to this Agreement. In such an enforcement hearing or proceeding, the burden of proof shall be on the Company to prove by that indemnification or advancement of expenses to Indemnitee is not required under this Agreement or permitted by applicable law. Any determination by the Company (including its board of directors, stockholders or independent counsel) that Indemnitee is not entitled to indemnification hereunder, shall not create any presumption that Indemnitee is not entitled to indemnification or advancement of expenses hereunder.

(d) Procedures Upon Application for Indemnification.

(i) Upon written request by Indemnitee for indemnification herein, a determination with respect to Indemnitee's entitlement thereto shall be made as follows, provided that a change in control shall not have occurred: (i) by a majority vote of the disinterested directors, even if less than a quorum of the Company's board of directors; (ii) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even if less than a quorum of the Company's board of directors; (iii) if there are no such disinterested directors or, if such disinterested directors so direct, by independent counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee; or (iv) if so directed by the Company's board of directors, by the Company's stockholders.

(ii) If a change in control shall have occurred, a determination with respect to Indemnitee's entitlement to indemnification shall be made by independent counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee. Indemnitee shall cooperate with the person, persons or entity making the determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) actually and reasonably incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company, to the extent permitted by applicable law.

(iii) In the event the determination of entitlement to indemnification is to be made by independent counsel, the independent counsel shall be selected as provided below and consistent with the requirements of an independent counsel as set forth in Section 1. If a change in control shall not have occurred, the independent counsel shall be selected by the Company's board of directors, with the consent of the Indemnitee (which consent shall not be unreasonably withheld). If a change in control shall have occurred, the independent counsel shall be selected by Indemnitee (unless Indemnitee shall request that such selection be made by the Company's board of directors, in which event the preceding sentence shall apply, or in the event that there are multiple indemnitees relating to the same indemnification claims without a conflict of interest, in which case such indemnitees shall endeavor to unanimously appoint a single independent counsel), with the consent of the Company (which consent shall not be unreasonably withheld). The Company shall pay the reasonable fees and expenses of any independent counsel relating to the indemnification matters contemplated herein consistent with the terms of this Agreement.

(e) Cooperation. Indemnitee shall provide the Company such information and cooperation in connection with any proceeding as may be reasonably appropriate.

8. Assumption of Defense. In the event the Company may be obligated to make any indemnity to Indemnitee contemplated hereunder in connection with any proceeding, the Company, if appropriate, shall be entitled to assume the defense of such proceeding, or to participate to the extent permissible in such proceeding, with counsel reasonably acceptable to Indemnitee. Upon assumption of the defense by the Company and the retention of such counsel by the Company, the Company shall not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same proceeding, provided that Indemnitee shall have the right to employ separate counsel in such proceeding at Indemnitee's sole

cost and expense. Notwithstanding the foregoing, if Indemnitee's counsel delivers a written notice to the Company stating that such counsel has reasonably concluded that there is, or is reasonably likely to be, a conflict of interest between the Company and Indemnitee in the conduct of any such defense or the Company shall not have employed counsel or otherwise actively pursued the defense of such proceeding within a reasonable time, then in any such event the reasonable fees and expenses of Indemnitee's counsel to defend such proceeding shall be subject to the indemnification and advancement of expenses provisions of this Agreement.

9. Insurance. To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents of the Company or of any subsidiary ("D&O Insurance"), Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, officer, employee or agent under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has D&O Insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all commercially reasonable or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies. In the event of a Change in Control, or the Company becoming insolvent (including being placed into receivership or entering the federal bankruptcy process and the like), the Company shall maintain in force any and all insurance policies then maintained by the Company in respect of Indemnitee (including directors' and officers' liability, fiduciary, employment practices or otherwise), for a period of six years thereafter ("Tail Policy"). The Tail Policy shall be placed by the broker of the Company's choice with incumbent insurance carriers using the policies that were in place at the time of the Change in Control (unless the incumbent carriers do not offer such policies, in which case the Tail Policy shall be substantially comparable in scope and amount as the expiring policies, and the insurance carriers for the Tail Policy shall have an AM Best rating that is the same or better than the AM Best ratings of the expiring policies).

10. Exceptions.

(a) Certain Matters. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee on account of any proceeding with respect to (i) remuneration paid to Indemnitee if it is determined by final judgment or other final adjudication that such remuneration was in violation of law (and, in this respect, both the Company and Indemnitee have been advised that the Securities and Exchange Commission believes that indemnification for liabilities arising under the federal securities laws is against public policy and is, therefore, unenforceable and that claims for indemnification should be submitted to appropriate courts for adjudication, as indicated in Section 10(d) below); (ii) a final judgment rendered against Indemnitee for an accounting, disgorgement or repayment of profits made from the purchase or sale by Indemnitee of securities of the Company against Indemnitee or in connection with a settlement by or on behalf of Indemnitee to the extent it is acknowledged by Indemnitee and the Company that such amount paid in settlement resulted from Indemnitee's conduct from which Indemnitee received monetary personal profit pursuant to the provisions of Section 16(b) of the Securities Exchange Act of 1934, as amended, or other provisions of any federal, state or local statute or rules and regulations thereunder; (iii) a final judgment or other final adjudication that Indemnitee's conduct was in bad faith, knowingly

fraudulent or deliberately dishonest or constituted willful misconduct (but only to the extent of such specific determination); (iv) on account of conduct that is established by a final judgment as constituting a breach of Indemnitee's duty of loyalty to the Company or resulting in any personal profit or advantage to which Indemnitee is not legally entitled; or (v) any reimbursement of the Company by Indemnitee of any compensation pursuant to any compensation recoupment or clawback policy adopted by the Board or the compensation committee of the Board, including but not limited to any such policy adopted to comply with stock exchange listing requirements implementing Section 10D of the Securities Exchange Act. For purposes of the foregoing sentence, a final judgment or other adjudication may be reached in either the underlying proceeding or action in connection with which indemnification is sought or a separate proceeding or action to establish rights and liabilities under this Agreement.

(b) Claims Initiated by Indemnitee. Any provision herein to the contrary notwithstanding, the Company shall not be obligated to indemnify or advance expenses to Indemnitee with respect to proceedings or claims (or any part thereof) initiated or brought by Indemnitee against the Company or its directors, officers, employees or other agents and not by way of defense, except (i) with respect to proceedings brought to establish or enforce a right to indemnification or an advancement of expenses under this Agreement or under any other agreement, provision in the Bylaws or Certificate of Incorporation or applicable law, or (ii) with respect to any other proceeding initiated by Indemnitee that is either approved by the Company's board of directors. However, indemnification or advancement of expenses may be provided by the Company in specific cases if the Company's board of directors determines it to be appropriate.

(c) Unauthorized Settlements. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee under this Agreement for any amounts paid in settlement of a proceeding effected without the Company's written consent. The Company shall not, without the Indemnitee's prior written consent, enter into any such settlement of any proceeding contemplated by this Agreement (in whole or in part) unless such settlement (i) provides for a full and final release of all claims asserted against Indemnitee and (ii) does not impose any expense, judgment, fine, penalty or limitation on Indemnitee. Neither the Company nor Indemnitee shall unreasonably withhold consent to any proposed settlement; provided, however, that the Company may in any event decline to consent to (or to otherwise admit or agree to any liability for indemnification hereunder in respect of) any proposed settlement if the Company is also a party in such proceeding and determines in good faith that such settlement is not in the best interests of the Company and its stockholders.

(d) Securities Act Liabilities. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee or otherwise act in violation of any undertaking appearing in and required by the rules and regulations promulgated under the Securities Act of 1933, as amended (the "Act"), or in any registration statement filed with the SEC under the Act. Indemnitee acknowledges that paragraph (h) of Item 512 of Regulation S-K currently generally requires the Company to undertake in connection with any registration statement filed under the Act to submit the issue of the enforceability of Indemnitee's rights under this Agreement in connection with any liability under the Act on public policy grounds to a court of appropriate jurisdiction and to be governed by any final adjudication of such issue. Indemnitee specifically agrees that any such undertaking shall supersede the provisions of this Agreement and to be bound by any such undertaking.

(e) No Duplication of Payment. The Company shall not be obligated under this Agreement to make any payment of amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent payment has actually been made to or on behalf of Indemnitee under any statute, insurance policy, indemnity provision or otherwise.

11. Nonexclusivity; Priority of Payment and Survival of Rights.

(a) The provisions for indemnification and advancement of expenses set forth in this Agreement shall not be deemed exclusive of any other rights which Indemnitee may at any time be entitled under any provision of applicable law, the Company's Certificate of Incorporation, Bylaws or other agreements, both as to action in Indemnitee's official capacity and Indemnitee's action as an agent of the Company, in any court in which a proceeding is brought, and Indemnitee's rights hereunder shall continue after Indemnitee has ceased acting as an agent of the Company and shall inure to the benefit of the heirs, executors, administrators and assigns of Indemnitee. The obligations and duties of the Company to Indemnitee under this Agreement shall be binding on the Company and its successors and assigns until terminated in accordance with its terms. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

(b) [The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses and/or insurance provided by [Venture Fund] and certain of its affiliates (collectively, the "Fund Indemnitors"). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Certificate of Incorporation or Bylaws of the Company (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors, and (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third party beneficiaries of the terms of this Section 11(b).]

(c) No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her corporate status prior to such amendment, alteration or repeal. To the extent that a change in the Code, whether by statute or judicial decision, permits greater indemnification or advancement of expenses than would be afforded currently under the Company's Certificate of Incorporation, Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, by Indemnitee shall not prevent the concurrent assertion or employment of any other right or remedy by Indemnitee.

12. Term. This Agreement shall continue until and terminate upon the later of: (a) ten (10) years after the date that Indemnitee shall have ceased to serve as a director or and/or officer, employee or agent of the Company; or (b) one (1) year after the final termination of any proceeding, including any appeal, then pending, in respect to which Indemnitee was granted, or otherwise may be entitled to, rights of indemnification or advancement of expenses hereunder. For the avoidance of doubt, this Agreement shall provide for rights of indemnification and advancement of Expenses as set forth herein for any event or occurrence related to Indemnitee's service for the Company, regardless of whether such events or occurrences occurred before or after the date of this Agreement.

No legal action shall be brought and no cause of action shall be asserted by or in the right of the Company against an Indemnitee or an Indemnitee's estate, spouse, heirs, executors or personal or legal representatives after the expiration of five (5) years from the date of accrual of such cause of action, and any claim or cause of action of the Company shall be extinguished and deemed released unless asserted by the timely filing of a legal action within such five-year period; provided, however, that if any shorter period of limitations is otherwise applicable to such cause of action, such shorter period shall govern.

13. Subrogation. In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee (other than against the Fund Indemnitor), who, at the request of the Company, shall execute all papers required and shall do everything that may be reasonably necessary to secure such rights, including the execution of such documents necessary to enable the Company effectively to bring suit to enforce such rights.

14. Interpretation of Agreement. It is understood that the parties hereto intend this Agreement to be interpreted and enforced so as to provide indemnification to Indemnitee to the fullest extent now or hereafter permitted by law.

15. Severability. If any provision of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever, (a) the validity, legality and enforceability of the remaining provisions of the Agreement (including without limitation, all portions of any paragraphs of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (b) to the fullest extent possible, the provisions of this Agreement (including, without limitation, all portions of any paragraph of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable and to give effect to Section 14 hereof.

16. Amendment and Waiver. No supplement, modification, amendment, or cancellation of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

17. Notice. Except as otherwise provided herein, any notice or demand which, by the provisions hereof, is required or which may be given to or served upon the parties hereto shall be in writing and, if by overnight delivery, courier or personal delivery, shall be deemed to have been validly served, given or delivered upon actual delivery and, if mailed, shall be deemed to have been validly served, given or delivered three (3) business days after deposit in the United States mail, as registered or certified mail, with proper postage prepaid and addressed to the party or parties to be notified at the addresses set forth on the signature page of this Agreement (or such other address(es) as a party may designate for itself by like notice). If to the Company, notices and demands shall be delivered to the attention of the Secretary of the Company.

18. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnatee for any reason whatsoever, the Company, in lieu of indemnifying Indemnatee, shall contribute to the amount incurred by Indemnatee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnatee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnatee in connection with such event(s) and/or transaction(s).

19. Governing Law; Venue. This Agreement shall be governed exclusively by and construed according to the laws of the State of Delaware, without giving effect to any conflicts of laws principles that require the application of the law of a different state. The Company and Indemnatee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Court of Chancery of the State of Delaware (the "**Delaware Court**"), and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, to appoint the registered agent of the Company irrevocably as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

20. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute but one and the same Agreement. Only one such counterpart need be produced to evidence the existence of this Agreement.

21. Headings. The headings of the sections of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction hereof.

22. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, understandings and negotiations, written and oral, between the parties with respect to the subject matter of this Agreement; provided, however, that this Agreement is a supplement to and in furtherance of the Company's Certificate of Incorporation, Bylaws, the Code and any other applicable law, and shall not be deemed a substitute therefor, and does not diminish or abrogate any rights of Indemnitee thereunder.

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement effective as of the date set forth in the first paragraph hereof.

COMPANY

BILLIONTOONE, INC.

Signature: _____

Print Name: _____

Title: _____

INDEMNITEE

Signature: _____

Print Name: _____

Address: _____

SIGNATURE PAGE TO
INDEMNIFICATION AGREEMENT

BILLIONTOONE, INC.

2627 Hanover St, Palo Alto, CA 94304

Oguzhan Atay

Dear Oguzhan Atay:

BillionToOne, Inc., a Delaware corporation (the "Company"), is pleased to offer you employment with the Company on the terms described below.

1. Position. You will start in a full-time position as Chief Executive Officer and you will report to the Company's Board of Directors. You will perform the duties customarily performed by an employee in your position. By signing this letter, you confirm with the Company that you are under no contractual or other legal obligations that would prohibit you from performing your duties with the Company.

2. Compensation and Employee Benefits. You will be paid as compensation for services at a gross rate of \$80,000.00 per year, of which \$10,000 will be paid immediately as a bonus, and the rest will be payable on the Company's regular payroll dates. The yearly salary will increase to \$140,000.00 per year upon closing of next round of at least \$1,000,000 fundraising in 2017. In addition, 3,000,000 Common Shares that you currently hold will continue to vest as specified in the original Restricted Stock Purchase Agreement between you and the Company and as determined by the Company's Board of Directors. As an employee of the Company, you will be eligible to participate in those Company-sponsored benefits generally made available to all employees. These benefits will include the payment for or reimbursement of a healthcare insurance plan available to employees.

3. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations which may have been made to you are superseded by this offer. "At will" nature of your employment may only be changed in an express written agreement signed by you and the Company's Board of Directors.

4. Withholding Taxes. All forms of compensation referred to in this letter are subject to applicable withholding and payroll taxes.

5. Miscellaneous.

(a) Governing Law. The validity, interpretation, construction and performance of the terms of this letter, and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law.

(b) Entire Agreement. This letter sets forth the entire agreement and understanding of the parties relating to the subject matter herein and supersedes all prior or contemporaneous discussions, understandings and agreements, whether oral or written, between them relating to the subject matter hereof.

(c) Counterparts. This letter may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and all of which together shall constitute one and the same agreement.

(d) Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to this letter or any notices required by applicable law or the Company's Certificate of Incorporation or Bylaws by email or any other electronic means. You hereby consent to receive such documents and notices by such electronic delivery and agree to participate through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

As required by law, your employment with the Company is also contingent upon your providing legal proof of your identity and authorization to work in the United States.

Your start date will be January 14, 2017.

Very truly yours,

BILLIONTOONE, INC.

By: /s/ David Tsao
David Tsao, President

OGUZHAN ATAY

By: /s/ Oguzhan Atay

BILLIONTOONE, INC.

April 5, 2017

Dear David Tsao:

BillionToOne, Inc., a Delaware corporation (the "Company"), is pleased to offer you employment with the Company on the terms described below.

1. Position. You will start in a full-time position as Chief Technology Officer and you will report to the Company's CEO and to the Board of Directors. You will perform the duties customarily performed by an employee in your position. By signing this letter, you confirm with the Company that you are under no contractual or other legal obligations that would prohibit you from performing your duties with the Company.

2. Compensation and Employee Benefits. You will be paid as compensation for services at a gross rate of \$70,000.00 per year, payable on the Company's regular payroll dates. In addition, 3,000,000 Common Shares that you currently hold will continue to vest as specified in the original Restricted Stock Purchase Agreement between you and the Company and as amended and determined by the Company's Board of Directors. As an employee of the Company, you will be eligible to participate in those Company-sponsored benefits generally made available to all employees. These benefits will include the payment for or reimbursement of a healthcare insurance plan available to employees.

3. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations which may have been made to you are superseded by this offer. "At will" nature of your employment may only be changed in an express written agreement signed by you and the Company's Board of Directors.

4. Withholding Taxes. All forms of compensation referred to in this letter are subject to applicable withholding and payroll taxes.

5. Miscellaneous.

(a) Governing Law. The validity, interpretation, construction and performance of the terms of this letter, and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law.

(b) Entire Agreement. This letter sets forth the entire agreement and understanding of the parties relating to the subject matter herein and supersedes all prior or contemporaneous discussions, understandings and agreements, whether oral or written, between them relating to the subject matter hereof.

(c) Counterparts. This letter may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and all of which together shall constitute one and the same agreement.

(d) Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to this letter or any notices required by applicable law or the Company's Certificate of Incorporation or Bylaws by email or any other electronic means. You hereby consent to receive such documents and notices by such electronic delivery and agree to participate through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

As required by law, your employment with the Company is also contingent upon your providing legal proof of your identity and authorization to work in the United States.

Your start date will be April 5, 2017.

Very truly yours,

BILLIONTOONE, INC.

By: /s/ Oguzhan Atay
Oguzhan Atay, CEO

DAVID TSAO

By: /s/ David Tsao

BILLIONTOONE, INC.
1035 O'Brien Drive
Menlo Park, CA 94025

January 2, 2024

Ross Taylor

Dear Ross Taylor:

BillionToOne, Inc., a Delaware corporation (the "Company"), is pleased to offer you employment with the Company on the terms described below.

1. Position. You will start in a full-time position as Chief Financial Officer and you will initially report to the Company's Chief Executive Officer. You will perform the duties customarily performed by an employee in your position or as otherwise may be assigned to you by the Company. By signing this letter, you confirm with the Company that you are under no contractual or other legal obligations that would prohibit you from performing your duties with the Company.

2. Compensation and Employee Benefits. You will be paid as compensation for your services at a gross rate of \$300,000.00 per year, payable on the Company's regular payroll dates. The Company will pay you a one-time, non-recurring sign-on bonus of \$100,000.00 to be paid within thirty (30) days after your Start Date, subject to applicable withholdings. In line with the general practices for sign-on bonuses, in the event that you resign your employment with the Company prior to the 2-year anniversary of your Start Date, you will repay a prorated portion of the sign-on bonus to the Company. In the event that the Company is subject to a Change of Control (as defined in the Company's Stock Plan (the "Plan")) before your service terminates, and if you are subject to an Involuntary Termination (as defined in the Plan) within twelve (12) months of such Change of Control, then you shall be entitled to a one-time severance payment equal to twelve (12) months of your then-current base salary, payable within thirty (30) days of such Involuntary Termination. As a regular employee of the Company, you will also be eligible to participate in those Company-sponsored benefits generally made available to all employees.

3. Stock Options. Subject to the approval of the Company's Board of Directors, you will have the opportunity to acquire an equity interest in the Company in the form of Stock Options (the "Equity Award"). The Equity Award will cover 175,000 shares of the Company's common stock and will be subject to the terms and conditions applicable to such awards granted under the Company's Stock Plan (the "Plan"), as described in that Plan and the applicable Plan agreement, which you will be required to sign. 175,000 of the Equity Award shares (the "Vesting Shares") will be subject to vesting. Subject to your continued service with the Company and the terms of the applicable Plan agreement, the Vesting Shares will vest as follows: 1/4th of the Vesting Shares shall vest on the 12-month anniversary of the commencement of your employment, and an additional 1/48th of the Vesting Shares shall vest each month thereafter. The applicable share price or exercise price used in connection with the Equity Award will be equal to the fair market value per share of the Company's common stock on the date the Equity Award is granted, as determined by the Company's Board of Directors. There is no guarantee that the Internal Revenue Service will agree with this value. You should consult with your own tax advisor concerning the tax consequences of accepting the Equity Award.

4. Confidential Information and Invention Assignment Agreement. Like all Company employees, you will be required, as a condition of your employment with the Company, to sign the Company's standard Confidential Information and Invention Assignment Agreement.

5. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations which may have been made to you are superseded by this offer. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the Company's Chief Executive Officer.

6. Outside Activities. While you render services to the Company, you agree that you will not engage in any other employment, consulting or other business activity without the written consent of the Company.

7. Withholding Taxes. All forms of compensation referred to in this letter are subject to applicable withholding and payroll taxes.

8. Miscellaneous.

(a) Governing Law. The validity, interpretation, construction and performance of the terms of this letter, and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law.

(b) Entire Agreement. This letter sets forth the entire agreement and understanding of the parties relating to the subject matter herein and supersedes all prior or contemporaneous discussions, understandings and agreements, whether oral or written, between them relating to the subject matter hereof.

(c) Counterparts. This letter may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and all of which together shall constitute one and the same agreement.

(d) Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to this letter or any notices required by applicable law or the Company's Certificate of Incorporation or Bylaws by email or any other electronic means. You hereby consent to receive such documents and notices by such electronic delivery and agree to participate through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

[Signature Page Follows]

This offer has been sent to you for electronic signature. By electronically signing this offer, you agree and acknowledge that you have been able to access and review the offer and choose to sign the offer electronically. If you wish to accept this offer, please electronically sign this letter and the accompanying Confidential Information and Invention Assignment Agreement. As required by law, your employment with the Company is also contingent upon your providing legal proof of your identity and authorization to work in the United States. This offer, if not accepted, will expire at the close of business on January 4, 2024.

We look forward to having you join us no later than January 8, 2024.

Very truly yours,

BILLIONTOONE, INC.

By: /s/ Oguzhan Atay
Oguzhan Atay, CEO

ACCEPTED AND AGREED:

Date: January 03, 2024

ROSS TAYLOR

By: /s/ Ross Taylor

BILLIONTOONE, INC.

1455 Adams Drive
Menlo Park, CA 94025

April 21, 2019

Nancy J. Johnson

Dear Nancy J. Johnson:

BillionToOne, Inc., a Delaware corporation (the "Company"), is pleased to offer you employment with the Company on the terms described below.

1. Position. You will start in a full-time position as VP of Sales and you will initially report to the Company's Chief Executive Officer. You will perform the duties customarily performed by an employee in your position or as otherwise may be assigned to you by the Company. By signing this letter, you confirm with the Company that you are under no contractual or other legal obligations that would prohibit you from performing your duties with the Company.

2. Compensation and Employee Benefits. You will be paid as compensation for your services at a gross rate of \$175,000.00 per year ("Base Compensation"), payable on the Company's regular payroll dates. In addition, you are eligible for a variable incentive compensation payout ("Incentive Compensation") and equity award ("Incentive Equity Award") at the end of each fiscal quarter. Your variable target bonus will be formalized by the Company in a separate Schedule of Incentive Payments ("The Schedule"), which will specify MBOs and sales targets for earning variable Incentive Compensation and Incentive Equity Awards. The Schedule may be revised from time to time at the Company's sole discretion. Your Incentive Compensation will initially be set to target \$62,500 per year, and your Incentive Equity Award will initially be set to target 24,150 Restricted Stock per year. Your Incentive Compensation and Incentive Equity Award will be paid quarterly and will be pro-rated based on the number of business days you were employed by the Company during each fiscal quarter. All equity awards are subject to the approval of Board of Directors and the target award may be revised when the underlying value of the stock changes and at the Company's sole discretion. You may also receive a car allowance up to \$750 per month or be reimbursed for mileage within the IRS guidelines, as set by the Company's internal policies. As a regular employee of the Company, you will also be eligible to participate in those Company-sponsored benefits generally made available to all employees.

3. Stock Options. Subject to the approval of the Company's Board of Directors, you will have the opportunity to acquire an equity interest in the Company in the form of Stock Options (the "Equity Award"). The Equity Award will cover 125,000 shares of the Company's common stock and will be subject to the terms and conditions applicable to such awards granted under the Company's Stock Plan (the "Plan"), as described in that Plan and the applicable Plan agreement, which you will be required to sign. 125,000 of the Equity Award shares (the "Vesting Shares") will be subject to vesting. Subject to your continued service with the Company and the terms of the applicable Plan agreement, the Vesting Shares will vest as follows: 1/4th of the Vesting Shares shall vest on the 12-month anniversary of the commencement of your employment, and an

additional 1/48th of the Vesting Shares shall vest each month thereafter. The applicable share price or exercise price used in connection with the Equity Award will be equal to the fair market value per share of the Company's common stock on the date the Equity Award is granted, as determined by the Company's Board of Directors. There is no guarantee that the Internal Revenue Service will agree with this value. You should consult with your own tax advisor concerning the tax consequences of accepting the Equity Award.

4. Confidential Information and Invention Assignment Agreement. Like all Company employees, you will be required, as a condition of your employment with the Company, to sign the Company's standard Confidential Information and Invention Assignment Agreement.

5. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations which may have been made to you are superseded by this offer. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the Company's Chief Executive Officer.

6. Outside Activities. While you render services to the Company, you agree that you will not engage in any other employment, consulting or other business activity without the written consent of the Company.

7. Withholding Taxes. All forms of compensation referred to in this letter are subject to applicable withholding and payroll taxes.

8. Miscellaneous.

(a) Governing Law. The validity, interpretation, construction and performance of the terms of this letter, and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law.

(b) Entire Agreement. This letter sets forth the entire agreement and understanding of the parties relating to the subject matter herein and supersedes all prior or contemporaneous discussions, understandings and agreements, whether oral or written, between them relating to the subject matter hereof.

(c) Counterparts. This letter may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and all of which together shall constitute one and the same agreement.

(d) Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to this letter or any notices required by applicable law or the Company's Certificate of Incorporation or Bylaws by email or any other electronic means. You hereby consent to receive such documents and notices by such electronic delivery and agree to participate through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

[Signature Page Follows]

This offer has been sent to you for electronic signature. By electronically signing this offer, you agree and acknowledge that you have been able to access and review the offer and choose to sign the offer electronically. If you wish to accept this offer, please electronically sign this letter and the accompanying Confidential Information and Invention Assignment Agreement. As required by law, your employment with the Company is also contingent upon your providing legal proof of your identity and authorization to work in the United States. This offer, if not accepted, will expire at the close of business on April 23, 2019.

We look forward to having you join us no later than April 23, 2019.

Very truly yours,

BILLIONTOONE, INC.

By: /s/ Oguzhan Atay
Oguzhan Atay, CEO

ACCEPTED AND AGREED:

Date: April 21, 2019

NANCY J. JOHNSON

By: /s/ Nancy J. Johnson

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in this Registration Statement on Form S-1 of BillionToOne, Inc. of our report dated June 20, 2025 relating to the financial statements of BillionToOne, Inc., which appears in this Registration Statement. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
Florham Park, New Jersey
October 7, 2025

Calculation of Filing Fee Tables

S-1

BillionToOne, Inc.

Table 1: Newly Registered and Carry Forward Securities ☐Not Applicable

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to be Paid	1 Equity	Class A common stock, par value \$0.00001 per share	457(o)			100,000,000.00	\$ 0.0001381	\$ 13,810.00				
Fees Previously Paid												
Carry Forward Securities												
Carry Forward Securities												
Total Offering Amounts:						\$ 100,000,000.00		\$ 13,810.00				
Total Fees Previously Paid:								\$ 0.00				
Total Fee Offsets:								\$ 0.00				
Net Fee Due:								\$ 13,810.00				

Offering Note

¹ (1) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended. (2) Includes the aggregate offering price of additional shares of Class A common stock that the underwriters have the option to purchase to solely cover over-allotments, if any.

Table 2: Fee Offset Claims and Sources ☒Not Applicable

		Registrant or Filer Name	Form or Filing Type	File Number	Initial Filing Date	Filing Date	Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
Rules 457(b) and 0-11(a)(2)												
Fee Offset Claims	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fee Offset Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rule 457(p)												
Fee Offset Claims	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fee Offset Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3: Combined Prospectuses ☒Not Applicable

	Security Type	Security Class Title	Amount of Securities Previously Registered	Maximum Aggregate Offering Price of Securities Previously Registered	Form Type	File Number	Initial Effective Date
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A