
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549**

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2021

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 001-40894

IsoPlexis Corporation

(Exact name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of
Incorporation or Organization)

46-2179799

(I.R.S. Employer
Identification No.)

35 NE Industrial Road, Branford, CT 06405

(Address of principal executive offices and zip code)

(203) 208-4111

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	ISO	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262 (b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The registrant was not a public company as of June 30, 2021, the last business day of its most recently completed second fiscal quarter, and therefore, cannot calculate the aggregate market value of its voting and non-voting common equity held by non-affiliates as of such date. The registrant’s common stock began trading on the Nasdaq Global Select Market on October 8, 2021.

The registrant had outstanding 39,037,919 shares of Common Stock, par value \$.001 per share, as of March 28, 2022.

DOCUMENTS INCORPORATED BY REFERENCE

The information required to be furnished pursuant to Part III of this Form 10-K will be set forth in, and incorporated by reference from, the registrant’s definitive proxy statement for its annual meeting of stockholders (the “2022 Proxy Statement”), which will be filed with the Securities and Exchange Commission not later than 120 days after the end of the fiscal year ended December 31, 2021 . Except as expressly incorporated by reference, the 2022 Proxy Statement shall not be deemed to be part of this Form 10-K.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (“Form 10-K”) contains “forward-looking statements.” These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies and other future conditions. Such forward-looking statements may include, without limitation, statements about future opportunities for us and our products and services, our future operations, financial or operating results, anticipated business levels, future earnings, planned activities, anticipated growth, market opportunities, strategies, competitions and other expectations and targets for future periods. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “predict,” “project,” “target,” “potential,” “seek,” “will,” “would,” “could,” “should,” “continue,” “contemplate,” “plan,” and other words and terms of similar meaning.

Forward-looking statements are subject to known and unknown risks and uncertainties, many of which may be beyond our control. We caution you that forward-looking statements are not guarantees of future performance or outcomes and that actual performance and outcomes may differ materially from those made in or suggested by the forward-looking statements contained in this Form 10-K. In addition, even if our results of operations, financial condition and cash flows, and the development of the markets in which we operate, are consistent with the forward-looking statements contained in this Form 10-K, those results or developments may not be indicative of results or developments in subsequent periods. New factors emerge from time to time that may cause our business not to develop as we expect, and it is not possible for us to predict all of them. Factors that could cause actual results and outcomes to differ from those reflected in forward-looking statements include, among others, the following:

- estimates of our addressable market, market growth, future revenue, expenses, capital requirements and our needs for additional financing;
- the implementation of our business model and strategic plans for our products and technologies;
- competitive companies and technologies and our industry;
- our ability to manage and grow our business by expanding our sales to existing customers or introducing our products to new customers;
- our ability to develop and commercialize new products;
- our ability to establish and maintain intellectual property protection for our products or avoid or defend claims of infringement;
- the performance of third party suppliers;
- our ability to hire and retain key personnel and to manage our future growth effectively;
- our ability to obtain additional financing in future offerings;
- the volatility of the trading price of our common stock;
- our expectations regarding use of proceeds from our initial public offering;
- the potential effects of government regulation;
- the impact of COVID-19 on our business; and
- our expectations about market trends.

For a further discussion of these and other factors that could impact our future results, performance or transactions, see Item 1A “Risk Factors” of this Form 10-K and our other filings with the Securities and Exchange Commission (the “SEC”). Given these uncertainties, you should not place undue reliance on these forward-looking statements.

You should read this Form 10-K and the documents that we reference within it completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this Form 10-K by these cautionary statements. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

Unless the context otherwise requires, we use the terms “IsoPlexis,” the “Company,” “we,” “us” and “our” in this prospectus to refer to IsoPlexis Corporation and our consolidated subsidiaries.

Channels for Disclosure of Information

Investors and others should note that we may announce material information to the public through filings with the SEC, our website (www.isoplexis.com), press releases, public conference calls, public webcasts and our social media accounts (including <https://www.linkedin.com/company/isoplexis-inc-/>). We use these channels to communicate with our customers and the public about the Company, our products, our services and other matters. We encourage our investors, the media and others to review the information disclosed through such channels as such information could be deemed to be material information. The information on such channels, including on our website and our social media accounts, is not incorporated by reference in this Form 10-K and shall not be deemed to be incorporated by reference into any other filing under the Securities Act (as defined below) or the Exchange Act (as defined below), except as expressly set forth by specific reference in such a filing. Please note that this list of disclosure channels may be updated from time to time.

Part I

Item 1. Business

Overview

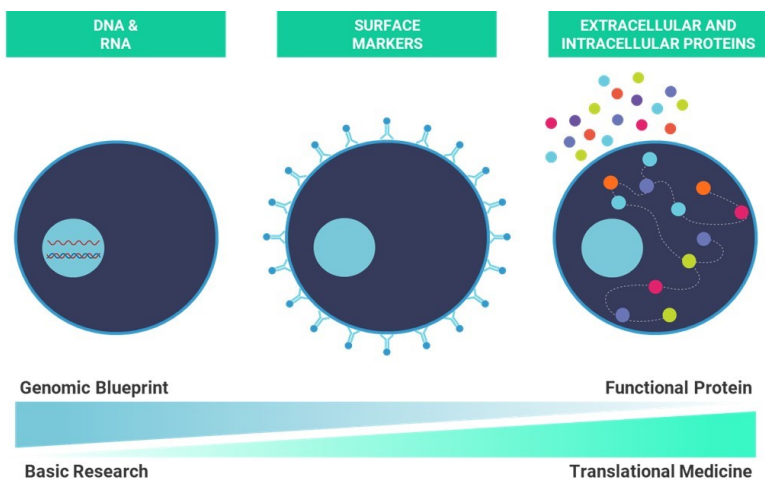
IsoPlexis is the Superhuman Cell company. Our systems identify a comprehensive range of multifunctional single cells, i.e. the superhero cells in the human body. These cells assist researchers in understanding and predicting disease progression, treatment resistance and therapeutic efficacy to advance all of human health. We are a life sciences company building solutions to accelerate the development of curative medicines and personalized therapeutics. Our award-winning single-cell proteomics systems reveal unique biological activity in small subsets of cells, allowing researchers to connect more directly to *in vivo* biology and develop more precise and personalized therapies.

We are enabling deeper access to *in vivo* biology and driving durable and potentially transformational research on disease in a new era of advanced medicine. We believe our platform is the first to employ both proteomics, or the study of proteins and their functions, and single cell biology in an effort to fully characterize and link cellular function to patient outcomes by revealing treatment response and disease progression. Our single cell proteomics platform, which includes instruments, chip consumables and software, provides an end-to-end solution to reveal a more complete view of protein function at an individual cellular level. Since our commercial launch in June of 2018, our platform has been adopted by the top 15 global biopharmaceutical companies by revenue and two-thirds of the comprehensive cancer centers in the United States to help develop more durable therapeutics, overcome therapeutic resistance, and predict patient responses for advanced immunotherapies, cell therapies, gene therapies, vaccines, and regenerative medicines. Our initial focus has been on developing applications of our platform for cancer immunology and cell and gene therapy. We are now expanding our capabilities to include applications for infectious diseases, inflammatory conditions, and neurological diseases.

We believe that traditional bulk methods of proteomics analysis, which analyze proteins in bulk samples made up of many different types of cells, lack quality single cell resolution. Single cell biology has become highly valuable to the life sciences industry because individual core cell types underlying a specific disease (for example, tumor cells, immune cells, and cells of the central nervous system) look and act very differently. Single cell biology provides deep insights into variations among each individual cell's behavior, such as underlying disease activity and therapeutic response. Traditional bulk proteomic analyses fail to provide these insights as they focus on average cell activity in the aggregate. For example, in cell therapy, where heterogeneous populations of immune cells are engineered to combat tumors, traditional bulk proteomic methods are not designed to identify the unique immune cell subsets that contribute most significantly to effective treatment responses. At the same time, while the genome of single cells has been explored in depth, genomics has limitations on accurately predicting treatment resistance, which often results from tumor protein signaling adaptations rather than genetic aberrations. In oncology, while genomics has been used to reveal mutations that reside along druggable pathways, therapeutics targeting these pathways have only marginally improved patient outcomes, with almost universal and rapid development of drug resistance. We believe that our platform can capture a more complete view of the functional biological drivers of disease and therapeutic response.

We designed our platform to reveal functional protein biology and cellular signaling networks at single cell resolution to accelerate the development of advanced medicines. The drivers of efficacy and toxicity are heavily impacted by cytokines, or extracellular functional proteins, through which certain individual cells send and receive signals. Additionally, disease progression and treatment resistance are heavily impacted by the intracellular signaling proteins, in particular phosphoproteins, which dictate the functional state of any cell. We believe that directly capturing the full range of intracellular and extracellular functional proteins is critical to analyzing the efficacy of therapies, identifying biomarkers suitable for druggable targets, and modifying therapeutics that are not generating the intended result. In contrast to traditional bulk methods of proteomics, which can only produce estimates of aggregated levels of functional proteins, our technology fills a critical knowledge gap by directly detecting the full range of intracellular and extracellular functional proteins within a sample.

Figure 1. The figure below represents the evolution of single cell biology from the study of the genomic blueprint of a cell—its DNA and RNA—through the functional representation of each cell's activity—its extracellular and intracellular proteins. This evolution towards the proteome is enabling greater application to translational medicine.



Our platform is an end-to-end solution comprised of our proprietary IsoLight and IsoSpark instruments, IsoCode and CodePlex chip consumables, and IsoSpeak software. Our IsoLight and IsoSpark instruments are designed to be fully-automated benchtop proteomic hubs. Our IsoCode chips utilize our core technology leveraging our proteomic barcoding to capture single cell protein information. Our recently introduced CodePlex chips leverage our core technology to assay multiplexed bulk proteins from very low volumes. Our IsoSpeak software interprets this data and is capable of rapidly returning comprehensive data figures in a format that would be suitable for inclusion in a research publication submission and is also capable of producing advanced visualizations to reveal key insights. We believe that our platform overcomes many of the limitations of traditional bulk proteomic workflows, which can be capital intensive, time consuming and laborious, require multiple instruments and many manual steps, and may only be capable of analyzing small numbers of functional proteins at a time. Our platform supports multiple applications, including in cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases.

Figure 2. Our platform is comprised of instruments, chip consumables, and software.



IsoCode and CodePlex Chip Technology Overview

<i>Chip Solutions</i>	<i>Function</i>	<i>Applications</i>
Extracellular Protein Detection	Enables the discovery of better biomarkers, including rare cells that have the potential to drive therapeutic persistence, potency, and durability	Translational medicine <ul style="list-style-type: none"> • Cancer immunology • Inflammation • Cell therapies • Infectious disease • Targeted therapies
Intracellular Protein Detection	Measures cellular protein-to-protein interactions and adaptive resistance pathways to identify resistance earlier and enable earlier selection of potential treatments	Discovery <ul style="list-style-type: none"> • Combinatorial therapies • Kinase inhibitors • Targeted therapies • Cell therapies

Our current product offering supports a variety of applications that are broadly used for translational, preclinical and clinical development of advanced medicines, representing an initial \$12 billion addressable market opportunity based on management estimates. This cumulative market spend accounts for an installed base of approximately 55,000 instruments, in line with mature protein and cell biology technologies such as flow cytometry and multiplexed proteomics. Our relevant end users span the range of biopharmaceutical companies and academic and research institutions worldwide, which in the aggregate cover approximately 5,500 advanced medicines programs in both preclinical and clinical stages. In addition to our currently targeted addressable market opportunity in advanced medicines, we have recently expanded our capabilities with intracellular protein detection IsoCode chip products, which are designed to improve discovery biology as a bridge to the earlier development of advanced medicines. We believe this represents an incremental \$12 billion addressable market opportunity. Expanding our chip solution portfolio is a key factor in enabling us to expand our capabilities into applications for infectious diseases, inflammatory conditions, and neurological diseases.

As of December 31, 2021, we have placed 209 systems globally, including at each of the top 15 global biopharmaceutical companies by revenue and two-thirds of the comprehensive cancer centers in the United States. As of December 31, 2021, we employed a commercial team of approximately 190 team members. We market and sell our platform, which is currently marketed to customers as research use only, through a direct sales channel in North America and specific regions in Europe. Additionally, we utilize thirteen distributor relationships to market and sell our products in Europe, North America, the Middle East and Asia-Pacific.

Our revenue to date has been driven primarily by sales of our instruments and chip consumables. Revenue for the years ended December 31, 2021 and 2020, was \$17.3 million and \$10.4 million, respectively. For the year ended December 31, 2021, our sales to end-markets of biopharmaceutical companies and academic and research institutions represented approximately 65% and 35% of our total sales, respectively. We generated net losses of \$81.6 million and \$23.3 million for the years ended December 31, 2021 and 2020, respectively.

The IsoPlexis Advantage

We designed our platform to reveal functional protein biology and cellular signaling networks at single cell resolution to accelerate the development of advanced medicines and improve patient outcomes by revealing treatment response and disease progression. As of December 31, 2021, use of our platform has generated approximately 55 predictive data sets and our technology has been referenced in approximately 100 publications. We believe that our platform offers several advantages over existing proteomic and cellular analysis technologies, including:

Direct single cell analysis of functional proteins: We designed our platform to directly measure the functional proteins from each cell in a highly multiplexed manner. For example, our platform is capable of directly measuring the proteomic activity of each immune cell—such as T cells, macrophages, or NK cells—providing highly correlative clinical and preclinical immune biomarkers. In contrast, while technologies such as RNA sequencing provide information useful for estimating cellular protein function, the correlation between such information and functional proteins is relatively low, making it difficult to translate the information from these technologies into insights for therapeutic applications. Similarly, flow cytometry cannot detect the highly multiplexed extracellular functional proteins from each cell that may directly correlate to *in vivo* response.

Multiple proteomic applications on a single system: We designed our technology to provide highly multiplexed information from bulk and single cell extracellular proteome and the intracellular proteome, all on the same system. Our

approach, which leverages a single system, is designed to increase efficiency and accessibility across many areas of advanced cellular analysis for a wide range of applications.

Rapid data analysis and insights: Gathering insights from current single cell technologies can take months due to the limitations of current solutions in collecting and analyzing data. Our IsoSpeak software provides advanced automated data analysis with a push button user interface that can be run with limited technological expertise, and is capable of generating insights and comprehensive data figures within hours, that are in a format that would be suitable for inclusion in a research publication submission. By streamlining and accelerating the data collection process, we believe our platform could potentially help our customers shorten drug development timelines.

Ultra-low sample volume requirements: Many traditional bulk proteomic workflows require relatively large sample volume, which can be a challenge for customers since samples are often very limited. We designed our platform to maximize the utility of the limited sample volume that our customers obtain from their clinical trials. Our IsoCode and CodePlex chip consumables require sample volumes as small as 11 μ L, allowing for multiplexed analysis of samples that are difficult to obtain such as cerebrospinal fluid and tracheal samples.

Simplified workflow and minimal footprint: Many traditional bulk proteomic workflows and single cell workflows are laborious and time consuming, requiring many manual steps across multiple instruments. After a sample is loaded onto one of our chips, which is then inserted into our IsoLight or IsoSpark instrument, our platform automates all protein detection steps in a walk away fashion, saving time and laboratory resources. Our automated ELISA, or a standard immunoassay, workflow reduces the need for specialized technicians to run experiments or interpret results and reduces overhead. Without our platform, similar workflows would require multiple instruments that would occupy a substantially larger combined footprint compared to the benchtop placement of our instruments, which have a total footprint of 28.5 inches (in the case of the IsoLight) or 18 inches (in the case of the IsoSpark). We believe ease of use of our fully-automated benchtop instruments, combined with their minimal footprint, drives customers to adopt our platform at a lower system and labor cost.

Our Platform

Our platform is an end-to-end solution comprised of our proprietary IsoLight and IsoSpark instruments, IsoCode and CodePlex chip consumables, and IsoSpeak software, spanning multiple applications. Once a sample is loaded onto our proprietary “proteomic barcoded” IsoCode or CodePlex chips, highly sensitive software-enabled optics quantify the proteins associated with each single cell through individualized antibody-based proteomic reactions.

Our platform leverages a series of chambers that capture single cells, where each separate chamber enables multiplexed protein detection reactions simultaneously, or in a parallelized fashion. The highly multiplexed number of functional proteins per cell quantified by our platform’s proteomic barcoding has led to correlative insights in cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases.

Our Instruments

Our IsoLight and IsoSpark instruments, both Red Dot Design Award winners, run our IsoCode and CodePlex chips, enabling high-throughput analysis of functional proteins from single cells and low sample volume bulk with a fully-automated workflow. The IsoLight has a footprint of 28.5 inches while the IsoSpark is a compact 18 inches. Both instruments are comprised of four modules:

- an optical system to quantify protein concentrations;
- a fluidic system to enable the automated ELISA workflow that allows the user to insert samples and retrieve answers with limited hands on time;
- a mechanical system to enable analysis of eight samples in the IsoLight, or four samples in the IsoSpark, simultaneously; and
- a thermal system to provide for the incubation of single cells to capture their proteomic reactions.

Our Chip Consumables

IsoCode chips: Our highly multiplexed chip solutions for single cell functional proteomics

Our IsoCode single cell chip solutions provide highly multiplexed applications to capture the functional extracellular and intracellular proteome.

Our single cell extracellular protein detection chip solution, which we also refer to as our single cell extracellular proteome solution, works through a series of steps:

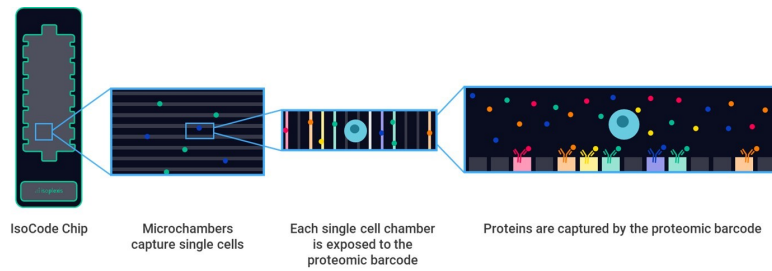
- first, the sample is prepared and retained in suspension;
- second, live cells are loaded onto the chip; and
- third, the live cells housed in the single cell chambers secrete their extracellular proteins, which are captured by our proteomic barcode.

Similarly, our single cell intracellular protein detection chip solution, which we also refer to as our single cell intracellular proteome solution, works through a series of similar steps:

- first, the sample is prepared and retained in suspension;
- second, live cells are loaded onto the chip; and
- third, these live cells are lysed within each single cell chamber to release their intracellular components, which are then captured by our proteomic barcode.

In each case, our IsoLight or IsoSpark then detects the concentration of these proteins per cell and determines the protein profile of each single cell.

Figure 3. The IsoCode chip solution workflow



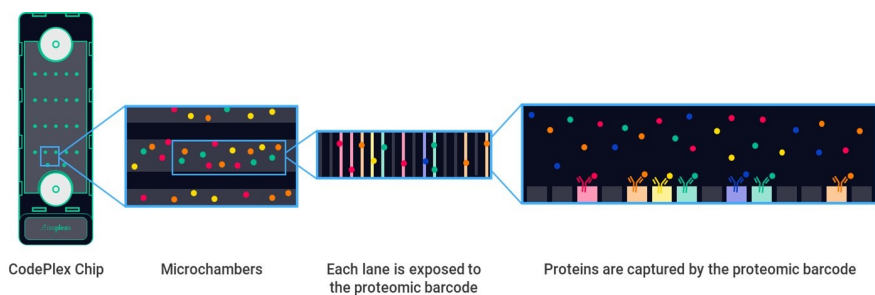
CodePlex chips: Our multiplexed solutions for ultra-low volume bulk samples

Our CodePlex chip solutions provide highly multiplexed applications to capture the functional extracellular and intracellular proteome from low volume of bulk protein samples, rather than from single cells. These extracellular and intracellular proteome solutions work through a series of steps:

- first, the protein sample is retained with minimal preparation or dilution;
- second, the protein sample is loaded into the chip through various ports to allow for multiple samples per chip; and
- third, each sample is retained in its respective chamber in which the proteins are captured by our proteomic barcode.

Our IsoLight or IsoSpark then detects the concentration of these proteins in bulk and determines the protein profile of each sample.

Figure 4. The CodePlex chip solution workflow



Our Software

Our IsoSpeak software, an Edison Award winner, takes complex high dimensional data and automates analysis with an intuitive push button user interface to deliver same day single cell and bulk proteome visualizations without the need for highly specialized informatics professionals. The software works by retaining the images of the proteins detected on the IsoLight or IsoSpark, analyzing the images for concentrations of those proteins using fluorescence and then converting the information into actionable insights through various data visualizations.

Our Services

In addition to selling our products, we leverage our platform to provide research support and services to our customers. We process samples from certain of our customers using our platform and return to these customers the immune response data generated from their samples. We also provide post-warranty services to our customers who have purchased our instruments.

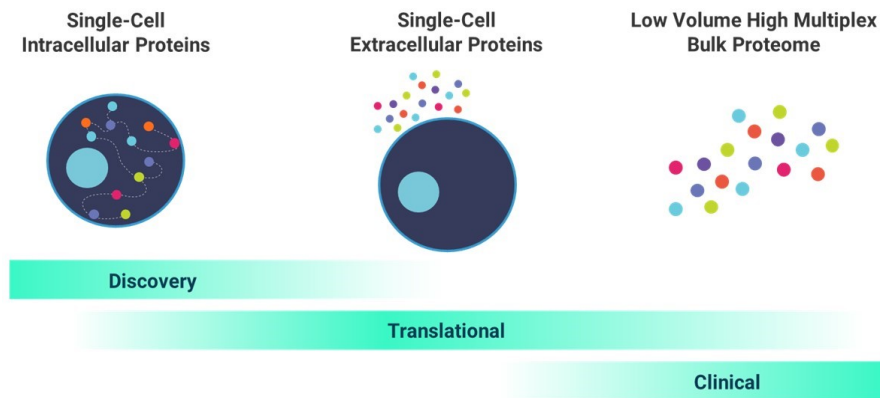
Our Applications across the Drug Development Continuum

Our IsoCode single cell extracellular proteome solution measures the extracellular functional proteins from each cell in a highly multiplexed manner, allowing for complete single cell functional characterization. This solution enables the comprehensive profiling of the extracellular function of a wide variety of immune cell types, resulting in the generation of correlative data sets in the fields of cancer immunology and cell and gene therapy, which have been our initial areas of focus. The differentiated information that has been obtained has been applied preclinically to evaluate immune and cell therapy candidates and processes. Additionally, it has generated key biomarkers of immune response in early clinical studies and forms the basis of our initial addressable market for advancing preclinical and clinical trials within advanced medicines. This chip solution has been leveraged by a number of high impact clinical studies published in reputable scientific journals such as *Cell* and *Blood*. See “—Customer Case Studies.”

Our IsoCode single cell intracellular proteome solution simultaneously measures multiple intracellular protein signaling networks at the single cell level, allowing for detection of critical protein-to-protein interactions and signaling networks in rare cells and cell subsets. These various protein signaling networks form the basis of both functional and dysfunctional activity in a wide variety of cell types. Our single cell intracellular proteome solution enables a better understanding of these signaling networks, which can then be applied to treat dysfunction in tumor cells and to facilitate activation of key immune cell types earlier in the therapeutic discovery process. The ability to target these signaling networks provides access to serve a discovery-focused market, enabling us to address opportunities in the fields of infectious diseases, inflammatory conditions, and neurological diseases.

Our CodePlex bulk extracellular proteome and intracellular proteome solutions provide means to achieve highly multiplexed, low sample volume proteomics. CodePlex requires up to 10 times less sample volume versus other comparable methods of analyses, opening up opportunities for precious sample analysis in preclinical and clinical studies. The CodePlex solution enables automated proteomic analyses on customers’ benchtops within one IsoLight or IsoSpark system, eliminating the need for multi-instrument workflows that require technician expertise to run. Our CodePlex solution is used across multiple applications for assaying proteins from blood, cerebrospinal fluid, and tracheal samples in both preclinical and clinical studies in the fields of cancer immunology and cell and gene therapy. Further, we expect that

our initial entry into the clinical diagnostics market will start with our CodePlex solution as it provides accessibility to end users through automation.



Customer Case Studies

Each of the case studies described below leveraged our IsoCode single cell extracellular proteome solution by detecting immune cell protein responses within our IsoCode chip and detecting unique extracellular protein signatures from subsets of these immune cells that predicted or correlated with treatment response or disease progression. The unique extracellular protein signature in each case study was defined by the ability of the cells to produce multiple proteins simultaneously, which we refer to as a sample having polyfunctional strength, or PSI.

Earlier measurement of potential survival biomarker in a cancer clinical study for checkpoint inhibitors

As published in *Journal of Clinical Oncology*, in a 38 patient metastatic melanoma study sponsored by pharmaceutical companies including Nektar Therapeutics, where the patients underwent checkpoint inhibitor and IL-2 agonist therapy, our platform identified that a blood-based biomarker correlated with patient response and progression-free survival. PSI of CD8+ T cells was measured at day 8 and day 1 in the set of metastatic melanoma patients treated with NKTR-214 (Bempeg) plus Nivolumab. The researchers found that the PSI difference (PSI on Day 8 minus PSI on Day 1) predicted eventual response, based on progression-free survival, to the Bempeg/Nivolumab treatment in first line therapy. Using our platform, researchers were able to measure PSI in week 1, much earlier than using other methods.

Analyzing treatment response and product potency in CAR-T cell therapy study

As published in *Blood*, in a 20 patient non-Hodgkin lymphoma study sponsored by Kite Pharma, researchers using our platform determined that the PSI of each CAR-T cell therapy product, prior to infusion, had a significant association with complete or partial patient response to anti-CD19 CAR-T therapy. Other pre-infusion metrics tested in this study using alternative methods were not predictive. Through this research, we were able to highlight the important role a functionally versatile subpopulation of CAR-T cells may play in the potency of anti-CD19 therapies. We believe product-based readouts like this one have the potential to enable more predictive and scalable manufacturing and product release of cell therapies globally.

Early indicators of response or relapse in CAR-T therapy optimization

As published in *Nature*, in a CD19 and CD22 bispecific CAR study, researchers using our platform showed that certain functional protein production was associated with early signs of response to CAR-T therapies or signs of relapse in patients with large B-cell lymphoma. The researchers found that functional protein production could be a meaningful attribute to predict the potency of cell therapies. We believe product-based readouts like this one have the potential to guide cell therapy manufacturing and optimization as a critical quality attribute.

Analyzing treatment response and product potency in TIL therapy study

As published in *Nature*, in a study of adoptive cell therapy using tumor-infiltrating lymphocytes (“TILs”) for lung cancer, researchers using our platform determined that polyfunctionality of CD8 T cells was associated with the impact of the infusion of TILs on a patient’s immune response. Recognizing that PSI is a metric for efficacy of cell therapies, the researchers compared the ability of T cells to secrete functional proteins before and after TIL infusion and found that polyfunctionality increased after TIL treatments. Our platform’s functional readouts have been shown to be critical for understanding the potency and durability of cell therapies.

Understanding progression of disease and inflammation to enable therapy development in a COVID-19 study

As published in *Cell*, in collaboration with Merck & Co. and the Institute for Systems Biology, researchers using our platform identified that the PSI of peripheral monocytes increased with COVID-19 severity, while CD4+ T cells, CD8+ T cells and NK cell percentages decreased, revealing which of these cells contributed to the pro-inflammatory environment in moderate to severe cases of COVID-19. Our platform’s characterization of immune biomarkers at each stage of COVID-19 progression is helping researchers to identify and develop treatments and critical prognostic biomarkers, based on functional profiles of critical subsets of immune cells.

Additional studies have shown correlations between biomarkers identified using our platform and the ability to predict responses across different types of immunotherapy studies.

Our Market Opportunity

Our current product offering supports a variety of applications which are broadly used for translational, preclinical and clinical development of advanced medicines, representing an initial \$12 billion addressable market opportunity based on management estimates. This cumulative market spend accounts for an installed base of approximately 55,000 instruments, in line with mature protein and cell biology technologies such as flow cytometry and multiplexed proteomics. Within this addressable market, our relevant end users span the range of biopharmaceutical companies and academic and research institutions worldwide, which cover approximately 5,500 advanced medicines programs in both preclinical and clinical stages.

In addition to our currently targeted addressable market opportunity in advanced medicines, we have recently expanded our capabilities with our intracellular protein detection IsoCode chip products, which are designed to improve discovery biology as a bridge to earlier development of advanced medicines. We believe this represents an incremental \$12 billion addressable market opportunity. Additionally, we are pursuing a range of integrated applications around sequencing and proteomic analytes from single cells, which will enable further applications for discovery biology. Expanding our chip solution portfolio is a key factor in enabling us to expand our capabilities into applications for infectious diseases, inflammatory conditions, and neurological diseases. Furthermore, our long term strategy is ultimately to add additional applications serving clinical diagnostics research that will allow us to serve additional markets we believe to be worth approximately \$10 billion. We expect that our initial entry into the clinical diagnostics market will start with our CodePlex solution for low volume bulk proteomics as it provides accessibility to end users through automation. We believe investments in these areas will provide access to a potential \$34 billion total addressable market.

Our Growth Strategy

Our goal is to establish our platform as a leading proteomic workflow solution in the life sciences industry. In pursuit of that goal, the key elements of our growth strategy include:

Promoting our platform as the standard for single cell proteomic analysis

We believe that our platform is a critical tool that provides new and accessible layers of biological data at the single cell level, and the ability to capture the functional extracellular and intracellular proteome from single cells for the first time. We believe that our platform is well positioned to fundamentally advance therapeutic discovery and development. We intend to continue promoting our instruments, chip consumables, and software to drive awareness of the broad utility of our platform for development of advanced medicines and the discovery of biomarkers.

Expand the installed base of our IsoLight and IsoSpark instruments with new and existing customers

As of December 31, 2021, we have placed 209 systems worldwide within leading biopharmaceutical companies and academic and research institutions in North America, Europe and Asia-Pacific. Utilizing our multi-channel sales and distribution network, we intend to continue engaging with the global life sciences community to grow our installed base and expand the number of instruments within organizations that are already utilizing our technology to advance their research and therapeutic development. Outside of North America, we intend to leverage our distributor partnerships across four continents to expand our presence, with an emphasis on the China market.

Drive adoption of our existing applications

We founded our company to help solve critical challenges to accelerating advanced medicines and since our inception, we have developed multiple applications spanning cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases. We intend to continue promoting our platform to help meet the urgent need to develop new therapeutics and accelerate development timelines across these applications. We intend to continue promoting the discoveries and data published by our customers, which we believe will further reinforce the value of our platform and drive additional adoption of our platform for use across these applications.

Develop new applications across multiple therapeutic classes and indications

As we continue to deploy our platform, we intend to concurrently expand the breadth of applications for our technologies to encourage increased use of our platform across our addressable markets. At present, we believe we have the ability to reveal insights in functional proteomics in new therapeutic classes and indications, such as infectious diseases, inflammatory conditions, and neurological diseases. Our goal is to continue innovating and bringing new products to market as new areas of therapeutic development emerge.

Expand adoption of our platform into new geographical markets

We currently market and sell our technology with an in-house commercial team in the United States and Europe. We are also utilizing our distribution network to market and sell across multiple countries, including Australia, Belgium, Canada, China, Czech Republic, France, Germany, Italy, Israel, Japan, Singapore, South Korea, Spain, Switzerland, and the United Kingdom. We intend to further expand our international presence by growing our distribution networks in Brazil, India, Mexico and beyond.

Integrate sequencing biology with proteomics

We intend to further develop our product roadmap to integrate sequencing and functional proteomic biology from single cells to enable novel applications in discovery biology through our newest product, Duomic. Currently, single cell solutions are limited in their ability to detect genomic and transcriptomic information and functional proteins concurrently from single cells. Based on our core technology leveraging our proteomic barcoding, Duomic utilizes our existing instrumentation to give researchers the ability to simultaneously measure functional protein and gene expression levels from the same cell. We believe that the ability to modulate and modify genomic activity in cells and detect genomic impacts can be enhanced by verifying the proteomic, or functional, impacts concurrently from the same cell. Our technology's ability to reveal this multi-omic connectivity across cellular pathways may be able to provide earlier therapeutic insights for developers of advanced medicines.

Our Commercial Organization

We launched our first product in June 2018 and have sold our products primarily to biopharmaceutical companies and academic and research institutions. Market adoption has accelerated since our initial commercial launch with 98 instruments sold in 2021 and 58 instruments in 2020. We have a global customer base with 155 systems placed in North America, 26 in EMEA and 28 in Asia-Pacific, in each case as of December 31, 2021.

We continue to invest in our commercial team of approximately 190 people as of December 31, 2021, including 35 sales representatives. We are currently building a direct salesforce in China that leverages our distributor relationships and other third parties. Beyond our direct salesforce, we have relationships with thirteen distributors covering countries including Australia, Belgium, Canada, China, Czech Republic, France, Germany, Italy, Israel, Japan, Singapore, South Korea, Spain, Switzerland, and the United Kingdom.

Continued investment in research and development is critical to the commercialization of our future products. Our deep product and application roadmap represents one of the key growth drivers of instrument and consumable sales. We intend to expand our intellectual property and research capabilities through internally developed efforts, in conjunction with strategic partners and by acquiring technology.

Our Product Development Approach

Our research and development teams, located in Branford, Connecticut, design and develop our proprietary products utilizing and combining expertise in single cell biology, fluidics, optics, informatics, hardware and software engineering. Our collaborative approach across disciplines helps lead to advancements in technology development intended to provide clarity on new layers of complex biology to advance curative medicines. To complement our growth strategy, both in the near term and long term, we plan to focus our research and development on:

New applications

We intend to focus our research and development efforts on developing new high value, highly differentiated applications that unlock new proteomically driven biology and drive the future of disease understanding and development of advanced medicines. Our focus in the near term includes new applications for infectious diseases, inflammatory conditions, and neurological diseases.

New panels and protocols

We intend to focus on developing new panels, protocols, and analyte targets for each application family to cover the full range of our customers' biological needs. Our research and development efforts in this area are centered on expanding our menu of test panels for single cell extracellular proteomics, single cell intracellular proteomics and low volume bulk proteomics to include, for example, tumor metabolome panels for single cell and low volume bulk analysis. Our focus in the near term also includes releasing protocols for additional types of immune cells, tumor cells and neural cells.

Integrating proteomics with sequencing-based technologies

We also intend to focus on integrating proteomics technologies with sequencing-based technologies to extend existing capacities in single cell biology through our newest product, Duomic. Based on our core technology leveraging our proteomic barcoding, Duomic utilizes our existing instrumentation to give researchers the ability to simultaneously measure functional protein and gene expression levels from the same cell. We believe that this integration will enable a better understanding of the connections between the genome, transcriptome and the proteome, and will have applications for cancer immunology, cell and gene therapy and neurological diseases.

Additionally, we also intend to focus on developing software that automates and streamlines advanced analytics, enabling immediate insights, and working with clinical partners to put in place validated tests that build a long-term path to clinical usage of our solutions.

Our research and development costs were \$21.0 million and \$11.2 million for the years ended December 31, 2021 and 2020, respectively. As of December 31, 2021, we employed 121 employees in research and development. We will continue investing in efforts to support the ongoing development of our instruments, chip consumables and software, as well as enhance the overall performance of our solutions.

Employees

As of December 31, 2021, we employed 459 employees. Of these employees, 121 were engaged in research and development activities, and we employed a commercial team of approximately 190 team members. 415 of these employees are located in the United States and 44 of these employees are located across Europe and Asia. None of our employees are represented by a labor union or are party to a collective bargaining agreement, and we have had no labor-related work stoppages.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity incentive plans are to attract, retain and reward personnel through the granting of stock-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.

Scientific Advisory Board

We have assembled a highly qualified scientific advisory board composed of advisors who have deep expertise in the fields of nanotechnology, biomedical engineering and medicine. Our scientific advisory board is composed of Rong Fan, Ph.D. (our co-founder and chair of the scientific advisory board), James R. Heath, Ph.D., David Ho, M.D., Arnold Levine, Ph.D., Ross Levine, M.D., and Antoni Ribas, M.D., Ph.D.

Facilities

Our principal executive offices are located in Branford, Connecticut, where we lease approximately 39,606 square feet of office and manufacturing space. The lease for our principal executive offices is currently scheduled to terminate on December 31, 2026. In addition to our principal executive offices, we lease additional offices and manufacturing space in Branford, Connecticut and additional offices in Campbell, California, Kent, England and Shanghai, China.

We do not currently own any real property. We believe that our current facilities are adequate to meet our immediate needs and believe that we should be able to renew each of our leases without an adverse impact on our operations. In addition, we believe that if we require additional office space or manufacturing facilities, we will be able to obtain additional facilities on commercially reasonable terms.

Manufacturing and Suppliers

We manufacture our instruments and chip consumables in our manufacturing facilities in Branford, Connecticut and do not outsource any of our production manufacturing to third party contract manufacturers. Certain of our suppliers of certain critical components and materials are single source suppliers and we do not have supply agreements with certain suppliers of these critical components and materials beyond purchase orders. As part of our overall risk management strategy, we continue to evaluate and identify alternative suppliers for each of our components and materials.

Competition

We face significant competition in the life sciences technology market. We currently compete with many established technology companies in the flow cytometry, cellular analysis and single cell -omics businesses. This includes companies that design, manufacture and market systems, consumables and software for, among other applications, genomics, transcriptomics, proteomics, metabolomics, single cell analysis and immunology, and/or provide services related to the same. These companies include Becton, Dickinson and Company, Thermo Fisher Scientific Inc. and Bio-Rad Laboratories, Inc., each of which has products that compete to varying degrees with some but not all of our products. Growing understanding of the importance of single cell information is leading to more companies offering services related to collecting such information. Our target customers may also elect to develop their workflows on legacy systems or using traditional methods, rather than implementing our platform, and they may also decide to stop using our platform. In addition, there are many large established players in the life sciences technology market that we do not currently compete with but that could develop systems, tools or other products that will compete with us in the future. These large established companies have substantially greater financial and other resources than us, including larger research and development staff or more established marketing and sales forces.

For further discussion of the risks we face relating to competition, see “Risk Factors—Risks Related to Our Business and Industry—*The life sciences technology market is highly competitive. If we fail to compete effectively, our business and results of operation will suffer*” in Item 1A. of this Form 10-K.

Government Regulation

Our products are currently marketed (and we currently intend to continue to market them) as research use only (“RUO”) and we sell them to biopharmaceutical companies and academic and research institutions that conduct research. The FDA defines RUO products as in-vitro diagnostic tests (“IVDs”) that are in the laboratory research phase of development and, if properly labeled, the FDA exempts RUO products from most FDA regulatory controls. RUO products must bear the statement: “For Research Use Only. Not for Use in Diagnostic Procedures.” RUO products cannot make any claims related to safety, effectiveness or diagnostic utility and they cannot be intended for human clinical diagnostic use. The FDA will evaluate the totality of the circumstances when determining if the product is intended for diagnostic purposes and, if the FDA were to determine, based on the totality of circumstances, that our products labeled and marketed for RUO are intended for diagnostic purposes, they would be considered medical devices and would require clearance or approval prior to commercialization. The FDA defines a medical device as an instrument, apparatus, implement, machine,

contrivance, implant, in vitro reagent or other similar or related article, including any component part or accessory, which is (i) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment or prevention of disease, in man or other animals, or (ii) intended to affect the structure or any function of the body of man or other animals and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes. The development, testing, manufacturing, marketing, post-market surveillance, distribution, advertising and labeling of medical devices, which includes IVDs, are subject to regulation in the United States by the FDA under the Federal Food, Drug, and Cosmetic Act (“FDC Act”) and comparable state and international agencies. The FDA regulates, among other things, the research, design, development, preclinical and clinical testing, manufacturing, safety, effectiveness, packaging, labeling, storage, recordkeeping, pre-market clearance or approval, adverse event reporting, marketing, promotion, sales, distribution and import and export of medical devices. To be commercially distributed in the United States, medical devices must receive from the FDA either clearance of a premarket notification, known as 510(k), or premarket approval pursuant to the FDC Act prior to marketing, unless subject to an exemption. Sales of devices for diagnostic purposes may also subject us to additional healthcare regulation. We continue to monitor the changing legal and regulatory landscape to ensure our compliance with any applicable rules, laws and regulations. For further discussion of the risks we face relating to regulation by the FDA and related regulatory agencies, see “Risk Factors—Risks Related to Government Regulation—*If our current or future products become subject to FDA or other related international regulation, the regulatory clearance or approval and the maintenance of continued and post-market regulatory compliance for such products will be expensive, time-consuming, and uncertain both in timing and in outcome*” in Item 1A. of this Form 10-K.

In the United States, various federal and state regulators, including governmental agencies like the Consumer Financial Protection Bureau and the Federal Trade Commission, have adopted, or are considering adopting, laws and regulations concerning personal information and data security. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than federal, international or other state laws, and such laws may differ from each other, all of which may complicate compliance efforts. For example, the California Consumer Privacy Act (“CCPA”), which increases privacy rights for California residents and imposes obligations on companies that process their personal information, came into effect on January 1, 2020. Among other things, the CCPA requires covered companies to provide new disclosures to California consumers and provide such consumers new data protection and privacy rights, including the ability to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. This private right of action may increase the likelihood of, and risks associated with, data breach litigation. In November 2020, California voters passed the California Privacy Rights Act (“CPRA”), which will become effective in most material respects beginning on January 1, 2023. The CPRA further expands the CCPA with additional data privacy compliance requirements and obligations and establishes a regulatory agency dedicated to enforcing the CCPA and CPRA. While we are not currently subject to the CCPA and CPRA, we may in the future be required to comply with such laws, which may increase our compliance costs and potential liability. Furthermore, the CCPA and CPRA could mark the beginning of a trend toward more stringent state privacy legislation in the United States, which could increase our potential liability and adversely affect our business.

In addition, the E.U. General Data Protection Regulation (“GDPR”), which became effective in May 2018, greatly increased the European Commission’s jurisdictional reach of its data privacy and security laws and added a broad array of requirements for handling personal data. EU member states are tasked under the GDPR to enact, and have enacted, certain implementing legislation that adds to and/or further interprets the GDPR requirements and potentially extends our obligations and potential liability for failing to meet such obligations. The GDPR, together with national legislation, regulations and guidelines of the EU member states governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, use, retain, protect, disclose, transfer and otherwise process personal data. In particular, the GDPR includes requirements to establish a legal basis for processing, higher standards for obtaining consent from individuals to process their personal data, more robust disclosures to individuals, a strengthened individual data rights regime, requirements to implement safeguards to protect the security and confidentiality of personal data, data breach notification obligations to appropriate data protection authorities or individuals, limitations on retention and secondary use of information and additional obligations when entities contract with third-party processors to process personal data. The GDPR authorizes fines for certain violations of up to 4% of global annual revenue or €20 million, whichever is greater. Following the withdrawal of the United Kingdom from the European Union, data privacy and security laws that are substantially similar to the GDPR are in effect in the United Kingdom, which carry similar risks and authorize similar fines for certain violations. The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Compliance with the GDPR will be a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business

practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our European activities. We continue to monitor the changing legal and regulatory landscape to ensure our compliance with any applicable rules, laws and regulations.

For further discussion of the risks we face relating to data privacy and related regulations, see “Risk factors—General Risks—*We are currently subject to, and may in the future become subject to additional, U.S. federal and state laws and regulations imposing obligations on how we collect, store and process personal information. Our actual or perceived failure to comply with such obligations could harm our business. Ensuring compliance with such laws could also impair our efforts to maintain and expand our future customer base, and thereby decrease our revenue*” in Item 1A. of this Form 10-K.

Intellectual Property

Our ability to obtain and maintain intellectual property protection for our products and technology is fundamental to the long-term success of our business. We rely on a combination of intellectual property protection strategies, including copyrights, patents, trademarks, trade secrets, license agreements, confidentiality policies and procedures, nondisclosure agreements, invention assignment agreements and technical measures designed to protect the intellectual property and commercially valuable confidential information and data used in our business.

As of December 31, 2021, we owned 40 issued U.S. patents, 26 pending U.S. patent applications, two pending Patent Cooperation Treaty (“PCT”) applications that have not entered national stage, 28 issued foreign patents and 38 pending foreign patent applications in various foreign jurisdictions. Excluding any possible patent term adjustments or extensions and assuming payment of all appropriate maintenance, renewal, annuity or other governmental fees, our owned issued patents are expected to expire between 2028 and 2037 and our owned patent applications, if issued, are expected to expire between 2028 and 2042. Our owned issued patents and patent applications that are material to our business include the following:

- Pending utility patent applications in the United States, China and Japan and issued utility patents in the United States, Austria, Belgium, China, Denmark, the European Patent Office (“EPO”), Finland, France, Germany, Japan, Netherlands, Norway, Sweden, Switzerland and the United Kingdom directed to the analysis and screening of cell secretion profiles. This technology is utilized in various products, including our IsoCode and CodePlex chip consumables, our IsoLight and IsoSpark instruments, and our IsoSpeak software. These issued patents are expected to expire between 2035 and 2036 and the patent applications, if issued, are expected to expire between 2035 and 2036.
- Pending utility patent applications in the United States, China and the EPO directed to systems and methods for multiplexed analysis of cellular and other immunotherapeutics. This technology is utilized in various products, including our IsoCode and CodePlex chip consumables. These patent applications, if issued, are expected to expire in 2037.
- Pending utility patent applications in the United States, China, Japan and the EPO directed to compositions and methods for the simultaneous genomic, transcriptomic and proteomic analysis of single cells. This technology is utilized in various products, including our IsoCode and CodePlex chip consumables. These patent applications, if issued, are expected to expire in 2037.
- Pending utility patent applications in the United States, China and the EPO directed to systems, devices and methods for cell capture and methods of manufacture thereof. This technology is utilized in various products, including our reusable and single use cleaning chips, our IsoCode chip consumables and our IsoLight and IsoSpark instruments. These patent applications, if issued, are expected to expire in 2037.
- A pending PCT utility patent application that has not entered national stage directed to systems, devices and methods for multiplexed analysis. This technology is utilized in various products, including our CodePlex chip consumables and our IsoLight and IsoSpark instruments. Any U.S. or foreign patent issuing from this patent application, if such patent is issued, is expected to expire in 2041.
- A pending PCT utility patent application that has not entered national stage directed to compositions, devices and methods for simultaneous genomic, transcriptomic, and proteomic analysis of single cells. Any U.S. or foreign patent issuing from this patent application, if such patent is issued, is expected to expire in 2041.

In May 2021, we purchased a collection of issued patents and patent applications. The issued patents and patent applications purchased that are material to our business include the following:

- A pending U.S. utility patent application and issued U.S. utility patents directed to methods and compositions for incorporating nucleotides. These issued patents are expected to expire in 2029 and the patent application, if issued, is expected to expire in 2029.
- Issued U.S. utility patents directed to methods, compositions and solutions for inhibiting undesired cleaving of labels. These issued patents are expected to expire between 2028 and 2031.
- A pending U.S. utility patent application and issued U.S. utility patents directed to methods and devices for sequencing nucleic acids in smaller batches. These issued patents are expected to expire between 2028 and 2029 and the patent application, if issued, is expected to expire in 2029.
- A pending U.S. utility patent application and issued U.S. utility patents directed to methods and devices for amplification of nucleic acid. These issued patents are expected to expire between 2029 and 2031 and the patent application, if issued, is expected to expire in 2029.
- Pending utility patent applications in the U.S., China, Japan and the EPO directed to polymerase enzymes. These patent applications, if issued, are expected to expire in 2036.
- Pending utility patent applications in the United States and the EPO and an issued utility patent in the United States directed to a DNA sequencing reaction additive. This issued patent is expected to expire in 2038 and the patent applications, if issued, are expected to expire in 2038.

We expect to utilize the patents purchased pursuant to the Patent Purchase Agreement to develop new products integrating our proprietary proteomics technologies with sequencing-based technologies to expand our existing capacities in single cell biology.

Our owned issued patents that are material to our business are summarized in tabular form below:

Patent Families with Issued Patent(s)	Scope of Issued Patent(s) in Patent Family	Products Related to Issued Patent(s) in Patent Family	Jurisdiction of Issued Patent(s) in Patent Family	Expiration of Issued Patent(s) in Patent Family
Analysis and Screening of Cell Secretion Profiles	<ul style="list-style-type: none"> • Systems • Methods of use • Computer implemented programming 	<ul style="list-style-type: none"> • IsoCode and CodePlex chip consumables • IsoLight and IsoSpark instruments • IsoSpeak software 	United States, Austria, Belgium, China, Denmark, the EPO, Finland, France, Germany, Japan, Netherlands, Norway, Sweden, Switzerland and the United Kingdom	2035-2036
Methods and Compositions for Incorporating Nucleotides	<ul style="list-style-type: none"> • Methods of use • Compositions of matter 	In development	United States	2029
Methods, Compositions and Solutions for Inhibiting Undesired Cleaving of Labels	<ul style="list-style-type: none"> • Systems • Methods of use • Compositions of matter 	In development	United States	2029-2031
Methods and Devices for Sequencing Nucleic Acids in Smaller Batches	<ul style="list-style-type: none"> • Systems • Methods of use 	In development	United States	2028-2029
Methods And Devices For Amplification Of Nucleic Acid	<ul style="list-style-type: none"> • Methods of use 	In development	United States	2031
Directed to a DNA Sequencing Reaction Additive	<ul style="list-style-type: none"> • Method of use 	In development	United States	2038

As of December 31, 2021, we exclusively licensed six issued U.S. patents, five pending U.S. patent applications, four issued foreign patents and seven pending foreign patent applications in various foreign jurisdictions. Excluding any

possible patent term adjustments or extensions and assuming payment of all appropriate maintenance, renewal, annuity or other governmental fees, our exclusively in-licensed issued patents are expected to expire between 2028 and 2038 and our exclusively in-licensed patent applications, if issued, are expected to expire between 2028 and 2038. Our exclusively in-licensed issued patents and patent applications material to our business include the following:

- Pending utility patent applications in the United States, the EPO and Japan and issued utility patents in the United States, China and Japan directed to a system, device and method for high-throughput multiplexed detection. This technology is utilized in various products, including our IsoCode chip consumables. These issued patents are expected to expire in 2033 and the patent applications, if issued, are expected to expire in 2033.
- A pending U.S. utility patent application directed to methods and compositions for quantifying metabolites and proteins from single cells. This technology is utilized in our IsoCode single cell metabolomics solution. This patent application, if issued, is expected to expire in 2036.

We intend to pursue additional intellectual property protection to the extent we believe it would be beneficial and cost-effective. Our ability to stop third parties from making, using or commercializing any of our patented inventions will depend in part on our success in obtaining, defending and enforcing patent claims that cover our technology, inventions, and improvements. With respect to both our owned and in-licensed intellectual property, we cannot provide any assurance that any of our current or future patent applications will result in the issuance of patents in any particular jurisdiction, or that any of our current or future issued patents will effectively protect any of our products or technology from infringement or prevent others from commercializing infringing products or technology.

In addition to our reliance on patent protection for our inventions, products and technologies, we also seek to protect our brand through the procurement of trademark rights. We own registered trademarks and pending trademark applications for “IsoPlexis,” “IsoLight,” “IsoCode,” “CodePlex” and other product related brand names in the United States and certain foreign jurisdictions. Furthermore, we rely on trade secrets, know-how, unpatented technology and other proprietary information, to strengthen our competitive position. We currently maintain as trade secrets our software and certain other technologies, including assays. To mitigate the chance of trade secret misappropriation, we enter into nondisclosure and confidentiality agreements with parties who have access to our trade secrets, such as our employees, consultants, advisors and other third parties. We also enter into invention assignment agreements with our employees and consultants that obligate them to assign to us any inventions they have developed while working for us. We generally control access to our proprietary and confidential information through the use of internal and external controls. Although we take steps to protect our proprietary information and trade secrets, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. As a result, we may not be able to meaningfully protect our trade secrets. Additionally, we use certain open source software in our products and services, including our IsoSpeak software, and anticipate using open source software in the future. The terms of various open source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our services. For further discussion of the risks relating to intellectual property, see “Risk Factors—Risks Related to Our Intellectual Property” in Item 1A. of this Form 10-K.

License Agreements

Yale University

In April 2014, we entered into a license agreement (as amended and restated in July 2014 and November 2015, and as further amended in December 2016, January 2018 and July 2021, the “Yale Agreement”) with Yale University (“Yale”). Pursuant to the Yale Agreement, we obtained an exclusive, royalty-bearing, sublicensable (subject to certain restrictions), worldwide license to certain patent rights and certain information related to (i) multiplexed detection to manufacture, use and commercialize products in all fields of use and (ii) high-throughput single-cell polyomics to manufacture, use and commercialize products in all fields of use except in the field of spatial biomolecular analysis. We also obtained a non-exclusive license to certain patent rights and certain information related to high-throughput single-cell polyomics to manufacture, use and commercialize products in the field of spatial biomolecular analysis. The license granted pursuant to the Yale Agreement is subject to certain rights retained by (i) the United States government under the Bayh-Dole Act and (ii) Yale (on behalf of itself and other non-profit academic and/or research institutions) to make, practice and use the licensed patent rights and licensed products for research, clinical, teaching and other non-commercial purposes. Such rights retained by the United States government and Yale are typical for a license from a U.S. university or research institution, and we believe such rights do not pose a material risk to our business. We may sublicense the licensed patent rights subject to certain conditions, including that any sublicense agreement must contain terms consistent with the terms of the Yale Agreement and we must pay Yale a low double-digit percentage of our sublicense income. Furthermore, in connection with

the first two sublicense agreements we enter into, we are obligated to pay Yale certain milestone payments that may equal up to \$15,000 in the aggregate.

In connection with entering into the Yale Agreement, we issued 7,772 shares of Series A redeemable convertible preferred stock to Yale valued at approximately \$51,000 at the time of issuance. We then amended the Yale Agreement in January 2018 (the “January 2018 Amendment”) to obtain an exclusive license to certain additional patent rights which include device, system and method of use claims directed to high-throughput single-cell polyomics to manufacture, use and commercialize products in all fields of use, which we subsequently amended in July 2021 to make the license exclusive in all fields except in the field of spatial biomolecular analysis only. Pursuant to the January 2018 Amendment, in consideration for the inclusion of these patent rights, we issued 3,374 shares of Series B-2 redeemable convertible preferred stock to Yale valued at approximately \$100,000 at the time of issuance. In addition, we must pay Yale a customary annual license maintenance royalty (“LMR”) in the low six-figure dollars, as well as low single-digit percentage earned royalties on worldwide cumulative net sales of licensed products, which royalties are subject to reduction upon the occurrence of certain events as specified in the Yale Agreement. The LMR is credited against earned royalties due by the Company in the same calendar year. As of December 31, 2021, we have incurred \$0.4 million in royalty expense under the Yale Agreement.

Upon our IPO in October 2021, all of our outstanding shares of redeemable convertible preferred stock were automatically converted to shares of common stock. Accrued dividends payable in respect of the outstanding shares of redeemable convertible preferred stock were settled through the issuance of shares of common stock. Accordingly, Yale received 93,558 shares of common stock upon the closing of our IPO.

Under the terms of the Yale Agreement, we are required to use reasonable commercial efforts to develop and sell the licensed products, including incurring minimum annual expenses on research and development with respect to the licensed products, and we are restricted from developing, manufacturing or selling products that compete with the licensed products. Yale controls the filing, prosecution and maintenance of the licensed patent rights at our expense, subject to our ability to comment or approve certain related actions. We have the first right and obligation to institute a suit for infringement of the licensed patent rights and defend against any claim of invalidity or declaratory judgment action brought against the licensed patent rights. If we do not institute such suit or defend against such actions within a certain period of time, Yale has the right to convert the exclusive license granted under this license agreement to a non-exclusive license.

Unless terminated earlier, the Yale Agreement will continue, on a country-by-country basis, until the later of the expiration of the last to expire licensed patent right in a country or ten years after the date of first commercial sale of a licensed product in such country. The last to expire of the licensed issued patents under the Yale Agreement will expire in 2034 and the last to expire of the licensed patent applications under the Yale Agreement, if issued, will expire in 2038. Subject to an applicable cure period, Yale may terminate the Yale Agreement if we fail to comply with applicable payment obligations or upon a material breach of our obligations under the Yale Agreement, including our diligence obligations. Yale may also terminate the Yale Agreement if we fail to maintain adequate liability insurance or if we, directly or indirectly, challenge or oppose the validity, patentability or enforceability of any of the licensed patent rights, or if any of our sublicensees do so and we do not terminate the relevant sublicense agreement within a certain specified amount of time. The Yale Agreement automatically terminates if we cease to carry on our business for a certain specified period of time or for certain specified insolvency-related events. We may terminate the Yale Agreement at any time by providing advance written notice. Subject to a cure period, we may terminate the Yale Agreement upon material, uncured breach by Yale. Either party may terminate the Yale Agreement, on a country-by-country basis, if neither party elects to undertake the defense of a suit alleging infringement for a certain period of time in a country.

California Institute of Technology

In March 2017, we entered into an exclusive license agreement (the “Caltech Agreement”) with the California Institute of Technology (“Caltech”), pursuant to which we obtained an exclusive, royalty-bearing, sublicensable (subject to certain restrictions), worldwide license to certain patent rights related to methods and compositions for quantifying metabolites to manufacture, use and commercialize products in the field of detecting metabolites, including proteins and other analytes. The licenses granted pursuant to the Caltech Agreement are subject to certain rights retained by (i) the United States government under the Bayh-Dole Act and (ii) Caltech to make, import and use the licensed products for non-commercial purposes and to grant other non-profit institutions rights under the licensed patent rights and licensed technology for educational and research purposes. Such rights retained by the United States government and Caltech are typical for a license from a U.S. university or research institution, and we believe such rights do not pose a material risk to our business. We may sublicense the licensed patent rights and technology subject to certain conditions, including that any sublicense

agreement must contain terms consistent with the terms of the Caltech Agreement, and we must pay Caltech a low double-digit percentage of our sublicense income.

In connection with entering into the Caltech Agreement, we issued 2,830 shares of Series B redeemable convertible preferred stock to Caltech valued at approximately \$50,000 at the time of issuance. Upon our IPO in October 2021, all of our outstanding shares of redeemable convertible preferred stock were automatically converted to shares of common stock. Accrued dividends payable in respect of the outstanding shares of redeemable convertible preferred stock were settled through the issuance of shares of common stock. Accordingly, Caltech received 23,719 common shares upon the closing of our IPO. In addition, we must pay Caltech a royalty on the exclusively licensed patent rights at a low single-digit percentage of net revenues on a country-by-country and licensed product-by-licensed product basis (with an annual minimum royalty in the range of low to mid five-figure dollars), which obligation will continue until the expiration of all patent claims covering such licensed product in such country. For any country in which the exclusively licensed patent rights do not include any valid claims, we must pay Caltech a royalty on the non-exclusively licensed technology at a lower single-digit percentage of net revenues for a period of ten years from the first commercial sale. In the event that we fail to commercialize products that incorporate the licensed patents or technology, the annual minimum royalties due to Caltech will increase in accordance with the terms of the Caltech Agreement. We are also required to pay Caltech a mid-teen percentage of sublicensing revenue. As of December 31, 2021, we have incurred an immaterial amount in royalty expense pursuant to the Caltech Agreement. There are no potential future milestone payments under the Caltech Agreement.

Under the terms of the Caltech Agreement, we are required to use commercially reasonable efforts to commercialize the licensed products. In the event that we fail to commercialize the licensed products, the annual minimum royalty payment due to Caltech will increase in accordance with the Caltech Agreement. Caltech controls the prosecution and maintenance of the licensed patents and patent applications at our expense, subject to our ability to comment on certain related actions. Caltech also has the first right to institute a suit and defend against a declaratory judgment action pertaining to infringement or invalidity of the licensed patent rights.

Unless terminated earlier, the Caltech Agreement continues until the expiration of the last to expire licensed patent right, or as long as we are obligated to pay royalties under the Caltech Agreement. The last to expire of the licensed patent applications under the Caltech Agreement, if issued, will expire in 2036. Subject to an applicable cure period, Caltech may terminate the Caltech Agreement if we fail to comply with applicable payment obligations, fail to maintain adequate liability insurance or upon a material breach of our obligations under the Caltech Agreement, including our diligence obligations, our obligation to mark licensed products with applicable patent numbers, our exploitation of any licensed patent rights outside of the licensed field or our cessation of commercial activities in the licensed field. Caltech may also terminate the Caltech Agreement for certain specified insolvency-related events. We may terminate our license to any particular licensed patent or patent application at any time by providing advance written notice. Subject to a cure period, we may terminate the Caltech Agreement upon material, uncured breach by Caltech.

Corporate Information

IsoPlexis Corporation was incorporated in Delaware on March 1, 2013. Our principal executive office is located at 35 NE Industrial Rd., Branford, CT 06405 and our telephone number is (203) 208-4111. We completed our initial public offering (our “IPO”) in October 2021, and our common stock is listed on the Nasdaq Global Select Market (“Nasdaq”) under the symbol “ISO.”

Available Information

Additional information regarding IsoPlexis may be obtained at www.isoplexis.com and our investor relations website at <https://investors.isoplexis.com>. We have used, and intend to continue to use, our investor relations website as a means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. Our website address is not intended to function as a hyperlink and the information available at these addresses is not incorporated by reference into this Form 10-K. We make our periodic and annual reports, together with amendments to these reports, available on our website, free of charge, as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The SEC maintains a website at www.sec.gov that contains the reports and other information that we file electronically with the SEC.

In addition, our corporate governance guidelines, code of business conduct and ethics and the committee charters of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are available through the investor relations section of our website at <https://investors.isoplexis.com>.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. You should consider and read carefully all of the risks and uncertainties described below, as well as the other information included in this Form 10-K, including our audited consolidated financial statements and related notes thereto appearing in this Form 10-K and in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below, if they occur, or other events, developments or risks not presently known to us or that we currently believe to be immaterial, could materially and adversely affect our business, financial condition, results of operations and prospects. In such an event, the trading price of our common stock could decline, and you may lose all or part of your original investment. Some statements in this Form 10-K, including statements in the following risk factors, constitute forward-looking statements. Please refer to "Cautionary Note Regarding Forward-Looking Statements" included elsewhere in this Form 10-K.

Summary Risk Factors

Our business is subject to a number of risks, including those described at length below. The following is a summary of some of the principal risks we face:

- we have incurred significant net losses since inception, we expect to incur net losses in the future and we may not be able to generate sufficient revenue to achieve and maintain profitability;
- it may be difficult for us to implement our strategies for executing our growth plan or to sustain or successfully manage our anticipated growth. Specifically, we may face difficulties related to scaling our operations, converting customers to our platform and incorporating new equipment and new technology systems and laboratory processes in response to our growth;
- we have a limited operating history, which may make it difficult to evaluate the prospects for our future viability and predict our future performance;
- the life sciences technology market is highly competitive. If we fail to compete effectively, our business and results of operations will suffer;
- the sizes of the markets and forecasts of market growth for our platform are based on a number of complex assumptions and estimates, and may be inaccurate;
- our business, financial condition, results of operations and prospects may be harmed if our customers discontinue or spend less on research, development and production and other scientific endeavors;
- if we do not successfully manage the development and launch of new products, our operating results could be adversely affected;
- we depend on our key personnel and other highly qualified personnel, and if we are unable to recruit, train and retain our personnel, we may not achieve our goals;
- we depend on our information technology systems, and any failure of these systems could harm our business;
- due to the significant resources required to enable access in new markets, we must make strategic and operational decisions to prioritize certain markets or technology offerings. We may expend our resources to access markets or develop technologies that do not yield meaningful revenue or we may fail to capitalize on markets or technologies that may be more profitable or with a greater potential for success;
- our international business could expose us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of the United States;
- our manufacturing operations are dependent upon third party suppliers, including single source suppliers, making us vulnerable to supply shortages and price fluctuations, which could harm our business;
- if our facilities are damaged or become inoperable, we will be unable to continue to research, develop and manufacture our products and, as a result, our business, financial condition, results of operations and prospects may be adversely affected until we are able to secure a new facility;

- if we are unable to obtain and maintain sufficient intellectual property protection for our products and technologies, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired; and
- we have identified a material weakness in our internal control over financial reporting, and the failure to remediate this material weakness may adversely affect our business, investor confidence in our company, our financial results and the market value of our common stock.

Risks Related to Our Business and Industry

We have incurred significant net losses since inception, we expect to incur net losses in the future, we may not be able to generate sufficient revenue to achieve and maintain profitability.

We have incurred significant net losses since our inception. For the years ended December 31, 2021 and 2020, we incurred net losses of \$81.6 million and \$23.3 million, respectively. As of December 31, 2021 and 2020, we had an accumulated deficit of \$134.0 million and \$52.4 million, respectively. We expect that our operating expenses will continue to increase as we develop, enhance and commercialize new products and incur additional operational costs associated with being a public company. To date, we have financed our operations primarily from private placements of our redeemable convertible preferred stock, the sale of common stock in our IPO, the incurrence of indebtedness and, to a lesser extent, grant income and revenue derived from sales of our instruments and chip consumables. We have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, conducting development activities, including development and commercialization of our IsoLight and IsoSpark instruments, IsoCode and CodePlex chip consumables, and IsoSpeak software and research and development activities related to advancing and expanding our scientific and technological capabilities, and filing patent applications. We will need to generate significant additional revenue to achieve and sustain profitability, and even if we achieve profitability, we cannot be sure that we will remain profitable for any substantial period of time. We may never be able to generate sufficient revenue to achieve or sustain profitability and our recent and historical growth should not be considered indicative of our future performance. If we do not achieve or sustain profitability, it will be more difficult for us to finance our business and accomplish our strategic objectives, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects and cause the market price of our common stock to decline.

It may be difficult for us to implement our strategies for executing our growth plan or to sustain or successfully manage our anticipated growth.

Our success will depend on our ability to grow market penetration in existing markets and our ability to identify new applications for our platform to capture a greater share of the research spend accelerating advanced medicines and additional markets in the future. Our ability to grow our market penetration in existing markets will depend on our ability to attract new customers by increasing awareness of the capabilities of our platform. Future revenue growth will also depend on our ability to:

- properly identify and anticipate the needs of our customers in existing and new markets, including expanding our capabilities to include new applications for infectious diseases, inflammatory conditions and neurological diseases;
- develop and introduce new products;
- avoid infringing upon the intellectual property rights of third-parties and maintain necessary intellectual property licenses from third-parties; and
- provide adequate training to potential users of our products.

If we are unable to drive new customer conversion to our platform, expand adoption of the IsoLight or IsoSpark and our related products in new industries and markets, or increase the usage and value of our workflows to our customers, then our business, financial condition, results of operations and prospects could be adversely affected.

Additionally, as we continue to scale our business and the number of customers accessing our platform grows and our volume of installed platforms increases, we may find that certain of our products, certain customers or certain markets may require a dedicated sales force or sales personnel with different experience than those we currently employ. We may need to increase our capacity for customer service and support, for billing and general process improvements, and expand our internal quality assurance programs. Identifying, recruiting and training additional qualified personnel would require

significant time, expense and attention. We may also need to purchase additional equipment, some of which can take several months or more to procure, setup and validate, and increase our personnel levels 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, or that we will have adequate space, including in our manufacturing facilities, 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, possibly with supplemental or different qualifications as compared to our current personnel. Failure to manage this growth or transition 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 the prospects for our business.

We have a limited operating history, which may make it difficult to evaluate the prospects for our future viability and predict our future performance.

We completed our first sale of our instruments in June 2018 and have experienced significant revenue growth in recent periods. Revenue increased by 66.1% to \$17.3 million for the year ended December 31, 2021 as compared to \$10.4 million for the year ended December 31, 2020. In addition, we operate in highly competitive markets characterized by rapid technological advances and we expect that our business will have to evolve over time to remain competitive. We have experienced and expect to continue to experience pricing pressure for our products and services as a result of competitive factors and an evolving product mix as we expand the scope of our offering. Our limited operating history, evolving business and rapid growth may 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.

If we fail to address the risks and difficulties that we face, including those described elsewhere in this Item 1A. of this Form 10K, our business, financial condition, results of operations and prospects could be adversely affected. We have encountered in the past, and expect to encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in new and rapidly changing industries. 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 and difficulties successfully, our results of operations could differ materially from our expectations and our business, financial condition, results of operations and prospects could be adversely affected.

The life sciences technology market is highly competitive. If we fail to compete effectively, our business and results of operations will suffer.

We face significant competition in the life sciences technology market. We currently compete with many established technology companies in the flow cytometry, cellular analysis and single cell-omics businesses. This includes companies that design, manufacture and market systems, consumables and software for, among other applications, genomics, transcriptomics, proteomics, metabolomics, single cell analysis and immunology, and/or provide services related to the same. These companies include Becton, Dickinson and Company, Thermo Fisher Scientific Inc. and Bio-Rad Laboratories, Inc., each of which has products that compete to varying degrees with some but not all of our products.

Some of our current competitors are large publicly-traded companies, or are divisions of large publicly-traded companies, and may enjoy a number of competitive advantages over us, including:

- greater name and brand recognition;
- greater financial and human resources;
- broader product lines;
- larger sales forces and more established distributor networks;
- substantial intellectual property portfolios;
- larger and more established customer bases and relationships; and
- better established, larger scale and lower cost manufacturing capabilities.

As a result, our competitors and potential competitors may be able to respond more quickly to changes in customer requirements, devote greater resources to the development, promotion and sale of their platforms or instruments than we

can or sell their platforms or instruments, or offer services competitive with our platform and services, at prices designed to win significant levels of market share. We may not be able to compete effectively against these organizations.

In addition, competitors may be acquired by, receive investments from or enter into other commercial relationships with larger, well-established and well-financed companies. Certain of our competitors may be able to secure key inputs from vendors on more favorable terms, devote greater resources to marketing and promotional campaigns, adopt more aggressive pricing policies and devote substantially more resources to product development than we can. If we are unable to compete successfully against current and future competitors, we may be unable to increase market adoption and sales of our platform, which could prevent us from increasing our revenue or achieving profitability.

The sizes of the markets and forecasts of market growth for our platform are based on a number of complex assumptions and estimates, and may be inaccurate.

The market for our platform is evolving, making it difficult to predict with any accuracy the size of the markets for our current and future products. We use estimates and forecasts to calculate annual total addressable markets and market growth for our platform and for our technologies under development. These estimates and forecasts are based on a number of complex assumptions, internal and third party estimates and other business data, including assumptions and estimates relating to our ability to generate revenue from the development of new applications and products. While we believe our assumptions and the data underlying our estimates are reasonable, there are inherent challenges in measuring or forecasting such information. As a result, 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 and our forecasts of market growth and future revenue for our current or future products may prove to be incorrect. If the annual total addressable market or the potential market growth for our platform is smaller than we have estimated, it may impair our sales growth and have an adverse impact on our business, financial condition, results of operations and prospects.

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

Products from our research and development programs will take time and considerable resources to develop, and may include improvements or changes to our instruments, chip consumables and software, and we may not be able to complete development and commercialize them on a timely basis, or at all. There can be no assurance that any of our applications and other products in development will produce commercial products and solutions and before we can commercialize any new products or workflows, we will need to expend significant funds in order to:

- conduct substantial research and development, which may include validation and proof of concept studies;
- further develop and scale our laboratory, engineering and manufacturing processes to accommodate different products and workflows; and
- further develop and scale our infrastructure to be able to analyze increasingly large amounts of data.

Our product and workflow development processes involve a high degree of risk, and these efforts may be delayed or fail for many reasons, including:

- failure of the product or workflow to perform as expected; and
- failure to reliably demonstrate the process advantages of our products or workflows.

In addition, if we are unable to generate additional data and insights from our research and development programs, then we may not be able to advance these programs as quickly, or at all, or without significant additional investment, all of which could have a material adverse effect on our product and workflow development efforts.

Even if we are successful in developing new products or workflows, it will require us to make significant additional investments in marketing and selling resources in order to commercialize any such products or workflows. As a result, we may be unsuccessful in commercializing new products or workflows that we develop, which could adversely affect our business, financial condition, results of operations and prospects.

Our operating results may fluctuate significantly in the future, 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 have fluctuated significantly in the past and may fluctuate significantly in the future, 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, but not limited to:

- the level of demand for our platform, which may vary significantly;
- the length of time of the sales cycle for purchases of our products;
- the timing and cost of, and level of investment in, research, development and commercialization activities relating to our products, which may change from time to time;
- the mix of our products sold and the geographies in which they are sold period to period;
- the relative reliability and robustness of our IsoSpark and IsoLight instruments;
- the introduction of new products or product enhancements by us or others in our industry;
- expenditures that we may incur to acquire, develop or commercialize additional products and technologies;
- expenditures involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims;
- changes in governmental regulations;
- future accounting pronouncements or changes in our accounting policies; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

The effect of one of the factors discussed above, or the cumulative effects of a combination 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. Investors should not rely on our past results as an indication of our future performance.

Our business, financial condition, results of operations and prospects may be harmed if our customers discontinue or spend less on research, development and production and other scientific endeavors.

Our customers include biopharmaceutical companies and academic and research institutions. Many factors, including public policy spending priorities, available resources and product and economic cycles, have a significant effect on the capital spending policies of these entities. Fluctuations in the research and development budgets of our customers could have a significant effect on the demand for our products. Our customers determine their research and development budgets based on several factors, including the need to develop new products, continued availability of governmental and other funding, competition and the general availability of resources. If our customers' research and development budgets are reduced, the impact could adversely affect our business, financial condition, results of operations and prospects.

If we are unable to maintain and expand sales and marketing capabilities, we may not be successful in increasing sales of our existing products or commercializing new products.

We may not be able to market, sell or distribute our current products, or future products that we may develop, effectively enough to support our planned growth.

Competition for employees capable of selling expensive instruments and related products within the pharmaceutical and biotechnology industries is intense. As of December 31, 2021, we employed a commercial team of approximately 190 team members, but we may not be able to retain existing personnel or attract new personnel or be able to maintain, and continue to build, 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 addition, the time and cost of establishing and maintaining a specialized sales, marketing and service force for a particular product or service may be difficult to justify in light of the revenue generated or projected.

Our expected future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Our future financial performance and our ability to increase sales of our existing products, commercialize new products and to compete effectively will depend, in part, on our ability to manage this potential future growth effectively, without compromising quality.

In addition, we utilize thirteen distributor relationships to market and sell our products in Europe, North America, the Middle East and Asia-Pacific and we intend to leverage our distributor partnerships to expand into additional markets in the future. We exert limited control over these distributors under our agreements with them, and if their sales and marketing efforts for our products in any region are not successful, our business would be materially and adversely affected. Locating, qualifying and engaging distribution partners with local industry experience and knowledge will be necessary in at least the short to mid-term to effectively market and sell our products in certain countries outside the United States. We may not be successful in finding, attracting and retaining distribution partners, or we may not be able to enter into such arrangements on favorable terms. Even if we are successful in identifying distributors, such distributors may engage in sales practices that violate local laws or our internal policies, which could create civil or criminal liability for us. Furthermore, sales practices utilized by any such distribution parties that are locally acceptable may not comply with sales practices standards required under U.S. and other laws that apply to us, which could create additional compliance risk. If our sales and marketing efforts by us or our distributors are not successful outside the United States, we may not achieve our sales goals for our products outside the United States, which would materially and adversely impact our business, financial condition, results of operations and prospects.

If we do not successfully manage the development and launch of new products, our operating results could be adversely affected.

Further development and commercialization of our current and future products are key elements of our growth strategy. For example, we completed our first sale of our IsoSpark instrument in the first quarter of 2021 and we intend to launch additional new products in the next six to twelve months. The expenses or losses associated with unsuccessful product development or launch activities, our inability to improve the functionality or reliability and robustness of our current products, or lack of market acceptance of our new products could adversely affect our business, financial condition, results of operations and prospects. This future growth could create strain on our organizational, administrative and operational infrastructure, including laboratory operations, quality control, customer service and sales organization management.

If we fail to offer high-quality customer service, our business and reputation could suffer.

Ensuring high-quality customer service is important for the growth of our business and any failure to maintain such standards of customer service, or a related market perception, could affect our ability to sell products to existing and prospective customers. Additionally, we believe our customer service team has a positive influence on recurring chip consumables revenue. Providing an exceptional customer experience requires significant time and resources from our customer service team. Potential impacts of the COVID-19 pandemic on the health and safety of our customer service organization could reduce or eliminate the organization's ability to provide an exceptional customer experience. Additionally, the organization's ability to provide on-site, in-person customer service (including on-site installation of our instruments) has and may continue to be restricted or eliminated due to the impacts of the COVID-19 pandemic. Therefore, failure to scale our customer service organization adequately or impacts on our organization's ability to provide an exceptional customer experience may adversely impact our business, financial condition, results of operations and prospects.

Customers utilize our service teams and online content for help with a variety of topics, including how to use our products efficiently, how to integrate our products into existing workflows, how to determine which of our other products may be needed for a given experiment and how to resolve technical, analysis and operational issues if and when they arise. As we introduce new products and enhance existing products, we expect utilization of our customer service teams to increase. In particular, the introduction of new or improved products may require additional customer service efforts to ensure customers use such products correctly and efficiently. While we have developed significant resources for remote training, including an extensive library of online videos, we may need to rely more on these resources for future customer training or we may experience increased expenses to enhance our online and remote solutions, particularly due to the impacts of the COVID-19 pandemic. If our customers do not adopt these resources, we may be required to increase the staffing of our customer service team, which would increase our costs. Also, as our business scales, we may need to engage third-party customer service providers, which could increase our costs and negatively impact the quality of the customer experience if such third parties are unable to provide service levels equivalent to ours.

The number of our customers has grown significantly and such growth, as well as any future growth, will put additional pressure on our customer service organization. We may be unable to hire qualified personnel quickly enough or to the extent necessary to accommodate increases in demand.

In addition, as we continue to grow our operations and reach a global customer base, we need to be able to provide efficient customer service that meets our customers' needs globally at scale. In geographies where we sell through distributors, we rely on those distributors to provide customer service. If these third-party distributors do not provide a high-quality customer experience, our business operations and reputation may suffer.

Repair or replacement costs due to warranties we provide on our instruments could have a material adverse effect on our business, financial condition and results of operations.

We provide a one-year assurance-type warranty on our instruments. Existing and future warranties place us at the risk of incurring future repair and/or replacement costs. At the time revenue is recognized, we establish an accrual for estimated warranty expenses based on historical data and trends of product reliability and costs of repairing and replacing defective products. We exercise judgment in estimating the expected product warranty costs, using data such as the actual and projected product failure rates, estimated repair costs, freight, material, labor and overhead costs. While we believe that historical experience provides a reliable basis for estimating such warranty cost, unforeseen quality issues or component failure rates as well as significantly higher sales and the introduction of new products could result in future costs in excess of such estimates, or alternatively, improved quality and reliability in our products could result in actual expenses that are below those currently estimated. As of December 31, 2021, we had accrued expenses of \$0.3 million relating to product warranty accruals. Substantial amounts of warranty claims could have a material adverse effect on our business, financial condition and results of operations.

Our Credit Agreement contains covenants, which restrict our operating activities, and we may be required to repay the outstanding indebtedness in an event of default, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

On December 30, 2020, we entered into a credit agreement and guaranty (as amended, the "Credit Agreement"), which provides for senior secured financing of up to \$50.0 million, consisting of (i) a \$25.0 million Tranche A term loan, (ii) a \$10.0 million Tranche B term loan and (iii) a \$15.0 million Tranche C term loan. The full amount of the Tranche A term loan was drawn on December 30, 2020 and the full amount of the Tranche B term loan was drawn on May 27, 2021. Our ability to draw the Tranche C term loan is subject to several conditions, including that the administrative agent under the Credit Agreement (the "Administrative Agent") shall have received evidence that we achieved total revenue of at least \$20.0 million for the twelve-month period then most recently ended. Unless accelerated prior to such date, all amounts outstanding under the Credit Agreement are due to be repaid on December 30, 2025. Until we have repaid such indebtedness, the Credit Agreement subjects us to various customary covenants, including requirements as to minimum liquidity and minimum total revenue and restrictions on our ability to incur indebtedness or guarantees, to subject our assets to any liens, to make investments and loans, to make capital expenditures, to engage in mergers, acquisitions and asset sales, to engage in new lines of business, to declare dividends, make payments or redeem or repurchase equity interests, to enter into agreements limiting restricted subsidiary distributions, to prepay, redeem or purchase certain indebtedness and to engage in certain transactions with affiliates. In particular, the Credit Agreement includes a quarterly minimum total revenue covenant for the applicable trailing twelve month period, which revenue threshold began at approximately \$15.02 million for the twelve months ending June 30, 2021 and increases over time. In June 2021, we obtained from the lenders a waiver of the quarterly minimum total revenue covenant for the twelve months ending June 30, 2021 and a waiver of any event of default resulting from non-compliance with the quarterly minimum total revenue covenant for such test period. On October 29, 2021, we entered into an amendment (the "Second Amendment") to the Credit Agreement to, among other things, eliminate the minimum total revenue covenant for the twelve months ending September 30, 2021 and December 31, 2021 and reset the minimum total revenue covenants thereafter. Pursuant to the Second Amendment, the minimum total revenue covenant, as amended, will resume being tested for the twelve months ending March 31, 2022. There can be no assurance as to our future compliance with the covenants under the Credit Agreement or that our lenders will waive any failure to satisfy such covenants under the Credit Agreement in the future. Our business may be adversely affected by these restrictions on our ability to operate our business.

We may be required to repay the amounts outstanding under the Credit Agreement if an event of default occurs under the Credit Agreement. An event of default will occur if, among other things, we fail to make required payments under the Credit Agreement; we breach any of our covenants under the Credit Agreement, subject to specified cure periods with respect to certain breaches; the Administrative Agent determines that a material adverse change (as defined in the Credit Agreement) has occurred; we or our assets become subject to certain legal proceedings, such as bankruptcy proceedings; we are unable to pay our debts as they become due; or we default on certain material indebtedness which would permit the acceleration of maturity of such indebtedness. We may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time any such event of default occurs. In the case where we may not have enough available cash or be able to raise additional funds to repay such indebtedness, we may be required

to delay, limit, reduce or terminate our product development or operations or grant to others rights to develop and market products that we would otherwise prefer to develop and market ourselves. The Administrative Agent could also exercise its rights as secured lender to take possession of and to dispose of the collateral securing the term loans, which collateral includes substantially all of our property. Our business, financial condition, results of operations and prospects could be materially adversely affected as a result of any of these events.

Despite our level of indebtedness, we are able to incur more debt and undertake additional obligations. Incurring such debt or undertaking such additional obligations could further exacerbate the risks our indebtedness poses to our financial condition.

As of December 31, 2021, we had approximately \$31.6 million in aggregate principal amount of outstanding indebtedness, in addition to \$15.0 million of unfunded delayed draw term loans available, subject to certain conditions, under the Credit Agreement. Despite our level of indebtedness, we may be able to incur significant additional indebtedness in the future, including in the event we refinance or replace our existing Credit Agreement. Although the Credit Agreement contains restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions. These restrictions also will not prevent us from incurring obligations that do not constitute indebtedness and, if we refinance existing indebtedness, such refinancing indebtedness may contain fewer restrictions on our activities. To the extent new indebtedness is added to our currently anticipated indebtedness levels, the related risks that we face could intensify. While the Credit Agreement also contains restrictions on making certain investments and loans, these restrictions are subject to a number of qualifications and exceptions, and the investments and loans incurred in compliance with these restrictions could be substantial.

Changes in the method for determining LIBOR or the elimination of LIBOR could affect our business, financial condition, results of operations and prospects.

Our Credit Agreement provides that interest may be indexed to the London Interbank Offered Rate (“LIBOR”), which is a benchmark rate at which banks offer to lend funds to one another in the international interbank market for short term loans. On March 5, 2021, ICE Benchmark Administration, which administers LIBOR publication, announced its intention to cease the publication of the one week and two month USD LIBOR rates after December 31, 2021 and the overnight, one-, three-, six- and 12-month USD LIBOR rates after June 30, 2023. We cannot predict the impact of any changes in the methods by which LIBOR is determined or any regulatory activity related to a potential phase out of LIBOR on our Credit Agreement and interest rates. While our Credit Agreement provides for the use of an alternative rate to LIBOR in the event LIBOR is phased out, uncertainty remains as to any such replacement rate and any such replacement rate may be higher or lower than LIBOR may have been. At this time, no consensus exists as to what rate or rates will become accepted alternatives to LIBOR, although The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, has identified the Secured Overnight Financing Rate (“SOFR”), a newly created index; calculated with a broad set of short-term repurchase agreements backed by treasury securities, as its preferred alternative rate for LIBOR. Although SOFR is the Alternative Reference Rates Committee’s recommended replacement rate, it is also possible that lenders may instead choose alternative replacement rates that may differ from LIBOR or SOFR that would result in higher interest costs for us. It is not possible to predict the effect of these changes, other reforms or the establishment of alternative reference rates in the United States or elsewhere. The establishment of alternative reference rates or implementation of any other potential changes may materially and adversely affect our business, results of operations or financial condition.

We depend on our key personnel and other highly qualified personnel, and if we are unable to recruit, train and retain our personnel, we may not achieve our goals.

Our future success depends upon our ability to recruit, train, retain and motivate key personnel. Our senior management team, including Sean Mackay, one of our co-founders and our Chief Executive Officer; John Strahley, our Chief Financial Officer; Jing Zhou, our Chief Scientific Officer; and Peter Siesel, our Chief Commercial Officer, is critical to our vision, strategic direction, product development and commercialization efforts. The departure of one or more of our executive officers, senior management team members, or other key employees could be disruptive to our business until we are able to hire qualified successors. We do not maintain “key man” life insurance on our senior management team.

Our continued growth depends, in part, on attracting, retaining and motivating qualified personnel, including highly-trained sales personnel with the necessary scientific background and ability to understand our platform at a technical level to effectively identify and sell to potential new customers. New hires require significant training and, in most cases, take significant time before they achieve full productivity. Our failure to successfully integrate these key personnel into our business could adversely affect our business. In addition, competition for qualified personnel in our industry is intense. We compete for qualified scientific and information technology personnel with other life science and information technology

companies as well as academic institutions and research institutions. Some of our scientific personnel are qualified foreign nationals whose ability to live and work in the United States is contingent upon the continued availability of appropriate visas. As a result, changes to United States immigration policies could restrain the flow of technical and professional talent into the United States and may inhibit our ability to hire qualified personnel. The current United States rules, regulations, policies and mandates restricting immigration and reforming the work visa process may adversely affect our ability to retain and maintain qualified personnel.

We do not maintain fixed term employment contracts with any of our employees. As a result, our employees could leave our company with little or no prior notice and may be free to work for a competitor. Due to the complex and technical nature of our products and technology and the dynamic market in which we compete, any failure to attract, train, retain and motivate qualified personnel could materially harm our business, results of operations, financial condition and prospects.

We depend on our information technology systems, and any failure of these systems could harm our business.

We depend on information technology and telecommunications systems for significant elements of our operations, including our laboratory information management system, our quality management system, our sales management system, and product lifecycle management system. We have installed, and expect to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including for example, systems handling human resources, financial controls and reporting, contract management, regulatory compliance and other infrastructure operations. These information technology and telecommunications systems support a variety of functions, including manufacturing operations, laboratory operations, data analysis, quality control, customer service and support, billing, research and development activities, scientific and general administrative activities.

Information technology and telecommunications systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious software, bugs or viruses, human acts and natural disasters. Moreover, despite network security and back-up measures, some of our servers are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive problems. Any disruption or loss of information technology or telecommunications systems on which critical aspects of our operations depend could have an adverse effect on our business and our reputation, and we may be unable to regain or repair our reputation in the future.

Due to the significant resources required to enable access in new markets, we must make strategic and operational decisions to prioritize certain markets or technology offerings. We may expend our resources to access markets or develop technologies that do not yield meaningful revenue or we may fail to capitalize on markets or technologies that may be more profitable or with a greater potential for success.

We believe our platform has potential applications across a wide range of markets and we have targeted certain markets in which we believe our technology has significant advantages, or for which we believe we have a higher probability of success or revenue opportunity or for which the path to realizing or achieving revenue is shorter. For example, our initial focus has been on developing applications for cancer immunology and cell and gene therapy but we are expanding our capabilities to include applications for infectious diseases, inflammatory conditions and neurological disorders. We seek to maintain a process of prioritization and resource allocation to maintain a balance between advancing near-term opportunities and exploring additional markets for our technology. However, due to the significant resources required for the development of new applications for new markets, we must make decisions on which markets to pursue and the amount of resources to allocate to each. Our decisions concerning the allocation of research, development, collaboration, management and financial resources toward particular applications may not lead to the development of any viable product and may divert resources away from better opportunities.

Our international business could expose us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of the United States.

We currently sell our products in several international markets, including in Australia, Belgium, Canada, China, Czech Republic, France, Germany, Italy, Israel, Japan, Singapore, South Korea, Spain, Switzerland, and the United Kingdom, and we intend to expand into additional international markets. We currently maintain relationships with distributors outside of the United States and may in the future enter into new distributor relationships. Doing business internationally involves a number of risks, including:

- multiple, conflicting and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, tariffs, economic sanctions and embargoes, employment laws, regulatory requirements and other governmental approvals, permits and licenses;

- failure by us or our distributors to obtain approvals to conduct our business in various countries;
- differing intellectual property rights;
- complexities and difficulties in obtaining intellectual property protection, enforcing our intellectual property and defending against third party intellectual property claims;
- difficulties in staffing and managing foreign operations;
- logistics and regulations associated with shipping systems and parts and components for instruments and chip consumables, as well as transportation delays;
- travel restrictions that limit the ability of marketing, presales, sales, services and support teams to service customers;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products and exposure to foreign currency exchange rate fluctuations;
- international trade disputes that could result in tariffs and other protective measures;
- natural disasters, political and economic instability, including wars such as the conflict between Russia and Ukraine, terrorism and political unrest, outbreak of disease, boycotts, curtailment of trade and other business restrictions; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and distributors' activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act (the "FCPA"), its books and records provisions, or its anti-bribery provisions, or similar laws in other countries.

Any of these factors could significantly harm our current operations and potential future international expansion and consequently, our business, financial condition, results of operations and prospects. In addition, certain international markets are subject to significant political and economic uncertainty, including for example the effect of the withdrawal of the United Kingdom from the European Union. Significant political and economic developments in international markets for which we operate or intend to operate, or the perception that any of them could occur, creates further challenges for operating in these markets in addition to creating instability in global economic conditions.

Our products could have defects or errors, which may give rise to claims against us, adversely affect market adoption of our products, and adversely affect our business, financial condition, and results of operations.

Our instruments, chip consumables and services utilize novel and complex technology and may develop or contain undetected defects or errors. We cannot assure you that material performance problems, defects, or errors will not arise, including as we commercialize additional products. We provide warranties that our instruments will meet performance expectations and will be free from defects. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing our products, we depend upon third parties for the supply of various components, many of which require a significant degree of technical expertise to produce. If our suppliers fail to produce our components to specification or provide defective products to us and our quality control tests and procedures fail to detect such errors or defects, or if we or our suppliers use defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised.

If our products contain defects, we may experience:

- loss of customer orders and delay in order fulfillment;
- damage to our brand reputation;
- increased warranty and customer service and support costs due to product repair or replacement;
- product recalls, withdrawals or replacements;
- inability to attract new customers;
- diversion of resources from our manufacturing and research and development departments to our service department; and

- legal claims against us, including product liability claims, which could be costly and time consuming to defend and result in substantial damages.

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

The marketing, sale and use of our products could lead to the filing of product liability claims were someone to allege that our products identified inaccurate or incomplete information regarding the cells analyzed or otherwise failed to perform as designed. We may also be subject to liability for errors in, a misunderstanding of or inappropriate reliance upon, the information we provide in the ordinary course of our business activities. If we cannot successfully defend ourselves against product liability claims, we could incur substantial liabilities and reputational harm. In addition, regardless of the merit or eventual outcome, product liability claims may result in:

- costs of litigation;
- distraction of management's attention from our primary business;
- the inability to commercialize existing or new products;
- decreased demand for our products;
- damage to our business reputation;
- product recalls or withdrawals from the market;
- termination of existing agreements by customers and suppliers; and
- loss of net sales.

We maintain product liability insurance that we believe is adequate, but this insurance is subject to deductibles and coverage limitations. Our current product liability insurance may not continue to be available to us on acceptable terms, if at all, and, if available, coverage may not fully protect us from the financial impact of defending against product liability claims. Any product liability claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. A product liability lawsuit, recall or other claim with respect to uninsured liabilities or for amounts in excess of insured liabilities could impact our business, financial condition, results of operations and prospects.

Our insurance policies are expensive and protect us only from some business risks, which leaves us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter and our policies have limits and significant deductibles. Some of the policies we currently maintain include general liability, property, umbrella and directors' and officers' insurance.

Any additional product liability insurance coverage we acquire in the future may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. A successful product liability claim or series of claims in which judgments exceed our insurance coverage could adversely affect our business, financial condition, results of operations and prospects, including preventing or limiting the commercialization of any products we develop.

We also expect the laws, rules and regulations we are subject to as a public company to make it more expensive for us to maintain directors' and officers' liability insurance, and we may be required in the future to accept reduced coverage or incur substantially higher costs to maintain coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees or as executive officers. We do not know, however, if we will be able to maintain existing insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our business, financial condition, results of operations and prospects.

We may need to raise additional capital to fund our existing operations, improve our platform or develop and commercialize new instruments, consumables and software, or expand our operations.

If our available cash resources and anticipated cash flows from operations are insufficient to satisfy our liquidity requirements, including because of lower demand for our products or the realization of other risks discussed in this Item

1A. of this Form 10-K, we may be required to raise additional capital through issuances of equity or convertible debt securities, entrance into a credit facility or another form of third party funding or seek other debt financing. There is no assurance we will be able to obtain future financing on commercially reasonable terms, or at all.

In any event, we may consider raising additional capital in the future to expand our business, to pursue strategic investments, to take advantage of financing opportunities or for other reasons, including to:

- increase our sales and marketing efforts to drive market adoption of our platform and address competitive developments;
- fund development and marketing efforts of our existing products or any future products;
- expand our technologies into additional markets;
- acquire, license or invest in technologies and other intellectual property rights;
- acquire or invest in complementary businesses or assets; and
- finance capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- our ability to achieve projected revenue growth;
- the cost of expanding our operations, including production capacity, lab space, and our offerings, including our sales and marketing efforts;
- our rate of progress in launching and commercializing new products, and the cost of the sales and marketing activities associated with increasing sales of our existing instruments and products;
- our rate of progress in, and cost of research and development activities associated with, products in research and development;
- the effect of competing technological and market developments;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims;
- costs related to domestic and international expansion; and
- the potential cost of and delays in product development as a result of any regulatory oversight that may be applicable to our products.

The various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our stockholders could result. Any preferred equity securities issued also could provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise funds by borrowing debt, such debt would have rights, preferences and privileges senior to those of holders of our common stock. The terms of such debt could impose significant restrictions on our operations. If we raise funds through collaborations or licensing arrangements, we might be required to relinquish significant rights to our platform technologies or products or grant licenses on terms that are not favorable to us or commit to future payment streams. Market volatility resulting from the COVID-19 pandemic or other factors may further adversely impact our ability to raise capital as and when needed.

If we are unable to obtain adequate financing or financing on terms satisfactory to us, if we require it, our ability to continue to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances could be significantly limited, and could have a material adverse effect on our business, financial condition, results of operations and prospects.

We are subject to differing tax rates in several jurisdictions in which we operate, which may adversely affect our business, financial condition, results of operations and prospects.

We are subject to taxes in the United States and certain foreign jurisdictions. Due to economic and political conditions, tax rates in various jurisdictions, including the United States, may be subject to change. Our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities and changes in tax laws or their interpretation. In addition, we may be subject to income tax audits by various tax jurisdictions. Although we believe our income tax liabilities are reasonably estimated and accounted for in accordance with applicable laws and principles, an adverse resolution by one or more taxing authorities could have a material impact on the results of our operations.

International tariffs applied to goods traded between the United States and China may adversely affect our business, financial condition, results of operations and prospects.

International tariffs, including tariffs applied to goods traded between the United States and China, may adversely affect our business, results of operations and financial condition. Since the beginning of 2018, there has been increasing rhetoric, in some cases coupled with legislative or executive action, from several U.S. and foreign leaders regarding the possibility of instituting tariffs against foreign imports of certain materials. More specifically, in March and April of 2018, the United States and China have applied tariffs to certain of each other's exports. The institution of trade tariffs both globally and between the United States and China specifically carries the risk of adversely affecting overall economic condition, which could have a negative impact on us as imposition of tariffs could cause an increase in the cost of our products and the components for our products, which may adversely affect our business, financial condition, results of operations and prospects.

Unfavorable U.S. or global economic conditions as a result of the COVID-19 pandemic, or otherwise, could adversely affect our ability to raise capital and our business, financial condition, results of operations and prospects.

While the potential economic impact brought by, and the duration of, the COVID-19 pandemic is difficult to assess or predict, the COVID-19 pandemic has resulted in, and may continue to result in, extreme volatility and disruptions in the capital and credit markets, reducing our ability to raise additional capital through equity, equity-linked or debt financings, which could negatively impact our short-term and long-term liquidity and our ability to operate in accordance with our operating plan, or at all. Additionally, our results of operations could be adversely affected by general conditions in the global economy and financial markets. If the operations of our suppliers are impacted by the COVID-19 pandemic, we may not be able to source the necessary components and materials to build our products in sufficient quantities to meet demand. If the operations of our customers are impacted by the COVID-19 pandemic, including shutdowns of laboratories and delayed spending on instruments or chip consumables, we may not be able to sell our products or provide on-site, in-person customer service. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for our products and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy could strain our customers' budgets or cause delays in their payments to us. Any of the foregoing could harm our business, and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our ability to raise capital, business, financial condition, results of operations and prospects.

Risks Related to Manufacturing and Supply

If we are unable to manufacture our instruments in high-quality commercial quantities successfully and consistently to meet demand, our growth will be limited.

We have manufactured approximately 320 of our instruments as of December 31, 2021. We currently manufacture our instruments and chip consumables at our facilities in Branford, Connecticut. To manufacture our products in the quantities that we believe will be required to meet anticipated market demand, we will need to increase manufacturing capacity, which could involve significant challenges and may require additional quality controls. We may not successfully complete any required increase to existing manufacturing capacity in a timely manner, or at all.

If there is a disruption to our manufacturing operations, whether from COVID-19 or some other disruptions, we will have no other means of producing our products until we restore our facility or develop alternative manufacturing facilities. Additionally, any damage to or destruction of our facility or equipment may significantly impair our ability to manufacture our products on a timely basis.

If we are unable to produce our products in sufficient quantities to meet anticipated customer demand, our business, financial condition, results of operations and prospects would be harmed. The lack of experience we have in producing commercial quantities of our products may also result in quality issues, and could result in product defects or errors or recalls.

We use biological and hazardous materials that require considerable expertise and expense for handling, storage and disposal and may result in claims against us.

We work with materials, including chemicals, biological agents and compounds that could be hazardous to human health and safety or the environment. Our operations also produce hazardous and biological waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. We are subject to periodic inspections by federal, state and local authorities to ensure compliance with

applicable laws. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental laws and regulations may restrict our operations. If we do not comply with applicable regulations, we may be subject to fines and penalties.

In addition, we cannot eliminate the risk of accidental injury or contamination from these materials or wastes, which could cause an interruption of our commercialization efforts, research and development programs and business operations, as well as environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations. In the event of contamination or injury, we could be liable for damages or penalized with fines in an amount exceeding our resources and our operations could be suspended or otherwise adversely affected. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance.

Our manufacturing operations are dependent upon third party suppliers, including single source suppliers, making us vulnerable to external factors such as supply shortages and price fluctuations, which could harm our business.

We are subject to the risks inherent in the manufacturing of our products, including industrial accidents, environmental events, strikes and other labor disputes, capacity constraints, as well as global shortages, disruptions in supply chain and loss or impairment of key suppliers, as well as natural disasters and other external factors over which we have no control. Our products contain several critical components, including lasers, circuit boards, antibodies and reagents. Some of the suppliers of critical components or materials are single source suppliers. Although we believe there are suitable alternative suppliers for these components, the replacement of existing suppliers or the identification and qualification of suitable second sources may require significant time, effort and expense, and could result in delays in production, which could negatively impact our business operations and revenue. We do not have supply agreements with certain suppliers of these critical components and materials beyond purchase orders and, although we maintain a safety stock inventory at our facilities in Branford, Connecticut for certain critical components, forecasted amounts may be inaccurate and we may experience shortages as a result of serious supply problems with these suppliers. There can be no assurance that our supply of components will not be limited, interrupted, or of satisfactory quality or continue to be available at acceptable prices. In addition, loss of any critical component provided by a single source supplier could require us to change the design of our manufacturing process based on the functions, limitations, features and specifications of the replacement components.

In addition, several other non-critical components and materials that comprise our products are currently manufactured by a single supplier or a limited number of suppliers. In certain of these cases, we have not yet qualified alternate suppliers. A supply interruption or an increase in demand beyond our current suppliers' capabilities could harm our ability to manufacture our products unless and until new sources of supply are identified and qualified. Our reliance on these suppliers subjects us to a number of risks that could harm our business, including:

- interruption of supply resulting from modifications to or discontinuation of a supplier's operations;
- trade disputes or other political conditions or economic conditions;
- delays in the manufacturing operations of our suppliers, or in the delivery of parts and components to support such manufacturing operations, due to the impact of public health issues, epidemics or pandemics, such as COVID-19;
- delays in product shipments resulting from uncorrected defects, reliability issues, or a supplier's variation in a component;
- a lack of long-term supply arrangements for key components with our suppliers;
- inability to obtain adequate supply in a timely manner, or to obtain adequate supply on commercially reasonable terms;
- difficulty and cost associated with locating and qualifying alternative suppliers for our components in a timely manner;
- a modification or change in a manufacturing process or part that unknowingly or unintentionally negatively impacts the operation of our platform;
- production delays related to the evaluation and testing of products from alternative suppliers, and corresponding regulatory qualifications;
- delay in delivery due to our suppliers prioritizing other customer orders over ours;
- damage to our brand reputation caused by defective components produced by our suppliers;

- increased cost of our warranty program due to product repair or replacement based upon defects in components produced by our suppliers; and
- fluctuation in delivery by our suppliers due to changes in demand from us or their other customers.

Any interruption in the supply of components or materials, or our inability to obtain substitute components or materials from alternate sources at acceptable prices in a timely manner, could result in increased costs and impair our ability to meet the demand of our customers, any of which would have an adverse effect on our business, financial condition, results of operations and prospects.

We forecast sales to determine requirements for components and materials used in our instruments, and if our forecasts are incorrect, we may experience delays in shipments or increased inventory costs.

We keep limited materials, components and finished products on hand. To manage our operations with our third party suppliers, we forecast anticipated product orders and material requirements to predict our inventory needs and enter into purchase orders on the basis of these requirements. Several components of our products require an order lead time of 3 months to 6 months. Our limited historical commercial experience and rapid growth may not provide us with enough data to consistently and accurately predict future demand. If our business expands and our demand for components and materials increase beyond our estimates, our suppliers may be unable to meet our demand. In addition, if we underestimate our component and material requirements, we may have inadequate inventory, which could interrupt, delay, or prevent delivery of our products to our customers. By contrast, if we overestimate our component and material requirements, we may have excess inventory, which would increase our expenses. Any of these occurrences would negatively affect our financial performance and business results.

Shipping is a critical part of our business and any changes in our shipping arrangements or damages or losses sustained during shipping could adversely affect our business, financial condition, results of operations and prospects.

We currently rely on third party vendors for our shipping. If we are not able to negotiate acceptable pricing and other terms with these entities or they experience performance problems or other difficulties, it could negatively impact our operating results and our customers' experience. In the past, some of our products have sustained serious damage in transit and were not repairable. Although we have taken steps to improve our shipping procedures, there is no guarantee our products will not become damaged or lost in transit in the future. If a product is damaged in transit, it may result in a substantial delay in the fulfillment of the customer's order, and depending on the type and extent of the damage and whether the incident is covered by insurance, it may result in a substantial financial loss. If our products are not delivered in a timely fashion or are damaged or lost during the delivery process, our customers could become dissatisfied and cease using our products or services, which would adversely affect our business, financial condition, results of operations and prospects.

If our facilities are damaged or become inoperable, we will be unable to continue to research, develop and manufacture our products and, as a result, our business, financial condition, results of operations and prospects may be adversely affected until we are able to secure a new facility.

We do not have redundant facilities for the final assembly of our products. Our facilities and equipment would be costly to replace and could require substantial lead-time to repair or replace. Our facilities may be harmed or rendered inoperable by natural or man-made disasters, including, but not limited to, tornadoes, flooding, fire and power outages. Such disasters may render it difficult or impossible to manufacture our products and conduct our research and development activities for new products. The inability to perform those activities, combined with our limited materials, components and finished products, may result in the inability to continue manufacturing or supplying our products during such periods and the loss of customers or harm to our reputation. Although we possess insurance for damage to our facilities and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and this insurance may not continue to be available to us on acceptable terms, or at all.

If we fail to maintain our numerous contractual relationships, our business, results of operations and financial condition could be adversely affected.

We are party to numerous contracts in the normal course of our business, including our supply and distribution agreements. In the aggregate, these contractual relationships are necessary for us to operate our business. From time to time, we amend, terminate or negotiate our contracts. We may also periodically be subject to, or make claims of breach of contract, or threaten legal action relating to our contracts. These actions may result in litigation. At any one time, we have a number of negotiations under way for new or amended commercial agreements. We devote substantial time, effort and

expense to the administration and negotiation of contracts involved in our business. However, these contracts may not continue in effect past their current term or we may not be able to negotiate satisfactory contracts in the future with current or new business partners, which may adversely affect our business, financial condition, results of operations and prospects.

Risks Related To Government Regulation

If our current or future products become subject to FDA or other related international regulation, the regulatory clearance or approval and the maintenance of continued and post-market regulatory compliance for such products will be expensive, time-consuming, and uncertain both in timing and in outcome.

We make our platform, which includes our instruments, chip consumables and software, available to customers as research-use-only (“RUO”) products. While products which are marketed and sold for RUO are not generally subject to regulation by the Food and Drug Administration (the “FDA”), regulatory requirements related to marketing, selling, and distribution of RUO products could change or be uncertain. Additionally, even if our products are labeled, promoted, and intended as RUO, the FDA or comparable agencies of other countries could disagree with our conclusion that our products are intended for research use only or deem our sales, marketing and promotional efforts as being inconsistent with RUO products. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, results of operations and prospects could be adversely affected.

In the event that we decide in the future to develop medical device products or modify our existing products in a manner intended for clinical or diagnostic uses, or if our existing platform were ever to be deemed a medical device by the FDA, we would be required in the United States to either receive clearance under Section 510(k) of the Federal Food, Drug, and Cosmetic Act or approval of a premarket approval application from the FDA, unless an exemption applies, prior to marketing any such product. The process of obtaining approval or clearance from the FDA for new products, or with respect to enhancements or modifications to existing products, could take a significant period of time, require the expenditure of substantial resources, involve rigorous preclinical and clinical testing, require changes to products or result in limitations on the indicated uses of products. There can be no assurance that we would receive the required approvals or clearances for any new products or for modifications to our existing products on a timely basis or that any approval or clearance would not be subsequently withdrawn or conditioned upon extensive post-market study requirements. Moreover, even if we were to receive FDA clearance or approval of new products or modifications to existing products, we would be required to comply with extensive regulations relating to the development, research, clearance, approval, distribution, marketing, advertising and promotion, manufacture, adverse event reporting, recordkeeping, import and export of such products, which could substantially increase our operating costs and have a material impact on our business, profits and results of operations. Failure to comply with applicable regulations could jeopardize our ability to sell our products and result in enforcement actions such as warning letters, fines, injunctions, civil penalties, termination of distribution, recalls or seizures of products, delays in the introduction of products into the market, total or partial suspension of production, refusal to grant future clearances or approvals, withdrawals or suspensions of current approvals, resulting in prohibitions on sales of our products, and in the most serious cases, criminal penalties. Occurrence of any of the foregoing could harm our reputation, business, financial condition, results of operations and prospects.

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

We are exposed to the risk of fraud or other misconduct by our employees, consultants, distributors and commercial partners. Misconduct by these parties could include intentional failures to comply with the applicable laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. These laws and regulations may restrict or prohibit a wide range of pricing, discounting and other business arrangements. Such misconduct could result in legal or regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and any 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 or other actions or lawsuits 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, which could have a significant impact on our business. Whether or not we are successful in defending against such actions or investigations, we could incur substantial costs, including legal fees and divert the attention of management in defending ourselves against any of these claims or investigations.

If we fail to comply with certain healthcare laws, including fraud and abuse laws, we could face substantial penalties and our business, results of operations, financial condition, and prospects could be adversely affected.

Even though we do not order healthcare services or bill directly to Medicare, Medicaid, or other third-party payors, certain federal and state healthcare laws and regulations pertaining to fraud and abuse may be applicable to our business. We could be subject to healthcare fraud and abuse laws of both the federal government and the states in which we conduct our business. Because of the breadth of these laws and the narrowness of available statutory and regulatory exceptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If we or our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including administrative, civil and criminal penalties, damages, fines, imprisonment, and the curtailment or restructuring of our operations, any of which could materially adversely affect our ability to operate our business and our financial results.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our products and technologies, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired.

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 products and technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. If we fail to obtain, maintain, protect and enforce our intellectual property, third parties may be able to compete more effectively against us. In addition, we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate coverage of our products, our competitive position could be adversely affected, as could our business, financial condition, results of operations and prospects. Both the patent application process and the process of managing patent and other intellectual property disputes can be time-consuming and expensive.

Our success depends in large part on our and our licensors' ability to obtain and maintain protection of the intellectual property we may own solely and jointly with, or license from, third parties, particularly patents, in the United States and other countries with respect to our products and technologies. We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, obtaining and enforcing patents is costly, time-consuming and complex, and we may fail to apply for patents on important products and 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, enforce and protect any patents that may issue from such patent applications, at a reasonable cost or in a timely manner or in all jurisdictions. It is possible that defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, for example with respect to proper priority claims, inventorship, claim scope or requests for patent term adjustments. 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. If we delay filing a patent application, and a competitor files a patent application on the same or similar invention before we do, our ability to secure patent rights may be limited and we may not be able to patent the invention at all. Even if we can patent the invention, we may be able to patent only a limited scope of the invention, and the limited scope may be inadequate to protect our products and technologies, or to block a competitor's products and technologies that are similar or adjacent to ours. Our earliest patent filings have been published. A competitor may review our published patents and arrive at the same or similar technology advances for our products as we developed. If the competitor files a patent application on such an advance before we do, then we may no longer be able to protect that aspect of our products and technologies and we may require a license from the competitor, which may not be available on commercially viable terms. Moreover, we may not develop additional proprietary products, methods and technologies that are patentable. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed from or to third parties. Therefore, these patents and applications may not be prosecuted and enforced by such third parties in a manner consistent with the best interests of our business.

In addition, the patent position of life sciences technology companies generally is highly uncertain, involves complex legal and factual questions, and has been the subject of much litigation in recent years. 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. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. It is possible that none of our pending patent applications will result in issued patents in a timely fashion or at all, and even if patents are granted, they may not provide a basis for intellectual property protection of commercially viable products or services, may not provide us with any competitive advantages, or may be challenged, narrowed and invalidated by third parties. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. It is possible that third parties will design around our current or future patents such that we cannot prevent such third parties from using similar technologies and commercializing similar products to compete with us. Some of our owned or licensed patents or patent applications may be challenged at a future point in time and we may not be successful in defending any such challenges made against our patents or patent applications. Any successful third-party challenge to our patents could result in the narrowing, unenforceability or invalidity of such patents and increased competition to our business. The outcome of patent litigation or other proceeding can be uncertain, and any attempt by us to enforce our patent rights against others or to challenge the patent rights of others may not be successful, or, regardless of success, may take substantial time and result in substantial cost, and may divert our efforts and attention from other aspects of our business. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations.

Further, while software and other of our proprietary works may be protected under copyright law, we have chosen not to register any copyrights in these works, and instead, we primarily rely on protecting our software as a trade secret. In order to bring a copyright infringement lawsuit in the United States, the copyright must be registered. Accordingly, the remedies and damages available to us for unauthorized use of our software may be limited.

The U.S. law relating to the patentability of certain inventions in the life sciences technology industry is uncertain and rapidly changing, which may adversely impact our existing patents or our ability to obtain patents in the future.

Changes in either the patent laws or interpretation of the patent laws in the United States or in other jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. For instance, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application is entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. 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 or our licensors were the first to either file any patent application related to our products and other proprietary technologies or invent any of the inventions claimed in our or our licensor's patents or patent applications. Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing the claimed invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license.

In addition, the America Invents Act implemented changes that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors or other third parties to challenge the validity of our patents. These changes include allowing third-party submission of prior art to the United States Patent and Trademark Office ("USPTO") during patent prosecution and additional procedures to challenge the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, inter partes review and derivation proceedings. Further, because of a lower evidentiary standard in these USPTO post-grant proceedings compared to the evidentiary standard in United States 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 would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. The America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Various courts, including the U.S. Supreme Court, have rendered decisions that impact the scope of patentability of certain inventions or discoveries relating to the life sciences technology. Specifically, these decisions stand for the proposition that patent claims that recite laws of nature are not themselves patentable unless those patent claims have sufficient additional features that provide practical assurance that the processes are genuine inventive applications of those laws rather than patent drafting efforts designed to monopolize the law of nature itself. What constitutes a "sufficient" additional feature is uncertain. Furthermore, in view of these decisions, since December 2014, the USPTO has published

and continues to publish revised guidelines for patent examiners to apply when examining process claims for patent eligibility.

In addition, U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that may have a material adverse effect on our ability to obtain new patents and to defend and enforce our existing patents and patents that we might obtain in the future.

We cannot assure you that our patent portfolio will not be negatively impacted by the current uncertain state of the law, new court rulings or changes in guidance or procedures issued by the USPTO or other similar patent offices around the world. From time to time, the U.S. Supreme Court, other federal courts, the U.S. Congress or the USPTO may change the standards of patentability, scope and validity of patents within the life sciences technology and any such changes, or any similar adverse changes in the patent laws of other jurisdictions, could have a negative impact on our business, financial condition, prospects and results of operations.

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

Filing, prosecuting and defending patents on our products and technologies in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and we and our licensors may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we and our licensors may not be able to prevent third parties from practicing our inventions in some or all countries outside the United States, or from selling or importing products made using our or our licensors' inventions in and into the United States or other jurisdictions. Competitors and other third parties may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and technologies and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products. Our and our licensors' patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. In addition, certain countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. Furthermore, many countries limit the enforceability of patents against other parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of any patents.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of many other countries do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for us to stop the misappropriation or other violations of our intellectual property rights including infringement of our patents in such countries. The legal systems in certain countries may also favor state-sponsored or companies headquartered in particular jurisdictions over our first-in-time patents and other intellectual property protection. The absence of harmonized intellectual property protection laws and effective enforcement makes it difficult to ensure consistent respect for patent, trade secret, and other intellectual property rights on a worldwide basis. As a result, it is possible that we will not be able to enforce our rights against third parties that misappropriate our proprietary technology in those countries.

Proceedings to enforce our or our licensors' patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our and our licensors' patents at risk of being invalidated or interpreted narrowly and our and our licensors' patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We and our licensors may not prevail in any lawsuits that we or any of our licensors initiate, or that are initiated against us or any of our licensors, and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, changes in the law and legal decisions by courts in the United States and foreign countries may affect our ability to obtain adequate protection for our products, services and other technologies and the enforcement of intellectual property. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations and prospects.

Any of our issued patents covering our products could be narrowed or found invalid or unenforceable if challenged in court or before administrative bodies in the United States or abroad, including the USPTO.

Our owned and licensed patents and patent applications may be subject to validity, enforceability and priority disputes. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability. Some of our patents or patent applications (including licensed patents and patent applications) may be challenged at a future point in time in opposition, derivation, reexamination, inter partes review, post-grant review or interference or other similar proceedings. Any successful third-party challenge to our or our licensors' patents in this or any other proceeding could result in the unenforceability or invalidity of such patents, which may lead to increased competition to our business, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, if we or our licensors initiate legal proceedings against a third party to enforce a patent covering our products, the defendant could counterclaim that such patent covering our products, as applicable, is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. There are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. 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 relevant patent office, or made a misleading statement, during prosecution. A litigant or the USPTO itself could challenge our patents on this basis even if we believe that we have conducted our patent prosecution in accordance with the duty of candor and in good faith. The outcome following such a challenge is unpredictable. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include ex parte re-examination, inter partes review, post-grant review and derivation proceedings in the U.S., and equivalent proceedings in non-U.S. jurisdictions, such as opposition proceedings. Such proceedings could result in revocation of or amendment to our or our licensors' patents in such a way that they no longer cover and protect our products. With respect to the validity of our or our licensors' patents, for example, we cannot be certain that there is no invalidating prior art of which we, our licensors, our or their respective patent counsel and the patent examiner were unaware during prosecution. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. If a defendant or other third party were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on certain aspects of our products and technologies, which could have a material adverse effect on our business, financial condition, results of operations and prospects. 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 intellectual property, or develop or commercialize current or future products.

We may not be aware of all third-party intellectual property rights potentially relating to our products. 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 these inventions, we may have to participate in interference proceedings, derivation proceedings or other post-grant proceedings declared by the USPTO, or other similar proceedings in non-U.S. jurisdictions, that could result in substantial cost to us and the loss of valuable patent protection. 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. Furthermore, if third parties bring these proceedings against our patents, regardless of the merit of such proceedings and regardless of whether we are successful, we could experience significant costs and our management may be distracted. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations and prospects.

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.

We rely heavily on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information and to maintain our competitive position. Certain elements of our products and technologies, including components of our software and processes for manufacturing, may involve proprietary know-how, information or technology that is not covered by patents. As such, we may consider trade secrets and know-how to be our primary intellectual property with respect to such aspects of our products and technologies. However, trade secrets and know-how can be difficult to protect. In particular, we anticipate that with respect to our technologies, these trade secrets and know how will over time be disseminated within the industry through independent development, the publication of journal articles describing the methodology, and the movement of personnel from academic to industry scientific positions.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into agreements, including confidentiality agreements, non-disclosure agreements and intellectual property assignment agreements, with our employees, consultants, academic institutions, corporate partners and, when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties that may have or have had access to our trade secrets or proprietary technology and processes, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors or other third parties will not otherwise gain access (such as through cybersecurity breach) to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. 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 disclosure, which could adversely impact our ability to establish or maintain a competitive advantage in the market. If we are required to assert our rights against such parties, it could result in substantial costs and be a distraction to management. Depending on the parties involved in such a breach, the available remedies may not provide adequate compensation for the value of the proprietary information disclosed to a third party.

Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had wrongfully obtained and was using our trade secrets, it would be expensive and time-consuming, it could distract our personnel, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets, if at all, and the damages and other remedies available for improper disclosure of proprietary information can differ substantially from those in the United States. We may need to share our proprietary information, including trade secrets, with future business partners, collaborators, contractors and other third parties located in countries with a heightened risk of theft of trade secrets, including through direct intrusion by private parties or foreign actors, and those affiliated with or controlled by state actors.

We also seek to preserve the integrity and confidentiality of our confidential 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 and we may not have adequate remedies for such breach. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor or other third party, 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. Competitors or third parties could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, design around our protected technology, develop their own competitive technologies that fall outside the scope of our intellectual property rights or independently develop our technologies without reference to our trade secrets. If any of our trade secrets were to be disclosed to or independently discovered by a competitor or other third party, it could materially and adversely affect 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 alleged trade secrets of their former employers or claims otherwise challenging the inventorship of our patents and other intellectual property.

We have employed and expect to employ individuals who were previously employed at universities or other companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants, advisors and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that our employees, advisors, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including 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. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel and face increased competition to our business. Any such litigation or the threat thereof may adversely affect our ability to hire employees or contract with advisors, contractors and consultants. A loss of key research personnel work product could hamper or prevent our ability to commercialize potential products, which could harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. This type of litigation or proceeding could substantially increase our operating losses and reduce our resources available for development activities. Some of our competitors may be able to sustain the costs of this type of litigation or proceedings more effectively than we can because of their substantially greater financial resources.

Furthermore, we or our licensors may in the future be subject to claims by former employees, consultants or other third parties asserting an ownership right in our owned or licensed patents or patent applications as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing our products or as a result of questions regarding co-ownership of potential joint inventions. Litigation may be necessary to resolve these and other claims challenging inventorship and/or ownership. An adverse determination in any such proceeding may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar technology, without payment to us, or could limit the duration of the patent protection covering our technology and products. Such challenges may also result in our inability to develop, manufacture or commercialize our products without infringing third-party patent rights. Also, our licensors may have relied on third-party consultants or collaborators or on funds from third parties, such as the U.S. government, such that our licensors may not be the sole and exclusive owners of the patents we in-license. If other third parties have ownership rights or other rights to our in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Furthermore, individuals executing agreements with us may have pre-existing or competing obligations to a third party, such as an academic institution, and thus an agreement with us may be ineffective in perfecting ownership of inventions developed by that individual, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We may not be able to protect and enforce our trademarks and trade names or build name recognition in our markets of interest thereby harming our competitive position.

The registered or unregistered trademarks or trade names that we own may be challenged, infringed, circumvented, declared generic, lapsed or determined to be infringing on or dilutive of other marks. We may not be able to protect our rights in these trademarks and trade names, which we need in order to build name recognition. In addition, third parties have filed, and may in the future file, for registration of trademarks similar or identical to our trademarks, thereby impeding our ability to build brand identity and possibly leading to market confusion. If they succeed in registering or developing common law rights in such trademark or any other trademarks that are similar or identical to our trademarks, and if we are not successful in challenging such rights and defending against challenges to our trademarks, we may not be able to use such trademarks to develop brand recognition of our technologies, products or services. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Further, we may in the future enter into agreements with owners of such third party trade names or trademarks to avoid potential trademark litigation which may limit our ability to use our trade names or trademarks in certain fields of business. We may also license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and trade names by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively, and our business, financial condition, results of operations and prospects may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations.

Patent terms may be inadequate to protect our competitive position on our products 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. While extensions may be available, the life of a patent, and the protection it affords, is limited. In the United States, a patent's term may, in certain cases, be lengthened

by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over a commonly owned patent or a patent naming a common inventor and having an earlier expiration date. Even if patents covering our products are obtained, once the patent life has expired, we may be open to competition from competitive products. If one of our products requires extended development, testing and/or regulatory review, patents protecting such products might expire before or shortly after such products are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours, which could have a material adverse effect on our business, financial condition and results of operations.

We may become involved in lawsuits to defend against third-party claims of infringement, misappropriation or other violations of intellectual property or to protect or enforce our intellectual property, any of which could be expensive, time consuming and unsuccessful, and may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our ability and the ability of future collaborators to develop, manufacture, market and sell our products and use our products and technologies without infringing, misappropriating or otherwise violating the intellectual property rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the life sciences technology sector, as well as administrative proceedings for challenging patents, including interference, derivation, inter partes review, post grant review, and reexamination proceedings before the USPTO, or oppositions and other comparable proceedings in foreign jurisdictions. We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that our products, manufacturing methods, software and/or technologies infringe, misappropriate or otherwise violate their intellectual property rights.

Numerous issued patents and pending patent applications that are owned by third parties exist in the fields in which we are developing our products and technologies. It is not always clear to industry participants, including us, the claim scope that may issue from pending patent applications owned by third parties or which patents cover various types of products, technologies or their methods of use or manufacture. Thus, because of the large number of patents issued and patent applications filed in our fields, it is difficult to conclusively assess our freedom to operate without infringing on third party rights and there may be a risk that third parties, including our competitors, may allege they have patent rights encompassing our products, technologies or methods and that we are employing their proprietary technology without authorization. We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our products in any jurisdiction. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect. For example, we may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third-party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

If third parties, including our competitors, believe that our products or technologies infringe, misappropriate or otherwise violate their intellectual property, such third parties may seek to enforce their intellectual property, including patents, by filing an intellectual property-related lawsuit, including patent infringement lawsuit, against us. Even if we believe third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, or priority. The patents and patent applications such third parties seek to enforce could be construed to cover our products and technologies. If any of these third parties were to assert these patents against us and we are unable to successfully defend against any such assertion, we may be required, including by court order, to cease the development and commercialization of the infringing products or technology and we may be required to redesign such products and technologies so they do not infringe such patents, which may not be possible or may require substantial monetary expenditures and time. We could also be required to pay damages, which could be significant, including treble damages and attorneys' fees if we are found to have willfully infringed such patents. We could also be required to obtain a license to such patents in order to continue the development and commercialization of the infringing product or technology. However, such a license may not be available on commercially reasonable terms or at all, including because certain of these patents are held by or may be licensed to our competitors. Even if such license were available, it may require substantial payments or cross-licenses under our intellectual property rights, and it may only be available on a non-exclusive basis, in which case third parties, including our competitors, could use the same licensed intellectual property to compete with us. Additionally, if our products are found to infringe the intellectual property rights of third parties, these third parties may assert infringement claims against our licensees and other parties with whom we have

business relationships, and we may be required to indemnify those parties for any damages they suffer as a result of these claims. The claims may require us to initiate or defend protracted and costly litigation on behalf of licensees and other parties regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of those parties or may be required to obtain licenses for the products they use. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operation or prospects.

We may choose to challenge, including in connection with any allegation of patent infringement by a third party, the patentability, validity or enforceability of any third-party patent that we believe may have applicability in our field, and any other third-party patent that may be asserted against us. Such challenges may be brought either in court or by requesting that the USPTO, European Patent Office ("EPO"), or other foreign patent offices review the patent claims, such as in an ex-parte reexamination, inter partes review, post-grant review proceeding or opposition proceeding. However, there can be no assurance that any such challenge by us or any third party will be successful. Even if such proceedings are successful, these proceedings are expensive and may consume our time or other resources, distract our management and technical personnel. There can be no assurance that our defenses of non-infringement, invalidity or unenforceability will succeed.

Third parties, including our competitors, could be infringing, misappropriating or otherwise violating our owned and in-licensed intellectual property rights. Monitoring unauthorized use of our intellectual property is difficult and costly. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. From time to time, we seek to analyze our competitors' products and services, and may in the future seek to enforce our rights against potential infringement, misappropriation or violation of our intellectual property. However, the steps we have taken to protect our intellectual property rights may not be adequate to enforce our rights as against such infringement, misappropriation or violation of our intellectual property. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete and reduce demand for our products and technologies.

Litigation proceedings may be necessary for us to enforce our patent and other intellectual property rights. In any such proceedings, a court may refuse to stop the other party from using the technology at issue on the grounds that our owned and in-licensed patents do not cover the technology in question. Further, in such proceedings, the defendant could counterclaim that our intellectual property is invalid or unenforceable and the court may agree, in which case we could lose valuable intellectual property rights, which could allow third parties to commercialize technology or products similar to ours and compete directly with us, without payment to us, or could require us to obtain license rights from the prevailing party in order to be able to manufacture or commercialize our products without infringing such party's intellectual property rights, and if we are unable to obtain such a license, we may be required to cease commercialization of our products and technologies, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects. The outcome in any such proceedings are unpredictable.

Regardless of whether we are defending against or asserting any intellectual property-related proceeding, any such intellectual property-related proceeding that may be necessary in the future, regardless of outcome, could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition, results of operations and prospects. 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. In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Some of our competitors and other third parties may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. We may not have sufficient financial or other resources to adequately conduct these types of litigation or proceedings. Any of the foregoing, or any uncertainties resulting from the initiation and continuation of any litigation, could have a material adverse effect on our ability to raise the funds necessary to continue our operations or could otherwise have a material adverse effect on our business, financial condition, results of operations and prospects. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar adverse effect on our business, financial condition, results of operations and prospects.

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. The USPTO and various non-U.S. governmental patent

agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In certain circumstances, we rely on our licensors to pay these fees due to the U.S. and non-U.S. patent agencies and to take the necessary action to comply with these requirements with respect to our licensed intellectual property. In many cases, an inadvertent lapse, including due to the effect of the COVID-19 pandemic on us, our licensors or our and our licensors' patent maintenance vendors, 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 lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors and other third parties may be able to enter the market without infringing our patents, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We currently rely on licenses from third parties, and in the future may rely on additional licenses from other third parties, and if we lose any of these licenses, then we may be subjected to future litigation.

We are, and may in the future become, a party to license agreements that grant us rights to use certain intellectual property, including patents and patent applications, typically in certain specified fields of use. Currently, we rely on an in-license from certain third parties with respect to certain patent rights relating to multiplexed detection and high throughput single cell polyomics, certain patent rights relating to methods and compositions for quantifying metabolites and certain patent rights relating to the detection of target molecules. We may in the future rely on licenses from other third parties with respect to our technology. Our rights to use licensed technology in our business are subject to the continuation of and compliance with the terms of these licenses and any licenses we may enter into in the future. Some of these licensed rights provide us with freedom to operate for aspects of our products and technologies. As a result, any termination of these licenses could result in the loss of significant rights and could harm our ability to develop, manufacture and commercialize our products. We may need to obtain additional licenses from others to advance our research, development and commercialization activities. For instance, to the extent any additional intellectual property developed by our licensors is not included under our existing license agreements are necessary or useful for our products, we would need to negotiate for additional licenses to such additional intellectual property. Such licenses may not be available on commercially reasonable terms or at all, or may be non-exclusive.

Our success may depend in part on the ability of our licensors and any future licensors to obtain, maintain and enforce patent protection for our licensed intellectual property. Under our current license agreements and under any licenses we may enter into in the future, we may not have the right to control the prosecution, maintenance or enforcement of patents and patent applications that are licensed to us. Our licensors or any future licensors may not successfully prosecute the patent applications we license or prosecute such patent applications in our best interest. Even if patents issue in respect of these patent applications, our licensors and any future licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents or may pursue such litigation less aggressively than we would. Without protection for the intellectual property we license, other companies might be able to offer substantially identical products and technologies for sale, which could materially adversely affect our competitive business position and harm our business, financial condition, results of operations and prospects.

Certain of our current license agreements impose, and future agreements may impose, various diligence, commercialization, milestone payment, royalty, insurance and other obligations on us and require us to meet development timelines, or to exercise commercially reasonable efforts to develop and commercialize licensed products, in order to maintain the licenses. If we fail to comply with these obligations (including as a result of COVID-19 impacting our operations), we use the licensed intellectual property in an unauthorized manner or we are subject to bankruptcy-related proceedings, the terms of these license agreements may be materially modified, such as by rendering currently exclusive licenses non-exclusive, or by giving our licensors the right to terminate their respective agreement with us, in which event we would not be able to develop or market products or technology covered by the licensed intellectual property. With respect to any license agreement under which we are a sublicensee, if our current or future sublicensor fails to comply with its obligations under its upstream license agreement with its licensor, such licensor may have the right to terminate the upstream license, which may terminate our sublicense. If this were to occur, we would no longer have rights to the applicable intellectual property unless we are able to secure our own direct license with the owner of the relevant rights, which may not be available on commercially reasonable terms or at all. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Moreover, disputes may also arise between us and our licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreements and other interpretation-related issues;
- our compliance with reporting, financial or other obligations under the license agreements;
- whether, and the extent to which, our products, technology and processes infringe on, misappropriate or otherwise violate the intellectual property of the licensors that is not subject to the licensing agreements;
- our right to sublicense the applicable intellectual or proprietary rights to third parties;
- our right to transfer or assign the license;
- our diligence obligations under the license agreements and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors; and
- the priority of invention of patented technology.

If we do not prevail in such disputes, we may lose any or all of our rights under such license agreements, experience significant delays in the development and commercialization of our products and technologies, or incur liability for damages, any of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. In addition, we may seek to obtain additional licenses from our licensors, and, in connection with obtaining such licenses, we may agree to amend our existing licenses in a manner that may be more favorable to the applicable licensor, including by agreeing to terms that could enable third parties, including our competitors, to receive licenses to a portion of the intellectual property that is subject to our existing licenses and to compete with our products.

Further, certain of our future agreements with third parties may limit or delay our ability to consummate certain transactions, may impact the value of those transactions, or may limit our ability to pursue certain activities. For example, we may in the future enter into license agreements that are not assignable or transferable, or that require the licensor's express consent in order for an assignment or transfer to take place.

In addition, the agreements under which we currently and in the future license intellectual property or technology from third parties are complex and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize any affected products or services, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Absent the license agreements, we may infringe patents subject to those agreements, and if the license agreements are terminated, we may be subject to litigation by the licensor. Litigation could result in substantial costs to us and distract our management. If we do not prevail, we may be required to pay damages, including treble damages, attorneys' fees, costs and expenses and royalties or be enjoined from selling our products, which could adversely affect our ability to offer products or services, our ability to continue operations and our business, financial condition, results of operations and prospects.

If we cannot license rights to use technologies on reasonable terms, we may not be able to commercialize new products in the future.

We may identify third-party technology that we may need to license or acquire in order to develop or commercialize our products or technologies. However, we may be unable to secure such licenses or acquisitions. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us.

We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. In return for the use of a third party's technology, we may agree to

pay the licensor royalties based on sales of our products or services. Royalties are a component of cost of products or technologies and affect the margins on our products. We may also need to negotiate licenses to patents or patent applications before or after introducing a commercial product. We may not be able to obtain necessary licenses to patents or patent applications, and our business may suffer if we are unable to enter into the necessary licenses on acceptable terms or at all, if any necessary licenses are subsequently terminated, if the licensor fails to abide by the terms of the license or fails to prevent infringement by third parties, or if the licensed intellectual property rights are found to be invalid or unenforceable.

Certain of our in-licensed patents are, and our future owned and in-licensed patents may be, subject to a reservation of rights by one or more third parties, including government march-in rights, that may limit our ability to exclude third parties from commercializing products similar or identical to ours.

Our owned and in-licensed patents may be subject to a reservation of rights by one or more third parties. For example, the U.S. government may have certain rights, including march-in rights, to patent rights and technology funded by the U.S. government under the Patent and Trademark Law Amendments Act, or the Bayh-Dole Act ("Bayh-Dole Act"). The U.S. government may have these rights in certain technologies licensed to us from certain third parties, including, to the extent any invention included within the following licensed patents has been funded by the U.S. government, certain patent rights relating to multiplexed detection and high throughput single cell polyomics, methods and compositions for quantifying metabolites and the detection of target molecules. We utilize these technologies in various products, including our IsoCode and CodePlex chips consumables.

Under the Bayh-Dole Act, when new technologies are developed with government funding, in order to secure ownership of such patent rights, the recipient of such funding is required to comply with certain government regulations, including timely disclosing the inventions claimed in such patent rights to the U.S. government and timely electing title to such inventions. Any failure to timely elect title to such inventions may permit the U.S. government to, at any time, take title to such inventions. Additionally, the U.S. government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. If the government decides to exercise these rights, it is not required to engage us as its contractor in connection with doing so. These rights may permit the U.S. government to disclose our confidential information to third parties and to exercise march-in rights to use or allow third parties to use our licensed technology. The U.S. government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. If the U.S. government exercises such march-in rights, we may receive compensation that is deemed reasonable by the U.S. government in its sole discretion, which may be less than what we might be able to obtain in the open market. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. While we currently believe such rights do not pose a material risk to our business, we cannot be sure that any licensed intellectual property will be free from governmental rights pursuant to the Bayh-Dole Act. Any exercise by the government of any of the foregoing rights could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, our current and future licensors may retain certain rights under their agreements with us, including the right to use the underlying technology for non-commercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and scholarly disclosures of information relating to the technology. It is difficult to monitor whether our licensors limit their use of the technology to these uses, and we could incur substantial expenses to enforce our rights to our licensed technology in the event of misuse, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our products contain third-party open source software components and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products and provide third parties access to our proprietary software.

Our products contain software licensed by third parties under open source software licenses. 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 support, warranties, indemnification or other contractual protections regarding infringement 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, 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

and other third parties to create similar products with less development effort and time and ultimately could result in a loss of our product sales and revenue, which could have a material adverse effect on our business, financial condition, results of operations and prospects. Alternatively, to avoid the public release of the affected portions of our source code, we could be required to expend substantial time and resources to re-engineer some or all of our software. In addition, some companies that use third-party open source software have faced claims challenging their use of such open source software and their compliance with the terms of the applicable open source license. We may face claims from third parties claiming ownership of what we believe to be open source software, or claiming non-compliance with the applicable open source licensing terms, including claims that demand release of source code for the open source software, derivative works or our proprietary source code that was developed using, or that is distributed with, such open source software. These claims could also result in litigation and could require us to make our proprietary software source code freely available, devote additional research and development resources to re-engineer our platform, seek costly licenses from third parties or otherwise incur additional costs and expenses, any of which could result in reputational harm and would have a negative effect on our business and operating results. 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 platform.

Although we review our use of open source software to avoid subjecting our proprietary software to conditions we do not intend, 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 and proprietary software. Moreover, 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 subject to damages, required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, 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, results of operations and prospects.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to products and technologies we may develop or utilize similar technology that are not covered by the claims of the patents that we own or license now or in the future;
- we, or our licensors, might not have been the first to make the inventions covered by the issued patent or pending patent application that we license or may own in the future;
- we, or our licensors, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing, misappropriating or otherwise violating our owned or licensed intellectual property rights;
- it is possible that our pending owned or licensed patent applications or those that we may own in the future will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents of others may harm our business;
- we may choose not to file a patent for certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property; and
- our trade secrets or proprietary know-how may be unlawfully disclosed, thereby losing their trade secret or proprietary status.

Should any of these events occur, they could materially adversely affect our business, financial condition, results of operations and prospects.

Risks Related to Our Common Stock

Our amended and restated certificate of incorporation designates a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, and also provides that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, each of which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, stockholders, or employees.

Our amended and restated certificate of incorporation provides that, subject to limited exceptions, the Court of Chancery for the State of Delaware will be the sole and exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or stockholders to us or our stockholders;
- any action asserting a claim arising pursuant to any provision of our amended and restated certificate of incorporation, our amended and restated bylaws or the General Corporation Law of the State of Delaware, or as to which the General Corporation Law of the State of Delaware confers jurisdiction on the Court of Chancery of the State of Delaware; and
- any other action asserting a claim against us that is governed by the internal affairs doctrine.

As described below, this provision does not apply to suits brought to enforce any duty or liability created by the Securities Act of 1933, as amended (the "Securities Act") or the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or rules and regulations thereunder, or any other claim for which there is exclusive federal or concurrent federal and state jurisdiction.

Our amended and restated certificate of incorporation also provides that the federal district courts of the United States of America are the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act. However, Section 22 of the Securities Act provides that federal and state courts have concurrent jurisdiction over lawsuits brought pursuant to the Securities Act or the rules and regulations thereunder. To the extent the exclusive forum provision restricts the courts in which claims arising under the Securities Act may be brought, there is uncertainty as to whether a court would enforce such a provision. We note that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. This provision does not apply to claims brought under the Exchange Act.

Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to these provisions. These provisions may impose additional litigation costs on stockholders in pursuing any such claims, particularly if the stockholders do not reside in or near the State of Delaware, or limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business or financial condition.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws and of state law may have anti-takeover effects and may delay, deter or prevent a takeover attempt that our stockholders might consider in their best interests. For example, such provisions or laws may prevent our stockholders from receiving the benefit from any premium to the market price of our common stock offered by a bidder in a takeover context. These anti-takeover provisions and laws may also make it more difficult for stockholders to elect directors of their choosing. Even in the absence of a takeover attempt, the existence of these anti-takeover provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2021, we had net operating loss carryforward (“NOLs”) for federal purposes of approximately \$12.7 million, which expire at various dates through 2033 and approximately \$112.8 million which have no expiration. As of December 31, 2021, we also had state NOLs of approximately \$79.2 million, which expire at various dates through 2043. We may use these NOLs to offset against taxable income for U.S. federal and state income tax purposes. However, Section 382 of the Internal Revenue Code of 1986, as amended, may limit the NOLs we may use in any year for U.S. federal income tax purposes in the event of certain changes in ownership of our company. A Section 382 “ownership change” generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company’s stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules may apply under state tax laws. We have not conducted a 382 study to determine whether the use of our NOLs is impaired. We may have previously undergone multiple “ownership changes.” In addition, future issuances or sales of our stock, including certain transactions involving our stock that are outside of our control, could result in future “ownership changes.” “Ownership changes” that have occurred in the past or that may occur in the future could result in the imposition of an annual limit on the amount of pre-ownership change NOLs and other tax attributes we can use to reduce our taxable income, potentially increasing and accelerating our liability for income taxes, and also potentially causing those tax attributes to expire unused. States may impose other limitations on the use of our NOLs. Any limitation on using NOLs could, depending on the extent of such limitation and the NOLs previously used, result in our retaining less cash after payment of U.S. federal and state income taxes during any year in which we have taxable income, rather than losses, than we would be entitled to retain if such NOLs were available as an offset against such income for U.S. federal and state income tax reporting purposes, which could adversely impact our operating results.

We are an “emerging growth company” and a “smaller reporting company” and the reduced disclosure requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). For so long as we remain an emerging growth company, we are permitted by SEC rules and plan to rely on exemptions from certain disclosure requirements that are applicable to other SEC registered public companies that are not emerging growth companies.

These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the Sarbanes-Oxley Act”), not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the consolidated financial statements, reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We elected to take advantage of certain of the reduced disclosure obligations available to emerging growth companies in this Form 10-K and expect to take advantage of other reduced reporting requirements in our future filings. As a result, the information we provide stockholders may be different than the information that is available with respect to other public companies that are not emerging growth companies. To the extent that we continue to qualify as a “smaller reporting company,” as such term is defined in Rule 12b-2 under the Exchange Act, after we cease to qualify as an emerging growth company, we will continue to be permitted to make certain reduced disclosures in our periodic reports and other documents that we file with the SEC. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, our consolidated financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Your percentage ownership in us may be diluted by future issuances of capital stock, which could reduce your influence over matters on which stockholders vote.

Pursuant to our amended and restated certificate of incorporation and amended and restated bylaws, our board of directors has the authority, without action or vote of our stockholders, to issue all or any part of our authorized but unissued shares of common stock, including shares issuable upon the exercise of options, or shares of our authorized but unissued preferred stock. Issuances of shares of common stock or shares of voting preferred stock would reduce your influence over matters on which our stockholders vote and, in the case of issuances of shares of preferred stock, would likely result in your interest in us being subject to the prior rights of holders of that preferred stock.

Our directors, officers and principal stockholders have significant voting power and may take actions that may not be in the best interests of our other stockholders.

As of December 31, 2021, our officers, directors and principal stockholders each holding more than 5% of our common stock collectively owned approximately 70% of our outstanding common stock. As a result, if they act together, may be able to exert significant influence over the management and affairs of our company and most matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This concentration of ownership may have the effect of delaying or preventing a change of control and might adversely affect the market price of our common stock. This concentration of ownership may not be in the best interests of our other stockholders.

We do not expect to pay any dividends for the foreseeable future and our indebtedness could limit our ability to pay dividends on our common stock.

We have never declared or paid any cash dividends on our equity securities. We do not currently anticipate declaring or paying regular cash dividends on our common stock in the near term and you should not rely on an investment in our common stock to provide dividend income. We currently intend to use our future earnings, if any, to pay debt obligations, to fund our growth and develop our business and for general corporate purposes. Therefore, you are not likely to receive any cash dividends on your common stock in the near term, and the success of an investment in shares of our common stock will depend upon any future appreciation in their value. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which they are initially offered. Any future declaration and payment of cash dividends or other distributions of capital will be at the discretion of our board of directors and the payment of any future cash dividends or other distributions of capital will depend on many factors, including our financial condition, earnings, cash needs, regulatory constraints, capital requirements (including requirements of our subsidiaries) and any other factors that our board of directors deems relevant in making such a determination. The Credit Agreement contains, and any future credit facility that we enter into may contain, terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. We cannot assure you that we will establish a dividend policy or pay cash dividends in the future or continue to pay any cash dividend if we do commence paying cash dividends pursuant to a dividend policy or otherwise.

General Risks

We may acquire businesses or form joint ventures or make investments in other companies or technologies that could negatively affect our operating results, could divert our management's attention, dilute our stockholders' ownership, increase our debt or cause us to incur significant expense.

We may pursue acquisitions of businesses and assets. We also may pursue strategic alliances and joint ventures that leverage our technologies and industry experience to expand our offerings or distribution. We have no experience with acquiring other companies and limited experience with forming strategic partnerships. We may not be able to find suitable partners or acquisition candidates, and we may not be able to complete such transactions on favorable terms, if at all. The competition for partners or acquisition candidates may be intense, and the negotiation process will be time-consuming and complex. If we make any acquisitions, we may not be able to integrate these acquisitions successfully into our existing business, these acquisitions may not strengthen our competitive position, the transactions may be viewed negatively by customers or investors, we may be unable to retain key employees of any acquired business, relationships with key suppliers, manufacturers or customers of any acquired business may be impaired due to changes in management and ownership, and we could assume unknown or contingent liabilities. Any future acquisitions also 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 business, financial condition, results of operations and prospects. If we were to issue additional equity in connection with such acquisitions, this may dilute our stockholders. We cannot guarantee that we will be able to fully recover the costs of any acquisition. Integration of an acquired company also may disrupt ongoing

operations and require management resources that we would otherwise focus on developing our existing business. We may not realize the anticipated benefits of any acquisition, technology license, strategic alliance or joint venture. We also may experience losses related to investments in other companies, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

To finance any acquisitions or joint ventures, we may choose to issue shares of our common stock as consideration, which would dilute the ownership of our stockholders. Additional funds may not be available on terms that are favorable to us, or at all. If the price of our common stock is low or volatile, we may not be able to acquire companies or fund a joint venture project using our stock as consideration.

We have identified a material weakness in our internal control over financial reporting, and the failure to remediate this material weakness may adversely affect our business, investor confidence in our company, our financial results and the market value of our common stock.

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. In connection with preparation of our financial statements for the fiscal years ended December 31, 2021 and 2020, we identified a material weakness in our internal control over financial reporting. The material weakness we identified related to the lack of maintaining a sufficient complement of personnel commensurate with the accounting and financial reporting requirements in order to have adequate segregation of key duties and responsibilities, which affected the operation of controls over the recording of journal entries and the reconciliation of key accounts. This material weakness did not result in a material misstatement to the financial statements. We are in the process of implementing measures designed to improve internal control over financial reporting to remediate the control deficiencies that led to our material weakness by, among other things, hiring qualified personnel with appropriate expertise to perform specific functions, and designing and implementing improved processes and internal controls.

While we believe the remedial efforts we are taking and will take will improve our internal controls and address the underlying causes of the material weakness, we cannot be certain that these steps will be sufficient to remediate the control deficiencies that led to our material weakness in our internal control over financial reporting or prevent future material weaknesses or control deficiencies from occurring. While we will work to remediate the material weakness as timely and efficiently as possible, at this time we cannot provide an estimate of costs expected to be incurred in connection with the implementation of our remediation actions, nor can we provide an estimate of the time it will take to complete our remediation actions. Neither our management nor an independent registered public accounting firm has performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act because no such evaluation has been required.

If we fail to effectively remediate the material weakness in our internal controls over financial reporting described above, we may be unable to accurately or timely report our financial condition or results of operations. Such failure may adversely affect our business, investor confidence in our company, our financial condition and the market value of our common stock.

Upon becoming a public company, we are now required to comply with the SEC's rules implementing Sections 302 and 404 of the Sarbanes-Oxley Act, which require management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of internal controls over financial reporting. Although we are required to disclose changes that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting on a quarterly basis, we will not be required to make our first annual assessment of our internal control over financial reporting pursuant to Section 404 until at least our second annual report required to be filed with the SEC, and we will not be required to have our independent registered public accounting firm formally assess our internal controls for as long as we remain an "emerging growth company" as defined in the JOBS Act.

When formally evaluating our internal control over financial reporting, we may identify material weaknesses that we may not be able to remediate in time to meet the applicable deadline imposed upon us for compliance with the requirements of Section 404 of the Sarbanes-Oxley Act. In addition, if we fail to achieve and maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act. We cannot be certain as to the timing of completion of our evaluation, testing and any remediation actions or the impact of the same on our operations. If we are not able to implement the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner or with adequate compliance, our independent registered public accounting firm may issue an adverse opinion due to ineffective internal control over

financial reporting, and we may be subject to sanctions or investigation by regulatory authorities, such as the SEC. As a result, there could be a negative reaction in the financial markets due to a loss of confidence in the reliability of our financial statements. Any such action could have a significant and adverse effect on our business and reputation, which could negatively affect our results of operations or cash flows. In addition, we may be required to incur additional costs in improving our internal control system and the hiring of additional personnel.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operations 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 consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. We base our estimates on historical experience and estimates 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. For example, in connection with the implementation of the new revenue accounting standard, management makes judgments and assumptions based on our interpretation of the new standard. The new revenue standard is principle-based and interpretation of those principles may vary from company to company based on their unique circumstances. It is possible that interpretation, industry practice and guidance may evolve as we apply the new standard. If our assumptions underlying our estimates and judgments relating to our critical accounting policies change or if actual circumstances differ from our assumptions, estimates or judgments, our operating results may be adversely affected and 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.

We have incurred and will continue to incur significant additional costs as a result of being a public company, which may adversely affect our business, financial condition, results of operations and prospects.

As a public company, we have incurred and will continue to incur significant legal, accounting, compliance and other expenses that we did not incur as a private company and these expenses may increase even more after we are no longer an “emerging growth company.” Our management and other personnel will need to devote a substantial amount of time and incur significant expense in connection with compliance initiatives. For example, as a public company, we have adopted additional internal controls and disclosure controls and procedures, retained a transfer agent and adopted an insider trading policy. As a public company, we will bear all of the internal and external costs of preparing and distributing periodic public reports in compliance with our obligations under the securities laws.

In addition, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act, and the related rules and regulations implemented by the SEC and Nasdaq, have increased legal and financial compliance costs and will make some compliance activities more time-consuming. We intend to continue to invest resources to comply with evolving laws, regulations and standards, and this investment will result in increased general and administrative expenses and may divert management’s time and attention from our other business activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us, and our business may be harmed. We also expect the laws, rules and regulations we are subject to as a public company to make it more expensive for us to maintain directors’ and officers’ liability insurance, and we may be required in the future to accept reduced coverage or incur substantially higher costs to maintain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

The market price of our common stock may be volatile, which could result in substantial losses for investors who have purchased shares of our common stock.

Our quarterly results of operations are likely to fluctuate in the future as a publicly traded company. In addition, securities markets worldwide have experienced, and are likely to continue to experience, significant price and volume fluctuations. This market volatility, as well as general economic, market or political conditions, could subject the market price of our shares of common stock to wide price fluctuations regardless of our operating performance, which could cause a decline in the value of your investment. You should also be aware that price volatility may be greater if the public float and trading volume of shares of our common stock is low. Some factors that may cause the market price of our common stock to fluctuate, in addition to the other risks discussed in this Item 1A. of this Form 10-K, include:

- our operating and financial performance and prospects;

- our announcements or our competitors' announcements regarding new products or services, enhancements, significant contracts, acquisitions or strategic investments;
- changes in earnings estimates or recommendations by securities analysts who cover our common stock;
- fluctuations in our quarterly financial results or, in the event we provide it from time to time, earnings guidance, or the quarterly financial results or earnings guidance of companies perceived by investors to be similar to us;
- changes in our capital structure, such as future issuances of securities, sales of large blocks of common stock by our stockholders or the incurrence of additional debt;
- departure of key personnel;
- reputational issues;
- changes in general economic and market conditions, including related to the COVID-19 pandemic;
- changes in industry conditions or perceptions or changes in the market outlook for the life sciences technology industry; and
- changes in applicable laws, rules or regulations or regulatory actions affecting us or our clients and other dynamics.

These and other factors may cause the market price for shares of our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of our common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock sometimes have instituted securities class action litigation against the company that issued the stock. Securities litigation against us, regardless of the merits or outcome, could result in substantial costs and divert the time and attention of our management from the business, which could significantly harm our business, results of operation, financial condition or reputation.

Securities analysts may not publish favorable research or reports about our business or may publish no information at all, which could cause our stock price or trading volume to decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not have control over these analysts. If one or more of the analysts covering our business downgrade their evaluations of our common stock, the price of our common stock could decline. If one or more of these analysts cease to cover our common stock, we could lose visibility in the market for our common stock, which in turn could cause the price of our common stock to decline.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.

In the ordinary course of our business, we collect and store sensitive data, including personally identifiable information, intellectual property and proprietary business information owned or controlled by ourselves or our employees, customers and other parties. 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. These applications and data encompass a wide variety of business-critical information, including research and development information, commercial information and business and financial information. We face a number of risks relative to protecting this critical information, including loss of access risk, inappropriate use or disclosure, unauthorized access, inappropriate modification and the risk of our being unable to adequately monitor and audit and modify our controls over our critical information. This risk extends to the third party vendors and subcontractors we use to manage this sensitive data or otherwise process it on our behalf. The secure processing, storage, maintenance and transmission of this critical information are vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take reasonable measures to protect sensitive data from unauthorized access, use or disclosure, no security measures can be perfect and our information technology and infrastructure may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other malicious or inadvertent disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Any such access, breach, or other loss of information could result in legal claims or proceedings, and liability under federal or state laws that protect the privacy of personal information, and regulatory penalties. Notice of breaches may be required to affected individuals or state, federal or foreign regulators, and for

extensive breaches, notice may need to be made to the media or State Attorneys General. Such a notice could harm our reputation and our ability to compete.

We are currently subject to, and may in the future become subject to additional, U.S. federal and state laws and regulations imposing obligations on how we collect, store and process personal information. Our actual or perceived failure to comply with such obligations could harm our business. Ensuring compliance with such laws could also impair our efforts to maintain and expand our future customer base, and thereby decrease our revenue.

We are, and may increasingly become, subject to various laws and regulations, as well as contractual obligations, relating to data privacy and security in the jurisdictions in which we operate. The regulatory environment related to data privacy and security is increasingly rigorous, with new and constantly changing requirements applicable to our business, and enforcement practices are likely to remain uncertain for the foreseeable future. These laws and regulations may be 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 may have a material adverse effect on our business, financial condition, results of operations and prospects.

In the United States, various federal and state regulators, including governmental agencies like the Consumer Financial Protection Bureau and the Federal Trade Commission, have adopted, or are considering adopting, laws and regulations concerning personal information and data security. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than federal, international or other state laws, and such laws may differ from each other, all of which may complicate compliance efforts. For example, the California Consumer Privacy Act (“CCPA”), which increases privacy rights for California residents and imposes obligations on companies that process their personal information, came into effect on January 1, 2020. Among other things, the CCPA requires covered companies to provide new disclosures to California consumers and provide such consumers new data protection and privacy rights, including the ability to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. This private right of action may increase the likelihood of, and risks associated with, data breach litigation. In November 2020, California voters passed the California Privacy Rights Act (“CPRA”), which will become effective in most material respects beginning on January 1, 2023. The CPRA further expands the CCPA with additional data privacy compliance requirements and obligations and establishes a regulatory agency dedicated to enforcing the CCPA and CPRA. In addition, laws in all 50 U.S. states require businesses to provide notice to consumers whose personal information has been disclosed as a result of a data breach. State laws are changing rapidly and there is discussion in the U.S. Congress of a new comprehensive federal data privacy law to which we would become subject if it is enacted.

Internationally, laws, regulations and standards in many jurisdictions apply broadly to the collection, use, retention, security, disclosure, transfer and other processing of personal information. For example, the E.U. General Data Protection Regulation (“GDPR”), which became effective in May 2018, greatly increased the European Commission’s jurisdictional reach of its data privacy and security laws and added a broad array of requirements for handling personal data. EU member states are tasked under the GDPR to enact, and have enacted, certain implementing legislation that adds to and/or further interprets the GDPR requirements and potentially extends our obligations and potential liability for failing to meet such obligations. The GDPR, together with national legislation, regulations and guidelines of the EU member states governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, use, retain, protect, disclose, transfer and otherwise process personal data. In particular, the GDPR includes requirements to establish a legal basis for processing, higher standards for obtaining consent from individuals to process their personal data, more robust disclosures to individuals, a strengthened individual data rights regime, requirements to implement safeguards to protect the security and confidentiality of personal data, data breach notification obligations to appropriate data protection authorities or individuals, limitations on retention and secondary use of information and additional obligations when entities contract with third-party processors to process personal data. The GDPR authorizes fines for certain violations of up to 4% of global annual revenue or €20 million, whichever is greater. Following the withdrawal of the United Kingdom from the European Union, data privacy and security laws that are substantially similar to the GDPR are in effect in the United Kingdom, which carry similar risks and authorize similar fines for certain violations.

All of these evolving compliance and operational requirements impose significant costs, such as costs related to organizational changes, implementing additional protection technologies, training employees and engaging consultants, which are likely to increase over time. In addition, such requirements may require us to modify our data processing practices and policies, distract management or divert resources from other initiatives and projects, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Any failure or perceived failure by us to comply with any applicable federal, state or similar foreign laws and regulations relating to data privacy and security could result in damage to our reputation, as well as proceedings or litigation by governmental agencies or

other third parties, including class action privacy litigation in certain jurisdictions, which would subject us to significant fines, sanctions, awards, penalties or judgments, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our global headquarters is located in Branford, Connecticut. We utilize the following facilities:

Location	Purpose or Use	Square Feet	Status
Branford, Connecticut	Corporate headquarters, engineering, research and development	39,606	Leased, expires December 31, 2026
Branford, Connecticut	Engineering, research and development	20,118	Leased, expires June 30, 2026
Branford, Connecticut	Engineering, research and development	10,807	Leased, expires June 30, 2026
Branford, Connecticut	Engineering, research and development	9,600	Leased, expires December 31, 2026

In addition to the facilities listed above, we lease space in various international locations, primarily for use as sales offices.

Upon expiration of our facilities leases, we believe we will obtain lease agreements under similar terms; however, there can be no assurance that we will receive similar terms or that any offer to renew will be accepted.

We believe that our current facilities are sufficient to meet our ongoing needs and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

Item 3. Legal Proceedings

From time to time we are a party to various litigation matters incidental to the conduct of our business. We are not presently party to any legal proceedings the resolution of which we believe would have a material adverse effect on our business, prospects, financial condition, liquidity, results of operation, cash flows or capital levels.

Item 4. Mine Safety Disclosures

Not applicable.

Part II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information and Holders

Our common stock has been listed on the Nasdaq Global Select Market under the symbol "ISO" since October 8, 2021. Prior to that date, there was no public trading market for our common stock.

As of March 28, 2022, there were 64 stockholders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

Dividend Policy

We have never paid cash dividends on our common stock, nor do we currently intend to pay any cash dividends on our common stock in the foreseeable future. We intend to retain our earnings, if any, for the future operation and expansion of our business.

Sales of Unregistered Securities

From January 1, 2021 through October 12, 2021, we granted options to purchase an aggregate of 2,189,400 shares of our common stock under our 2014 Stock Plan (the “2014 Plan”) to our directors, officers, employees, consultants and other service providers at exercise prices per share ranging from \$1.83 to \$10.72 and we issued 81,056 shares of common stock upon exercise of options under our 2014 Plan to our directors, officers, employees, consultants and other service providers at exercise prices per share ranging from \$0.13 to \$1.03, for a weighted-average exercise price per share of \$0.31. The foregoing transactions did not involve 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 in reliance on Rule 701 under the Securities Act because the transactions were pursuant to compensatory benefit plans or contracts related to compensation as provided under such rule.

On May 11, 2021, we issued 3,178 shares of Series A-2 redeemable convertible preferred stock when the outstanding warrant for Series A-2 redeemable convertible preferred stock was exercised. This transaction did not involve any underwriters, underwriting discounts or commissions, or any public offering. We believe the issuance of the redeemable convertible preferred stock was exempt from registration under Section 4(a)(2) of the Securities Act (or Regulation D or Regulation S promulgated thereunder) because it did not involve any public offering.

Upon closing of the IPO on October 12, 2021, all 3,344,836 shares of redeemable convertible preferred stock that were outstanding immediately prior to the closing of the IPO automatically converted into 26,758,688 shares of our common stock. In addition, we issued 1,643,374 shares of common stock to the holders of the redeemable convertible preferred stock outstanding immediately prior to the closing of the IPO in respect of accrued dividends thereon accrued to but not including October 12, 2021, based on the IPO price of \$15.00 per share.

No additional consideration was paid in connection with these conversions. We believe the issuances of the above securities were exempt from registration pursuant to Section 3(a)(9) of the Securities Act because our securities were converted by us with our existing security holders exclusively where no commission or other remuneration was paid or given directly or indirectly for soliciting such conversion or exchange.

Use of Proceeds

On October 12, 2021, we closed our IPO through an underwritten sale of 8,333,000 shares of our common stock at a price of \$15.00 per share. The offer and sale of all of the shares in our IPO were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-258046), which was declared effective by the SEC on October 7, 2021. Morgan Stanley & Co. LLC, Cowen and Company, LLC, Evercore Group, L.L.C. and SVB Leerink LLC acted as lead book-running managers for the IPO.

The aggregate offering price for shares sold in our IPO was approximately \$125.0 million. We raised approximately \$110.5 million in net proceeds from the offering after deducting underwriting discounts and commissions of \$8.7 million and other offering expenses payable by us of \$5.7 million. No offering expenses were paid or are payable, directly or indirectly, to our directors or officers, to persons owning 10% or more of any class of our equity securities or to any of our affiliates.

There has been no material change in the planned use of proceeds from the IPO as described in the final prospectus, dated October 7, 2021 and filed with the SEC on October 12, 2021 pursuant to Rule 424(b) of the Securities Act.

Item 6. [Removed and Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with our consolidated financial statements and related notes thereto that appear elsewhere in this Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Form 10-K, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the sections titled “Cautionary Note Regarding Forward-Looking Statements” and “Risk Factors” included in this Form 10-K, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

IsoPlexis is the Superhuman Cell company. Our systems identify a comprehensive range of multifunctional single cells, i.e. the superhero cells in the human body. These cells assist researchers in understanding and predicting disease

progression, treatment resistance and therapeutic efficacy to advance all of human health. We are a life sciences company building solutions to accelerate the development of curative medicines and personalized therapeutics. Our award-winning single-cell proteomics systems reveal unique biological activity in small subsets of cells, allowing researchers to connect more directly to *in vivo* biology and develop more precise and personalized therapies.

We are enabling deeper access to *in vivo* biology and driving durable and potentially transformational research on disease in a new era of advanced medicine. We believe our platform is the first to employ both proteomics and single cell biology in an effort to fully characterize and link cellular function to patient outcomes by revealing treatment response and disease progression. Our single cell proteomics platform, which includes instruments, chip consumables and software, provides an end-to-end solution to reveal a more complete view of protein function at an individual cellular level. Since our commercial launch in June 2018, our platform has been adopted by the top 15 global biopharmaceutical companies by revenue and two-thirds of the comprehensive cancer centers in the United States to help develop more durable therapeutics, overcome therapeutic resistance, and predict patient responses for advanced immunotherapies, cell therapies, gene therapies, vaccines, and regenerative medicines. Our initial focus has been on developing applications of our platform for cancer immunology and cell and gene therapy. We are now expanding our capabilities to include applications for infectious diseases, inflammatory conditions, and neurological diseases.

We currently market and sell our technology with an in-house commercial team in the United States and Europe. We are also utilizing our distribution network to market and sell across multiple countries, including Australia, Belgium, Canada, China, Czech Republic, France, Germany, Italy, Israel, Japan, Singapore, South Korea, Spain, Switzerland, and the United Kingdom. We intend to further expand our international presence by growing our distribution networks in Brazil, India, Mexico and beyond.

We manufacture our instruments and chip consumables in our manufacturing facilities in Branford, Connecticut and do not outsource any of our production manufacturing to third party contract manufacturers. Certain of our suppliers of certain critical components and materials are single source suppliers and we do not have supply agreements with certain suppliers of these critical components and materials beyond purchase orders. As part of our overall risk management strategy, we continue to evaluate and identify alternative suppliers for each of our components and materials.

Since our inception in March 2013, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, conducting research and development activities, and filing patent applications. Prior to the completion of our IPO, we financed our operations primarily through the private placement of our securities, the incurrence of indebtedness and, to a lesser extent, grant income and revenue derived from sales of our instruments and chip consumables. On October 12, 2021, we closed the IPO of our common stock through an underwritten sale of 8,333,000 shares of common stock at a price of \$15.00 per share. The aggregate net proceeds from the IPO, after deducting underwriting discounts and commissions and other offering expenses payable by us, were approximately \$110.5 million. As of December 31, 2021, our principal source of liquidity was cash, which totaled \$126.6 million.

We completed our first sale of our systems in June 2018 and have experienced significant revenue growth in recent periods. Revenue increased to \$17.3 million for the year ended December 31, 2021 as compared to \$10.4 million for the year ended December 31, 2020. Nevertheless, we have incurred recurring losses since inception. For the year ended December 31, 2021, our net losses were \$81.6 million as compared to \$23.3 million for the year ended December 31, 2020. As of December 31, 2021, we had an accumulated deficit of \$134.0 million. We expect to continue to incur significant expenses and additional operating losses for the foreseeable future. We expect our expenses will increase in connection with ongoing development and business expansion activities, particularly as we continue to:

- expand our research and development activities;
- obtain, maintain and expand and protect our intellectual property portfolio;
- market and sell new and existing products and services; and
- attract, hire and maintain qualified personnel to support our expanding business efforts.

Furthermore, we have incurred and will continue to incur additional costs associated with operating as a public company, including significant legal, accounting, compliance, investor relations and other expenses that we did not incur as a private company.

As a result of these anticipated expenditures, we will need substantial additional financing to support our continuing operations and pursue our growth strategy. Until such time as we can generate positive cash flows from operations, if ever, we expect to finance our operations through a combination of equity offerings, debt financings and, to a lesser extent, grant

income. We may be unable to raise additional funds when needed on favorable terms or at all. Our inability to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We will need to generate significant revenue to achieve profitability, and we may never do so.

Key Factors Affecting Our Performance

We believe that our financial performance has been, and in the foreseeable future will continue to be, primarily driven by the following factors. While each of these factors presents significant opportunities for our business, they also pose important challenges that we must successfully address in order to pursue our growth strategy and improve our results of operations. Our ability to successfully address the factors below is subject to various risks and uncertainties, including those factors set forth in the section titled "Risk Factors" included elsewhere in this Form 10-K.

New Customer Adoption of Our Platform

Our financial performance has been, and in the foreseeable future will continue to be, driven by our ability to increase the adoption of our platform and the installed base of our instruments. We plan to drive new customer adoption through a direct sales and marketing organization in the United States and parts of Europe and China and third party distributors in Europe, North America, the Middle East and Asia-Pacific. As of December 31, 2021, we market and sell our technology with an in-house commercial team of approximately 190 team members and also utilize our distribution network to market and sell across multiple countries.

Recurring Revenues from Sales of our Chip Consumables

Our IsoCode and CodePlex chip consumables represent a source of recurring revenue from customers using our platform across a wide range of applications. Our instruments and consumables are designed to work together exclusively. As we expand our installed base of instruments, we expect consumable revenues to increase on an absolute basis and become an increasingly important contributor to our overall revenues.

Adoption of Our Platform Across Existing Customers' Organizations

There is an opportunity to grow our installed base and expand the number of instruments within organizations that are already utilizing our platform to advance their research and therapeutic development by their purchasing of additional instruments to support multiple locations or to increase capacity.

Adoption of Our Platform for New Applications

We founded our company to help solve critical challenges to accelerating advanced medicines and since our inception, we have developed multiple applications spanning cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases. As we continue to deploy our platform, we intend to concurrently expand the breadth of applications for our technologies to encourage increased use of our platform across our addressable markets. We expect our investments in these efforts to increase as we develop and market new applications, including a diagnostic.

Components of Our Results of Operations

Revenue

Revenue consists of sales of instruments and consumables in addition to service revenue. Our total revenue for the year ended December 31, 2021 was \$17.3 million compared to \$10.4 million for the year ended December 31, 2020. We expect that our revenue will be less than our expenses for the foreseeable future and that we will experience losses as we continue to expand our business.

Cost of Product and Service Revenue

The Company's cost of product revenue primarily consists of manufacturing related costs incurred in the production process, including personnel and related costs, costs of components and materials, labor and overhead, packaging and delivery costs and allocated costs for facilities and information technology. Cost of service revenue consists primarily of personnel and related costs of service and warranty costs to support our customers.

Research and Development Expenses

Research and development expenses include:

- costs to obtain licenses to intellectual property and related future payments should certain success, development and regulatory milestones be achieved;
- employee-related expenses, including salaries, benefits and stock-based compensation expense;
- costs of purchasing lab supplies and non-capital equipment used in our research and development activities;
- consulting and professional fees related to research and development activities; and
- facility costs, depreciation, and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance, and other supplies.

We expense research and development costs as incurred. We do not track research and development expenses by product candidate. Research and development activities are central to our business model. We expect research and development costs to continue to increase for the foreseeable future as our current development programs progress and new programs are added.

Because of the numerous risks and uncertainties associated with product development, we cannot determine with certainty the duration and completion costs of our current or future research and development efforts.

General and Administrative Expenses

General and administrative expenses consist primarily of employee-related expenses, including salaries, benefits and stock-based compensation, for personnel in executive, finance, business development, facility and administrative functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters and fees for accounting, tax and consulting services.

We anticipate that our general and administrative expenses will increase in the future to support continued research and development activities and increased costs of operating as a public company. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside consultants, lawyers and accountants, among other expenses. Additionally, we anticipate increased costs associated with being a public company, including services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance costs and investor and public relations costs.

Sales and Marketing Expenses

Sales and marketing expenses consist primarily of compensation related expenses, including salaries, bonuses, benefits, non-cash stock-based compensation, for sales and marketing personnel, advertising and promotion expenses, consulting and subcontractor fees, sales commissions, recruiting fees, and various other selling expenses. We anticipate that our sales and marketing expenses will increase in the future as we pursue our growth mission, including the hiring of consultants to help us identify and expand into new markets, including additional worldwide markets.

Grant Income

We are engaged in various Small Business Innovation Research ("SBIR") grants with the federal government to help fund the costs of certain research and development activities. We believe that we have complied with all contractual requirements of the SBIR grants through the date of the financial statements. We do not currently expect future grant income to be a material source of funding for the Company.

Research and Development State Tax Credits

Research and development ("R&D") tax credits exchanged for cash pursuant to the Connecticut R&D Tax Credit Exchange Program, which permits qualified small businesses engaged in R&D activities within Connecticut to exchange their unused R&D tax credits for a cash amount equal to 65% of the value of exchanged credits, are recorded as a receivable and other income in the year the R&D tax credits relate to, as it is reasonably assured that the R&D tax credits will be received, based upon our history of filing for and receiving the tax credits. R&D tax credits receivable where cash is expected to be received by us more than one year after the balance sheet date are classified as noncurrent in the consolidated balance sheets.

Fair Value Adjustment for Warrants and Loan Commitments

Warrants and loan commitments are freestanding financial instruments that qualify as liabilities or equity and assets, respectively, required to be recorded at their estimated fair value at the inception date and remeasured at each reported balance sheet date thereafter until settlement, with gains and losses arising from changes in fair value recognized in the statement of operations during each period. Our outstanding preferred share warrants were converted to common share warrants upon our IPO and were reclassified from liabilities to equity for the year ended December 31, 2021.

Results of Operations**Comparisons of the Years Ended December 31, 2021 and 2020**

The following table summarizes our results of operations for the years ended December 31, 2021 and 2020, together with the dollar change in those items:

<i>(in thousands)</i>	Year Ended December 31,		Period to period change
	2021	2020	
Revenue:			
Product revenue	\$ 16,201	\$ 9,318	\$ 6,883
Service revenue	1,057	1,069	(12)
Total revenue	17,258	10,387	6,871
Cost of product revenue	8,445	4,866	3,579
Cost of service revenue	47	108	(61)
Gross profit	8,766	5,413	3,353
Operating expenses:			
Research and development expenses	20,966	11,157	9,809
General and administrative expenses	26,349	8,023	18,326
Sales and marketing expenses	37,774	13,511	24,263
Total operating expenses	85,089	32,691	52,398
Loss from operations	(76,323)	(27,278)	(49,045)
Other income (expense):			
Interest (expense), net	(3,618)	(18)	(3,600)
Other (expense) income, net	(1,628)	4,032	(5,660)
Net loss	\$ (81,569)	\$ (23,264)	\$ (58,305)

Revenue

Total revenue increased \$6.9 million for the year ended December 31, 2021 compared to December 31, 2020. This consisted of an increase of \$4.0 million for instruments and \$2.9 million for consumables.

The increase in instruments revenue for the year ended December 31, 2021 was driven by an increase in unit sales generated from a larger commercial team, primarily hired in the second half of 2020, and new executive leadership with the addition of our Chief Commercial Officer in the second quarter of 2020. The increase in consumable revenue in 2021 was driven by an increase in the number of units at customer locations.

Gross Profit

Gross profit as a percentage of total revenues was 50.8% for the year ended December 31, 2021 compared to 52.1% for the year ended December 31, 2020. The gross profit percentage decrease was due to increased cost of raw materials in the year ended December 31, 2021.

Research and Development Expenses

<i>(in thousands)</i>	Year Ended December 31,		
	2021	2020	Period to period change
Compensation related expenses	\$ 9,863	\$ 5,742	\$ 4,121
Professional fees and sub-contractor	1,647	475	1,172
Prototyping	2,538	1,455	1,083
Recruiting	676	32	644
Lab materials	1,794	522	1,272
Supplies expense	3,113	2,215	898
Depreciation and amortization	291	287	4
Other	1,044	429	615
Total	\$ 20,966	\$ 11,157	\$ 9,809

Research and development expenses increased by \$9.8 million, or 87.9%, for the year ended December 31, 2021 compared to the year ended December 31, 2020, primarily due to increases in compensation related expenses of \$4.1 million from hiring approximately 60 new hires year over year, a \$1.2 million increase in professional fees, an increase of \$0.6 million in recruiting expenses related to the 60 new hires, an increase of \$0.9 million in supplies expense related to an increase in the number of demonstrations performed for potential customers, an increase of \$1.3 million in lab materials, an increase of \$1.1 million in prototyping for next generation product development and an increase of \$0.6 million in other expenses related to supporting a larger research and development organization.

General and Administrative Expenses

General and administrative expenses increased by \$18.3 million, or 228.4%, for the year ended December 31, 2021 compared to the year ended December 31, 2020, primarily due to increases in compensation related expenses of \$9.8 million, including increased salary, bonus, benefits, and non-cash stock-based compensation, for additional personnel, including several executives, to support increased activities, an increase of \$3.7 million of professional fees, including legal, consulting, accounting, and audit fees, an increase of \$1.1 million in patent expenses, an increase of \$0.9 million in recruiting expenses, an increase of \$1.4 million in office related expenses and an increase of \$1.4 million in various other expenses.

Sales and Marketing Expenses

Sales and marketing expenses increased by \$24.3 million, or 179.6%, for the year ended December 31, 2021 compared to the year ended December 31, 2020, primarily due to increases in compensation related expenses of \$13.6 million, including increased salary, bonus, benefits, non-cash stock-based compensation, for additional sales and marketing personnel, consulting and professional fees of \$3.3 million, advertising and promotion expenses of \$2.6 million, recruiting expenses of \$2.0 million, and various other office, selling and headcount related expenses of \$2.8 million. Overall, the increase was driven by the increase in headcount to support our growth mission and the hiring of consultants to help us identify and expand into new markets, including worldwide markets.

Change in fair value of warrants and loan commitments

As a result of changes in fair value, we recognized a \$4.5 million change in fair value adjustment of warrants and loan commitments for the year ended December 31, 2021, most of which is attributable to our conversion of warrant liability to equity upon IPO.

Interest expense

As a result of the Credit Agreement, we entered into on December 30, 2020, under which we borrowed \$25.0 million on December 30, 2020 and \$10.0 million on May 27, 2021, we had \$31.6 million of borrowings outstanding as of December 31, 2021, and we recognized \$3.6 million in interest expense for the year ended December 31, 2021.

Liquidity and Capital Resources

At December 31, 2021, we had \$126.6 million in cash. Cash as of December 31, 2021 increased by \$19.9 million compared to December 31, 2020, primarily due to the factors described under the heading “—Cash Flows” below. Our

primary source of liquidity, other than cash on hand, has been cash flows from issuances of common stock in our IPO, issuances of preferred stock, debt financings and, to a lesser extent, grant income.

Cash Flows

Comparisons of the Years Ended December 31, 2021 and 2020

The following table provides information regarding our cash flows for the year ended December 31, 2021 and 2020:

(in thousands)	Year Ended December 31,	
	2021	2020
Net cash provided by (used in):		
Operating activities	\$ (86,507)	\$ (22,434)
Investing activities	(24,223)	(2,295)
Financing activities	130,655	103,999
Net increase in cash	\$ 19,925	\$ 79,270

Operating Activities

Net cash used in operating activities in the year ended December 31, 2021 primarily consisted of net loss of \$81.6 million, plus net changes in operating assets and liabilities of \$14.7 million, partially offset by net non-cash adjustments of \$9.8 million. The primary non-cash adjustment to net income was the change in the fair value of warrants and loan commitment of \$4.5 million. Cash flow impact from changes in net operating assets and liabilities were primarily driven by increases in inventory, partially offset by increases in accounts payable and accrued expenses and other liabilities.

Net cash used in operating activities in the year ended December 31, 2020 primarily consisted of net loss of \$23.3 million, partially offset by net non-cash adjustments of \$1.6 million, plus net changes in operating assets and liabilities of \$0.7 million. The primary non-cash adjustments to net income included share-based compensation of \$0.5 million, depreciation and amortization expenses of \$0.9 million, change in fair value of warrants of \$0.1 million, and provision for warranty costs of \$0.1 million. Cash flow impact from changes in net operating assets and liabilities were primarily driven by an increase in inventories and prepaid expenses and other current assets and partially offset by increases in accounts payable and accrued liabilities.

Investing Activities

Net cash used in investing activities totaled \$24.2 million in the year ended December 31, 2021. We purchased \$3.8 million of property and equipment. We paid \$20.4 million related to purchases of patents from third-parties.

Net cash used in investing activities totaled \$2.3 million in the year ended December 31, 2020. We purchased \$1.5 million of property and equipment. We paid \$0.3 million related to patent costs that were capitalized. We also purchased licenses for \$0.5 million.

Financing Activities

Net cash provided by financing activities was \$130.7 million in the year ended December 31, 2021. We raised cash through our IPO with net proceeds of \$110.5 million. We also borrowed the Tranche B term loan under our Credit Agreement, with net proceeds of \$10.0 million.

Net cash provided by financing activities was \$104.0 million in the year ended December 31, 2020. We raised cash through the issuance of Series C-2 and Series D redeemable convertible preferred stock, with net proceeds of \$79.9 million. In addition, we received \$24.1 million in net proceeds under the Credit Agreement.

Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue our research and development efforts and expand our business efforts. Furthermore, we have incurred and will continue to incur additional costs as a result of being a public company. Accordingly, we will need to obtain additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

Because of the numerous risks and uncertainties associated with our research and development efforts, we are unable to estimate the exact amount of our operating capital requirements. Our future capital requirements will depend on many factors, including:

- future research and development efforts;
- the need to service and refinance our indebtedness;
- our ability to enter into and terms and timing of any collaborations, licensing agreements or other arrangements;
- the costs of sales, marketing, distribution and manufacturing efforts;
- our headcount growth and associated costs as we expand our business;
- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against intellectual property related claims; and
- the costs of operating as a public company

Until such time, if ever, as we can generate positive cash flows from operations, we expect to finance our additional cash needs through a combination of equity offerings, debt financings, and, to a lesser extent, grants. To the extent that we raise additional capital through the sale of equity or convertible debt securities, our existing stockholders will be diluted, and the terms of those securities may include liquidation or other preferences that adversely affect the rights of holders of common stock. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or future revenue streams or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity offerings, debt financings or grants when needed, we may be required to delay, limit, or reduce our expansion efforts.

Contractual Obligations and Commitments

Contractual obligations represent future cash commitments and liabilities under agreements with third parties and exclude orders for goods and services entered into in the normal course of business that are not enforceable or legally binding.

On December 30, 2020, we entered into the Credit Agreement, which provides for senior secured financing of up to \$50.0 million, consisting of a \$25.0 million Tranche A term loan and a \$25.0 million Tranche B term loan. The Tranche A term loan of \$25.0 million was drawn at the initial closing of the Credit Agreement on December 30, 2020. The Credit Agreement was amended on May 27, 2021 to split the previously remaining \$25.0 million delayed draw term loan commitments under the Credit Agreement into a \$10.0 million Tranche B term loan and a \$15.0 million Tranche C term loan. The Tranche B term loan of \$10.0 million was drawn on May 27, 2021. Our ability to draw the \$15.0 million Tranche C term loan originally remained available through March 31, 2022 subject to several conditions, including achieving total revenue of at least \$20.0 million for the twelve month period then most recently ended. Borrowings under the Credit Agreement bear interest at a rate per annum equal to the one-month LIBOR rate (with a minimum LIBOR rate for such purposes of 1.75%) plus a margin of 9.50% (11.25% at December 31, 2021). Monthly payments of interest only are due over the term of the Credit Agreement with no scheduled loan amortization. Unless accelerated prior to such date, all amounts outstanding under the Credit Agreement are due to be repaid on December 30, 2025.

In addition, the Credit Agreement includes a quarterly minimum total revenue covenant for the applicable trailing twelve month period. On October 29, 2021, we entered into the Second Amendment to, among other things, eliminate the minimum total revenue covenant for the twelve months ending December 31, 2021 and reset the total minimum revenue covenants thereafter. Pursuant to the Second Amendment, the minimum total revenue covenant, as amended, will resume being tested for the twelve months ending March 31, 2022.

On March 30, 2022, we entered into a Third Amendment to Credit Agreement and Guaranty with Perceptive Credit Holdings III, LP pursuant to which the prior \$15.0 million Tranche C term loan, which was available through March 31, 2022 subject to several conditions, was changed to \$7.5 million and such amount was borrowed on March 30, 2022. In addition, the Third Amendment added a new \$7.5 million Tranche D term loan, which remains available through June 30, 2022 subject to several conditions, including pro forma compliance with the covenant showing total revenue of at least \$16.8 million for the twelve-month period ending March 31, 2022.

We have multiple operating lease commitments for office and manufacturing space and equipment, which expire through 2026. The future rental payments required to be made by the Company under the operating leases are approximately as follows:

(in thousands)	Year Ended December 31,
2022	\$ 1,523
2023	1,386
2024	1,328
2025	1,187
2026	687
Thereafter	—
Total	\$ 6,111

In connection with our entry into a Patent Purchase Agreement (the “Patent Purchase Agreement”) on May 12, 2021 with QIAGEN Sciences, LLC and QIAGEN GmbH (the “Sellers”), we entered into a Supply Agreement with one of the Sellers pursuant to which they have agreed to supply certain reagents to us, and we have agreed to certain annual minimum purchases. The future minimum purchase values are as follows:

(in millions)	Year Ended December 31,
2022	\$ 2.5
2023	4.0
2024	5.0
2025	7.0
2026	9.0
2027	10.0
Total	\$ 37.5

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. Management bases its estimates on historical experience, market and other conditions, and various other assumptions it believes to be reasonable. Although these estimates are based on management’s best knowledge of current events and actions that may impact us in the future, the estimation process is, by its nature, uncertain given that estimates depend on events over which we may not have control. Though the impact of the COVID-19 pandemic to our business and operating results presents additional uncertainty, we continue to use the best information available to inform our critical accounting estimates. If market and other conditions change from those that we anticipate, our consolidated financial statements may be materially affected. In addition, if our assumptions change, we may need to revise our estimates, or take other corrective actions, either of which may also have a material effect on our consolidated financial statements. In addition to the accounting policies discussed below, see “Item 8. Financial Statements and Supplementary Data — Notes to Consolidated Financial Statements — Note 2” for other significant accounting policies.

Revenue Recognition

Our revenue is generated primarily from the sale of products and services. Product revenue primarily consists of sales of instruments and chip consumables. Service revenue primarily consists of revenue generated from measuring immune responses using the Company’s technology.

The Company recognizes revenue when control of products and services is transferred to customers in an amount that reflects the consideration the Company expects to receive from the customers in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the contract price, allocating the contract prices to distinct performance obligations in the contract, and recognizing revenue when the performance obligations have been satisfied. Revenue recognition for contracts with multiple deliverables is based on the separate satisfaction of each distinct performance obligation within the contract. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer

either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. The Company considers a performance obligation satisfied once the Company has transferred control of a good or service to the customer, meaning the customer has the ability to use and obtain the benefit of the good or service. The contract price is allocated to each performance obligation in proportion to its standalone selling price. If the product or service has no history of sales or if the sales volume is not sufficient, the Company relies upon prices set by management, adjusted for applicable discounts.

The Company records revenue from product sales when performance obligations under the terms of a contract with customers are satisfied. Generally, this occurs with the transfer of control of the goods to customers at the time of shipment. The Company also generates service revenues by measuring immune responses using the Company's technology. The Company recognizes service revenue when performance obligations under the terms of a contract with customers are satisfied, which is generally at the time the analysis data is made available to the customer or agreed-upon milestones are reached. The Company makes judgments as to its ability to collect outstanding receivables and provides allowances when collection becomes doubtful.

Revenue is recorded net of discounts and sales taxes collected on behalf of governmental authorities. Employee sales commissions are recorded as sales and marketing expenses when incurred as the amortization period for such costs, if capitalized, would have been one year or less.

Share-Based Compensation

Our determination of the fair value of stock options with time-based vesting on the date of grant utilizes the Black-Scholes option pricing model, and is impacted by our common stock price as well as other variables including, but not limited to, expected term that options will remain outstanding, expected common stock price volatility over the term of the option awards, risk-free interest rates and expected dividends.

The fair value of a stock-based award is recognized over the period during which an optionee is required to provide services in exchange for the option award, known as the requisite service period (usually the vesting period) on a straight-line basis. Stock-based compensation expense is recognized based on the fair value determined on the date of grant and is reduced for forfeitures as they occur. Estimating the fair value of equity-settled awards as of the grant date using valuation models, such as the Black-Scholes option pricing model, is affected by assumptions regarding a number of complex variables. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. These inputs are subjective and generally require significant analysis and judgment to develop.

As there had been no public market for our common stock prior to our IPO, the estimated fair value of our common stock had been determined by our board of directors as of the date of each option grant, with input from management, considering our most recently available third-party valuations of common stock, and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the *American Institute of Certified Public Accountants' Accounting and Valuation Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Our common stock valuations were prepared using one or more of the following methods: the option pricing method ("OPM"), the probability-weighted expected return method ("PWERM") or the hybrid method, which combines both the OPM and the PWERM. The OPM uses market approaches to estimate our enterprise value and treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceed the value of the preferred stock liquidation preferences at the time of a liquidity event, such as a strategic sale or a merger. A discount for lack of marketability of the common stock is then applied to arrive at an indication of value for the common stock. The PWERM is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes considered by us, as well as the economic and control rights of each share class.

In addition to considering the results of these third-party valuations, our board of directors considered both objective and subjective factors, including:

- the prices at which we sold our redeemable convertible preferred stock and the superior rights and preferences of the redeemable convertible preferred stock relative to our common stock at the time of each grant;
- the progress of our research and development;

- our stage of development and our business strategy;
- external market conditions affecting the biotechnology industry, and trends within the biotechnology industry;
- our financial position, including cash on hand, and our historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and our redeemable convertible preferred stock; and
- the likelihood of achieving a liquidity event, such as an initial public offering or a sale of our company in light of prevailing market conditions.

Expected Term—We have opted to use the “simplified method” for estimating the expected term of options, whereby the expected term equals the arithmetic average of the vesting term and the original contractual term of the option (10 years).

Expected Volatility—Due to our limited operating history and a lack of company specific historical and implied volatility data, we have based our estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. The historical volatility data was computed using the daily closing prices for the selected companies’ shares during the equivalent period of the calculated expected term of the stock-based awards.

Risk-Free Interest Rate—The risk-free rate assumption is based on the U.S. Treasury instruments with maturities similar to the expected term of our stock options.

Expected Dividend—We have not issued any dividends in our history and do not expect to issue dividends over the life of the options and therefore have estimated the dividend yield to be zero.

The assumptions underlying these valuations represented management’s best estimate, which involved inherent uncertainties and the application of management’s judgment. As a result, if we had used significantly different assumptions or estimates, the fair value of our common stock and our stock-based compensation expense could have been materially different.

Estimates of the fair value of common stock are no longer necessary to determine the fair value of new awards in periods ended after the closing of our IPO, since the underlying shares have begun trading publicly.

Valuation of warrants

Prior to our IPO, we issued warrants exercisable into Series A-2 redeemable convertible preferred stock and Series D redeemable convertible preferred stock in connection with debt issuances. These warrants were classified as liabilities on our consolidated balance sheets as of December 30, 2020, as we determined that they met the definition of a freestanding financial instrument since they are legally detachable and also determined that such instruments represent forward sale contracts on redeemable shares and, accordingly, the instruments should be accounted for as a liability separate from the redeemable convertible preferred stock. They are reported at fair value at inception with an allocation of the proceeds from the debt issued. We remeasure these liabilities to fair value at each reporting date, and immediately prior to exercise or settlement, and recognize changes in the fair value of the liabilities in our consolidated statements of operations recorded as “change in fair value of warrants.” The warrant exercisable into Series A-2 redeemable convertible preferred stock was exercised on May 11, 2021, at an exercise price of \$12.58608 per share for 3,178 shares of Series A-2 redeemable convertible preferred stock. Upon closing of the IPO on October 12, 2021, the warrant exercisable into Series D redeemable convertible preferred stock was converted into a warrant exercisable for a total of 811,374 shares of common stock with an exercise price of \$9.62 per warrant share. In connection with the Third Amendment to the Credit Agreement dated March 30, 2022, the exercise price of the warrants has been changed from \$9.62 per warrant share to \$6.00 per warrant share. The common stock warrant is no longer considered “potentially redeemable” and the fair value of the warrant liability as of October 12, 2021 has been reclassified from liabilities to equity in accordance with ASC 480 for the year ended December 31, 2021.

Recent Accounting Pronouncements

Refer to Note 2, “Summary of Significant Accounting Policies,” in the accompanying notes to the consolidated financial statements for a discussion of recent accounting pronouncements.

The JOBS Act

The JOBS Act permits an emerging growth company such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption and, therefore, we will not be subject to new or revised accounting standards at the same time that they become applicable to other public companies that are not emerging growth companies until such time that we either (i) irrevocably elect to “opt out” of such extended transition period or (ii) no longer qualify as an emerging growth company. 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.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk related to changes in interest rates. As of December 31, 2021, we had cash of \$126.6 million. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of interest rates. As of December 31, 2021, our cash is held primarily in savings and checking accounts. Because of the short-term nature of the instruments in our portfolio, an immediate 10% change in the interest rate would not have a material impact on the fair market value of our investment portfolio or on our financial position or results of operations.

We are exposed to changes in the U.S. dollar based short term rates, specifically LIBOR. Fluctuations in LIBOR may affect the amount of interest expense we incur on borrowing indexed to LIBOR, such as borrowing under our Credit Agreement, which bear interest at a per annum equal to the one-month LIBOR rate (with a minimum LIBOR rate for such purposes of 1.75%) plus a margin of 9.5%.

With the transition away from LIBOR, borrowings under our Credit Agreement will be subject to an interest rate based on an alternate index to be agreed upon under the Credit Agreement; provided that if such alternate rate of interest shall be less than 1.75%, such rate shall be deemed to be 1.75% for the purposes of the Credit Agreement.

Item 8. Financial Statements and Supplementary Data

ISOPLEXIS CORPORATION AND SUBSIDIARIES

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of IsoPlexis Corporation

Opinion on the Financial Statements

We have audited the accompanying balance sheets of IsoPlexis Corporation and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, changes in redeemable convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the two years in the period ended December 31, 2021 and 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, 2021 and 2020, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2021, 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 in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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/ Deloitte & Touche LLP

Hartford, CT

March 30, 2022

We have served as the Company's auditor since 2020.

ISOPLEXIS CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

(in thousands, except share amounts)	December 31,	
	2021	2020
Assets		
Current assets:		
Cash	\$ 126,566	\$ 106,641
Accounts receivable, net	4,100	2,922
Inventories, net	24,299	3,955
Prepaid expenses and other current assets	3,478	2,156
Total current assets	158,443	115,674
Property and equipment, net	5,778	3,227
Intangible assets, net	21,008	1,643
Other assets	2,243	3,061
Total assets	\$ 187,472	\$ 123,605
Liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	\$ 4,839	\$ 2,137
Accrued expenses and other current liabilities	7,827	2,129
Deferred revenue	915	356
Total current liabilities	13,581	4,622
Warrant liability	—	4,637
Long-term debt	31,646	22,137
Total liabilities:	45,227	31,396
Commitments and Contingencies (Notes 10, 13 and 14)		
Redeemable convertible preferred stock, \$0.001 par value, zero and 3,442,340 shares authorized at December 31, 2021 and 2020, respectively; zero and 3,211,652 shares issued and outstanding at December 31, 2021 and 2020, respectively	—	143,460
Stockholders' deficit:		
Preferred stock, \$0.001 par value; 20,000,000 and zero shares authorized at December 31, 2021 and 2020, respectively; and zero shares issued or outstanding	—	—
Common stock, \$0.001 par value, 400,000,000 shares authorized; 39,036,010 and 2,133,904 shares issued and outstanding as of December 31, 2021 and 2020, respectively	39	2
Additional paid-in capital	276,179	1,151
Accumulated deficit	(133,973)	(52,404)
Total stockholders' equity (deficit)	142,245	(51,251)
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	\$ 187,472	\$ 123,605

The accompanying notes are an integral part of these consolidated financial statements.

ISOPLEXIS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except share and per share amounts)	Year ended December 31,	
	2021	2020
Revenue		
Product revenue	\$ 16,201	\$ 9,318
Service revenue	1,057	1,069
Total revenue	17,258	10,387
Cost of product revenue	8,445	4,866
Cost of service revenue	47	108
Gross profit	8,766	5,413
Operating expenses:		
Research and development expenses	20,966	11,157
General and administrative expenses	26,349	8,023
Sales and marketing expenses	37,774	13,511
Total operating expenses	85,089	32,691
Loss from operations	(76,323)	(27,278)
Other income (expense):		
Interest expense, net	(3,618)	(18)
Other (expense) income, net	(1,628)	4,032
Net loss	\$ (81,569)	\$ (23,264)
Accrued dividends on preferred stock	(10,455)	(6,137)
Net loss attributable to common stockholders	\$ (92,024)	\$ (29,401)
Basic and diluted net loss per common share	\$ (8.99)	\$ (14.06)
Weighted-average common shares outstanding—basic and diluted	10,239,869	2,090,392

The accompanying notes are an integral part of these consolidated financial statements.

ISOPLEXIS CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)

(in thousands, except share and per share amounts)	Series A Preferred		Series A-2 Preferred		Series B Preferred		Series B-2 Preferred		Series C Preferred		Series C-2 Preferred		Series D Preferred		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at January 1, 2020	253,862	\$ 1,596	290,002	\$ 3,623	376,061	\$ 6,606	237,183	\$ 6,991	564,287	\$ 24,839	412,174	\$ 19,929	—	\$ —	2,083,568	\$ 2	\$ 604	\$ (29,140)	\$ (28,534)
Issuance of Preferred Stock, net of issuance cost of \$124	—	—	—	—	—	—	—	—	—	—	103,044	5,000	975,039	74,876	—	—	—	—	—
Exercise of common stock options	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50,336	—	30	—	30
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	517	—	517
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(23,264)	(23,264)
Balance at December 31, 2020	253,862	1,596	290,002	3,623	376,061	6,606	237,183	6,991	564,287	24,839	515,218	24,929	975,039	74,876	2,133,904	2	1,151	(52,404)	(51,251)
Issuance of Preferred Stock, net of issuance cost of \$0	—	—	3,178	247	—	—	—	—	—	—	—	—	130,006	10,000	—	—	—	—	—
Exercise of common stock options	—	—	—	—	—	—	—	—	—	—	—	—	—	—	167,044	1	69	—	70
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,083	—	2,083
Conversion of preferred stock	(253,862)	(1,596)	(293,180)	(3,870)	(376,061)	(6,606)	(237,183)	(6,991)	(564,287)	(24,839)	(515,218)	(24,929)	(1,105,045)	(84,876)	26,758,688	27	153,680	—	153,707
Accrued dividend on preferred shares converted to common shares	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,643,374	1	(1)	—	—
Issuance of common stock from initial public offering, net of underwriting and issuance costs of \$14,451	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,333,000	8	110,537	—	110,545
Reclassification of warrant liability to equity	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,660	—	8,660
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(81,569)	(81,569)
Balance at December 31, 2021	—	\$ —	—	\$ —	—	\$ —	—	\$ —	—	\$ —	—	\$ —	—	\$ —	39,036,010	\$ 39	\$ 276,179	\$ (133,973)	\$ 142,245

The accompanying notes are an integral part of these consolidated financial statements.

ISOPLEXIS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)	Year Ended December 31,	
	2021	2020
Cash flows from operating activities		
Net loss	\$ (81,569)	\$ (23,264)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2,307	879
Provision for warranty costs	250	100
Change in fair value of warrants and loan commitment	4,460	85
Amortization of debt discount	350	—
Stock-based compensation	2,083	517
Provision for excess and obsolete inventories	301	—
Changes in operating assets and liabilities:		
Accounts receivable	(1,178)	(76)
Inventories	(20,645)	(762)
Prepaid expenses and other current assets	(1,322)	(1,696)
Other assets	(253)	(25)
Accounts payable	2,702	659
Accrued expenses and other current liabilities	5,448	1,064
Deferred revenue	559	85
Net cash used in operating activities	(86,507)	(22,434)
Cash flows from investing activities		
Purchases of property and equipment	(3,798)	(1,442)
Payments for patents acquired and capitalized	(20,425)	(333)
Purchases of license	—	(520)
Net cash used in investing activities	(24,223)	(2,295)
Cash flows from financing activities		
Proceeds from exercise of Series A-2 preferred stock warrants	40	—
Proceeds from issuance of Series C-2 preferred stock	—	5,000
Proceeds from issuance of Series D preferred stock	10,000	75,000
Preferred stock issuance costs	—	(124)
Proceeds from initial public offering of common stock, net of underwriting fees of \$8,750	116,247	—
Proceeds received from borrowings on credit agreement	10,000	25,000
Initial public offering costs paid	(5,702)	—
Debt issuance cost paid	—	(907)
Exercise of common stock options	70	30
Net cash provided by financing activities	130,655	103,999
Net change in cash	19,925	79,270
Cash beginning	106,641	27,371
Cash ending	\$ 126,566	\$ 106,641
Non-cash investing and financing activities		
Transfer of Tranche B loan commitment to contra-debt upon additional borrowing under credit agreement	\$ 841	\$ —
Exercise of Series A-2 preferred stock warrants	\$ 207	\$ —
Conversion of redeemable convertible preferred stock to common stock upon closing of the initial public offering (including \$24.7 million of accrued dividends)	\$ 153,707	\$ —
Conversion of preferred stock warrants to common stock warrants	\$ 8,660	\$ —
Fair value of warrants issued with credit agreement	\$ —	\$ 4,430
Fair value of loan commitment	\$ —	\$ 2,240
Supplemental disclosure of cash flow information		
Cash paid for interest	\$ 3,575	\$ 21

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 - Nature of operations

IsoPlexis Corporation (together with its subsidiaries, the “Company”) was incorporated in the State of Delaware in March 2013. The Company is a life sciences company building solutions to accelerate the development of curative medicines and personalized therapeutics. The Company’s award-winning single-cell proteomics systems reveal unique biological activity in small subsets of cells, allowing researchers to connect more directly to in-vivo biology and develop more precise and personalized therapies. The Company’s products have been adopted by researchers around the world, including each of the top 15 global pharmaceutical companies by revenue and by approximately 67% of the comprehensive cancer centers in the United States. On December 28, 2018, the Company created IsoPlexis UK Limited (“IsoPlexis UK”), which has remained dormant. IsoPlexis (Shanghai) Trading Co., Ltd. was created on October 9, 2021.

Stock Split

On September 27, 2021, the Company implemented an 8-for-1 forward stock split (the “Stock Split”) of the Company’s common stock, \$0.001 par value per share (“Common Stock”), pursuant to an amendment to the Company’s amended and restated certificate of incorporation approved by the Company’s board of directors and stockholders. As a result of the Stock Split, all Common Stock share and per share data and related information shown in these financial statements and related notes have been adjusted on a retroactive basis for all periods presented. There was no change in the par value of the Company’s Common Stock.

Initial public offering

On October 12, 2021, the Company closed an initial public offering (“IPO”) of its Common Stock through an underwritten sale of 8,333,000 shares of Common Stock at a price of \$15.00 per share. The aggregate net proceeds from the IPO, after deducting underwriting discounts and commissions and other offering expenses payable by the Company, were approximately \$110.5 million. The net proceeds from the IPO will be used for general corporate purposes.

Preferred stock conversion

Upon closing of the IPO on October 12, 2021, all 3,344,836 shares of redeemable convertible preferred stock that were outstanding immediately prior to the closing of the IPO automatically converted into 26,758,688 shares of Common Stock. In addition, the Company issued 1,643,374 shares of Common Stock to the holders of the redeemable convertible preferred stock outstanding immediately prior to the closing of the IPO in respect of accrued dividends thereon accrued to but not including October 12, 2021, based on the IPO price of \$15.00 per share.

COVID-19

The COVID-19 pandemic developed rapidly in 2020, with a significant number of cases. Measures taken by various governments to contain the virus have affected economic activity. The Company has taken a number of measures to monitor and mitigate the effects of COVID-19, such as safety and health measures for the Company’s employees (such as social distancing and working from home) and securing the supply of materials that are essential to the production process.

At this stage, the impact on the Company’s business and results has not been significant and based on the Company’s experience to date, management expects this to remain the case. The Company will continue to follow the various government policies and advice.

Liquidity and ability to continue as a going concern

The accompanying financial statements are prepared in accordance with generally accepted accounting principles applicable to a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. Management has evaluated whether there are conditions and events that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the date the financial statements are issued.

Since its inception, the Company has incurred net losses and negative cash flows from operations.

During the years ended December 31, 2021 and 2020, the Company incurred a net loss of \$81.6 million and \$23.3 million, respectively, and used \$86.5 million and \$22.4 million in cash for operations, respectively. In addition, as of

December 31, 2021, the Company had an accumulated deficit of \$134.0 million. The Company expects to continue to generate operating losses and negative cash flows for the foreseeable future.

The Company may seek additional funding in order to reach its business objectives. The Company may seek these funds either through public debt or equity offerings or further private equity financings, debt financings, and strategic alliances. The Company may not be able to obtain funding on acceptable terms, or at all, and the terms of any funding may adversely affect the holdings or the rights of the Company's stockholders. If the Company is unable to obtain additional funding, it could adversely affect the Company's business prospects.

The Company is subject to risks common to companies in the life sciences industry. There can be no assurance that the Company's research and development will be successful, that adequate protection for its intellectual property will be maintained, that any products developed will obtain required regulatory approval, or that any approved products will be commercially viable.

Note 2 - Summary of significant accounting policies

Basis of presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted ("GAAP") in the United States. Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") promulgated by the Financial Accounting Standards Board ("FASB").

Principles of consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries, IsoPlexis UK Limited and IsoPlexis (Shanghai) Trading Co., Ltd. All intercompany transactions have been eliminated.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. The most significant estimates are those used in the determination of the fair value of warrant liabilities, useful lives of long-lived assets, and estimated fair value of common stock for purposes of recording equity-based incentive compensation prior to the Company's IPO.

Cash

The Company maintains its cash with high-credit quality financial institutions. At times, such amounts may exceed federally insured limits.

Accounts receivable, net

Accounts receivable are carried at their estimated collectible amounts. Accounts receivable are periodically evaluated for collectability based on past credit history with customers and their current financial condition. The Company maintains an allowance for doubtful accounts for estimated losses.

Inventories, net

Inventories are valued at the lower of cost or market. Inventories are accounted for using the first-in, first-out method of determining inventory costs. Inventory quantities on-hand are regularly reviewed, and where necessary, provisions for excess and obsolete inventory, shrinkage, and scrap are recorded based primarily on the Company's estimated forecast of product demand and production requirements.

Product and services revenue and cost of sales

The Company primarily generates product revenue from the sale of single cell diagnostic equipment and consumables and also generates service revenues by measuring immune responses using the Company's technology.

The Company recognizes revenue when and as control of products and services is transferred to customers in an amount that reflects the consideration the Company expects to be entitled from customers in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the transaction price, allocating the transaction prices to each performance obligation in the contract, and recognizing revenue when or as the performance obligations have been satisfied. Revenue recognition for contracts with multiple performance obligations is based on the separate satisfaction of each distinct performance obligation within the contract. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. The Company considers a performance obligation satisfied once the Company has transferred control of a good or service to the customer, meaning the customer has the ability to use and obtain the benefit of the good or service. The transaction price is allocated to each performance obligation in proportion to its standalone selling price. If the product or service has no history of standalone sales or if the sales volume is not sufficient, the Company estimates standalone selling price maximizing the use of observable inputs such as expected cost plus a reasonable margin and competitor pricing.

The Company contracts with its customers based on purchase orders, which are short-term single orders. The Company records revenue from sales of single cell diagnostic equipment and consumables when performance obligations under the terms of a contract with customers are satisfied, which is when control of the goods is transferred to the customer at the time of shipment. Invoicing typically occurs upon shipment and payment is typically due within 30 days from invoice. Product returns are minimal and must be requested by the customer within 72 hours of receipt. The Company recognizes service revenue when performance obligations under the terms of a contract with customers are satisfied, which is generally at the time the analysis data from measuring immune responses using the Company's technology is made available to the customer. The Company also generates revenues through the sale of extended service type warranties, which are recognized ratably over the contract term as the Company is standing ready to provide services when and if needed.

Revenue is recorded net of discounts and sales taxes collected on behalf of governmental authorities. Employee sales commissions are recorded as sales and marketing expenses when incurred as the amortization period for such costs, if capitalized, would have been one year or less.

Cost of products and services revenue consists of labor, components and overhead costs related to the products sold and services delivered, as well as royalty expense and amortization under the license technology agreements described in Note 13. The amortization of capitalized intangible assets is recognized in cost of product and service revenue. The amortization of purchased intangible assets is recognized in general and administrative operating expenses. Once products begin selling that utilize the purchased intangibles technology, amortization is recorded to cost of product and service revenue.

The Company makes judgements as to its ability to collect outstanding receivables and provides allowances when collections becomes doubtful.

As of December 31, 2021 and 2020, no single customer represented 10% or more of revenue or accounts receivable.

Property and equipment

Property and equipment, including leasehold improvements, are carried at cost less accumulated depreciation and amortization. Depreciation and amortization are provided on a straight-line basis over the estimated useful lives of the assets, ranging from three to seven years. Amortization of leasehold improvements is recorded over the shorter of the estimated useful life of the asset or remaining lease term.

The estimated useful lives of the major classes of property and equipment as generally as follows:

	Estimated Useful Lives
Furniture and equipment	3 to 7 years
Computers and technology	3 to 5 years
Leasehold improvements	Lesser of lease term or useful life (approximately 3 to 5 years)

Patents

Costs related to filing and pursuing patent applications for products that have reached technological feasibility are capitalized and amortized over the estimated period to be benefited, not to exceed the patent lives, which may be as long as 17 years. Patent costs are amortized as part of cost of product and service revenue. The Company periodically evaluates capitalized patent costs to determine if any amounts should be written down. Patent costs for products that have not reached technological feasibility are expensed as incurred in general and administrative expenses since recoverability of such expenditures is uncertain.

License agreements

The Company has entered into and may continue to enter into license agreements to access and utilize certain technology. The Company evaluates if the license agreement results in acquisition of an asset or a business and then determines if the acquired asset has the ability to generate revenues or is subject to regulatory approval. When regulatory approval is not required and there is a probable future benefit from the license, the Company records the license as an asset and amortizes it over the estimated economic life. The Company records the amortization as a cost of product and service revenue.

Leases

The Company records rent expense on a straight-line basis over the life of the lease. In cases of escalating rental payments, the Company records rent expense on a straight-line basis with an offset to deferred rent liability.

Shipping and handling

Shipping and handling expenses are included in cost of product revenue.

Research and development state tax credits

Research and development ("R&D") tax credits exchanged for cash pursuant to the Connecticut R&D Tax Credit Exchange Program, which permits a qualified small business engaged in R&D activities within Connecticut to exchange its unused R&D tax credits for a cash amount equal to 65% of the value of exchanged credits, are recorded as a receivable and other income in the year the R&D tax credits relate to, as it is reasonably assured that the R&D tax credits will be received, based upon the Company's history of filing for and receiving the tax credits. R&D tax credits receivable where cash is expected to be received by the Company more than one year after the balance sheet date are classified as noncurrent in the consolidated balance sheets. The Company has recorded \$0.6 million and \$0.4 million of R&D tax credits receivable as of December 31, 2021 and 2020, respectively.

Loan commitment

The Company's Credit Agreement (see Note 7) contains a commitment from the lender for a third tranche of debt under certain conditions. The Company has determined the commitment represents a freestanding financial instrument under the definition provided within the ASC Glossary, and therefore has initially recorded it at fair value, with reductions in fair value that have occurred each period recorded in earnings. The balance of \$1.2 million and \$2.2 million is included in other assets in the consolidated balance sheet at December 31, 2021 and 2020, respectively.

Detachable warrants

The Company accounts for detachable warrants on its preferred stock as freestanding financial instruments in accordance with ASC 480, *Distinguishing Liabilities from Equity*, ("ASC 840") which requires the Company to separately account for the detachable warrants at fair value. Under liability classification prior to the IPO, the fair value used for the warrants was calculated using the Black-Scholes valuation model. Upon IPO, the warrants were converted into common stock warrants and as a result of meeting the criteria for equity classified instruments in ASC 480, were reclassified into equity at the fair value at conversion. See Notes 3 and 7.

Fair value measurements

The fair value of assets and liabilities are based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value

maximize the use of observable inputs and minimize the use of unobservable inputs. The Company uses a fair value hierarchy with three levels of inputs, of which the first two are considered observable and the last unobservable, to measure fair value:

Level 1 — Quoted prices in active markets for identical assets or liabilities.

Level 2 — Inputs, other than Level 1, that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

To the extent that valuation is based on models or inputs that are less observable in the market, the determination of fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Financial instruments measured at fair value on a recurring basis include loan commitment assets and warrant liabilities (Note 3). The fair value was determined based on Level 3 inputs as described in Note 3. An entity may elect to measure many financial instruments and certain other items at fair value at specified election dates. The Company did not elect to measure any additional financial instruments or other items at fair value.

There have been no changes to the valuation methods utilized by the Company during the years ended December 31, 2021 or 2020. The company evaluates transfers between levels at the end of each reporting period. There were no transfers of financial instruments between levels during the years ended December 31, 2021 or 2020.

Income taxes

The Company has adopted the accounting guidance within ASC 740 on uncertainties in income taxes. ASC Topic 740, *Income Taxes*, (“ASC 740”) prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

Deferred income tax assets and liabilities are recognized for the expected future tax consequences attributed to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using the enacted tax rates expected to be applied to taxable income in the years in which those temporary differences are expected to reverse. Deferred income taxes result primarily from temporary differences between the recognition of stock-based compensation and certain other expenses for both financial statement and income tax reporting purposes as well as net operating loss and tax carryforwards. Valuation allowances are recorded to reduce deferred income tax assets when it is more likely than not that a tax benefit will not be realized.

The Company has no unrecognized tax benefits at December 31, 2021 and 2020 and its income tax returns after for prior years in which a net operating loss was incurred and carried forward are subject to audit by the applicable taxing authorities. The Company will recognize any interest and penalties associated with tax matters as part of income tax expense.

Stock-based compensation

The Company measures stock option awards made to employees and directors based on the estimated fair values of the awards and recognizes the compensation expense over the requisite service period. ASC 718, *Stock Compensation*, requires the recognition of stock-based compensation expense, using a fair value-based method, for costs related to all stock options granted. Stock-based compensation awards consist of stock options and restricted stock awards, which function similar to restricted stock units. The Company’s determination of the fair value of stock options with time-based vesting on the date of grant utilizes the Black-Scholes option-pricing model, and is impacted by the estimated fair value of its common stock as well as other variables including, but not limited to, the expected term that stock options will remain outstanding, the expected common stock price volatility over the term of the stock option, risk-free interest rates and expected dividends.

The fair value of stock options is recognized over the period during which an optionee is required to provide services in exchange for the stock option award, known as the requisite service period, on a straight-line basis. Stock-based compensation expense is recognized based on the fair value determined on the date of grant and is reduced for forfeitures

as they occur. The grant date is determined based on the date when a mutual understanding of the key terms of the stock option awards are established.

Due to the lack of Company-specific historical implied volatility data, the Company bases its computations of expected volatility on the historical volatility of a representative group of public companies with similar characteristics of the Company, including stage of product development and life science industry focus. The historical volatility is calculated based on a period of time commensurate with the expected term assumption. The Company uses the simplified method as prescribed by the U.S. Securities and Exchange Commission ("SEC") Staff Accounting Bulletin No. 107, *Share-Based Payment*, to calculate the expected term for options granted to employees and non-employees, whereby, the expected term equals the arithmetic average of the vesting term and the original contractual term of the options due to its lack of sufficient historical data. The risk-free interest rate is based on U.S. Treasury securities with a maturity date commensurate with the expected term of the associated award. The expected dividend yield is assumed to be zero as the Company has never paid dividends and has no current plans to pay any dividends on its common stock.

Prior to the IPO, due to the absence of an active market for the Company's common stock, the Company utilized methodologies in accordance with the framework of the American Institute of Certified Public Accountants Technical Practice Aid, Valuation of Privately-Held Company Equity Securities Issued as Compensation, to estimate the fair value of its common stock. The estimated fair value of the Company's common stock was determined at each grant based upon a variety of factors, including the illiquid nature of the common stock, arm's-length sales of the Company's capital stock (including redeemable convertible preferred stock), the effect of the rights and preferences of the preferred shareholders, and the prospects of a liquidity event. Among other factors are the Company's financial position and historical financial performance, the status of technological developments within the Company's research, the composition and ability of the current research and management team, an evaluation or benchmark of the Company's competition, and the current business climate in the marketplace.

Estimates of the fair value of common stock are no longer necessary to determine the fair value of new awards in periods ended after the closing of the IPO since the underlying shares have begun trading publicly.

Impairment of long-lived and intangible assets

The Company evaluates the recoverability of its long-lived assets, which include property and equipment and intangible assets, whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable. Recoverability of an asset or asset group is measured by comparison of its carrying amount to the expected future undiscounted cash flows that the asset or asset group is expected to generate. If that review indicates that the carrying amount of the long-lived asset or asset group is not recoverable, an impairment loss is recorded in the amount by which the carrying amount of the asset or asset group exceeds its fair value. There were no impairment indicators in 2021 or 2020.

Preferred stock

The Company records all shares of redeemable preferred stock at their respective fair values less issuance costs on the dates of issuance. As of December 31, 2020, preferred stock was recorded outside of stockholders' deficit because, in the event of certain deemed liquidation events, which are events that are not considered solely within the Company's control, such as a merger, acquisition or sale of all or substantially all of the Company's assets, the preferred stock would become redeemable. All series of preferred stock outstanding as of October 12, 2021 were converted into common stock as a result of the Company's IPO. The Company's Amended and Restated Certificate of Incorporation dated October 12, 2021, authorizes preferred shares that are not subject to redemption or conversion. No preferred shares are issued or outstanding as of December 31, 2021.

Derivatives

Upon issuing financial instruments, the Company assesses whether the nature of the host contract and any of the features embedded within the financial instrument could be considered derivatives that require bifurcation. In determining whether the embedded features represent derivatives that could require bifurcation, the Company assesses whether the economic characteristics of embedded features are not clearly and closely related to the economic characteristics and risks of the remaining component of the financial instruments (i.e., the host contracts), whether the instrument is measured at fair value with changes in fair value reported in earnings as they occur and whether a separate, non-embedded instrument with the same terms as the embedded instruments would meet the definition of a derivative instrument. When it is determined that all of the criteria above are met, the embedded derivative is separated from the host contract and carried at fair value with any changes in fair value recorded in current period earnings.

Research and development costs

Research and development expenses consist of costs incurred to develop an automated method and instrument and consumable assay (platform) that proves feasibility and expands the capability of the Company's technology. Research and development expenses include personnel costs for the Company's research and product development employees, as well as non-personnel costs such as facilities and overhead costs attributable to research and development, and professional fees payable to third parties for research services. Research and development costs are expensed as incurred.

Product warranties

The Company generally provides a one-year warranty on instruments. At the time revenue is recognized, an accrual is established for estimated warranty expenses based on historical experience as well as anticipated product performance. The Company periodically reviews the warranty reserve for adequacy and adjusts the warranty accrual, if necessary, based on actual experience and estimated costs to be incurred. Warranty expense is recorded as a component of cost of product revenue. Product warranties are meant to ensure all the Company's instruments are operating effectively and based on the terms of the purchase or service agreement.

Foreign currency transactions

The Company is subject to foreign currency transaction gains and losses as certain transactions are denominated in foreign currencies. We recognized an immaterial amount of foreign currency transaction losses for the years ended December 31, 2021 and 2020. These amounts have been included in Other income and (expense), net in the Consolidated Statement of Operations.

Net loss per share attributable to common stockholders

The Company calculates basic net loss per share and diluted net loss per share using the weighted-average number of shares of common stock outstanding for the period. Net loss per share attributable to common stockholders is calculated using the two-class method, which is an earnings allocation formula that determines net loss per share for the holders of shares of the Company's common stock and participating securities. The Company's redeemable preferred stock contained a cumulative annual dividend right whether or not declared, which after consideration increases the net loss available to common stockholders. The Company's redeemable preferred stock also contained participation rights in any dividend paid by the Company as well as residuals in liquidation and were deemed to be participating securities. The participating securities do not include a contractual obligation to share in losses of the Company and are not included in the calculation of net loss per share in the periods in which net loss is recorded. Except where the result would be antidilutive to net income (loss), diluted net income (loss) per share is computed assuming the exercise of common stock options and the conversion of outstanding shares of preferred stock.

Segment information

Operating segments are defined as components of an enterprise for which discrete financial information is available for evaluation by the chief operating decision maker in deciding how to allocate resources and in assessing operating performance. The Company manages its operations as a single segment for the purposes of allocating resources, assessing performance, and making operating decisions. For revenue by geographic area see Note 4.

Immaterial correction of prior period financial statements

The Company has corrected the previously issued financial statement for the year ended December 31, 2020, as the result of an error identified in the calculation of cumulative dividends on the previously outstanding preferred stock. The correction resulted in an increase of \$4.1 million in accrued dividends presented for the year ended December 31, 2020, from \$2.0 million previously reported to \$6.1 million as corrected. The correction also had the impact of increasing the net loss attributable to common stockholders by the same amount, from \$25.2 million to \$29.4 million, with a corresponding change in net loss per share of \$1.99, from \$12.07 to \$14.06. The correction had no impact on total net loss presented in the statement of operations and had no impact on the consolidated balance sheets, statement of changes in redeemable preferred stock and shareholders' deficit or statement of cash flows.

New accounting standards not yet effective

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). This standard established a right-of-use model that requires all lessees to recognize right-of-use assets and liabilities on their balance sheet that arise from leases as

well as provide disclosures with respect to certain qualitative and quantitative information related to their leasing arrangements. The Company adopted the standard on January 1, 2022, using a modified retrospective transition approach to be applied to leases existing as of, or entered into after, January 1, 2022. The Company is finalizing its evaluation of the impact that the adoption will have on the consolidated financial statements and estimates a range of \$5.0 million to \$5.8 million of right-of-use assets and lease liabilities will be recognized upon adoption.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This standard requires that credit losses be reported using an expected losses model rather than the incurred losses model that is currently used, and establishes additional disclosures related to credit risks. For available-for-sale debt securities with unrealized losses, this standard now requires allowances to be recorded instead of reducing the amortized cost of the investment. This standard will be effective for the Company on January 1, 2023. The Company has not yet determined the impact the adoption of this standard will have on the consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-04, Reference Rate Reform (Topic 848) (“ASU 2020-04”), which provides companies with temporary optional financial reporting alternatives to ease the potential burden in accounting for reference rate reform and includes a provision that allows companies to account for a modified contract as a continuation of an existing contract. ASU 2020-04 is effective for all entities as of March 12, 2020 through December 31, 2022. The Company has certain debt instruments for which the interest rates are indexed to LIBOR, and as a result, is currently evaluating the effect that the implementation of this standard will have on the Company’s consolidated operating results, cash flows, financial condition and related disclosures.

Note 3 - Fair Value Measurement

Certain of the Company’s assets and liabilities are recorded at fair value, as described below.

The following tables set forth the Company’s financial instruments that were measured at fair value on recurring basis by level within the fair value hierarchy:

(in thousands)	December 31, 2021			
	Level 1	Level 2	Level 3	Total
Loan commitment asset	\$ —	\$ —	\$ 1,169	\$ 1,169

(in thousands)	December 31, 2020			
	Level 1	Level 2	Level 3	Total
Warrant liability	\$ —	\$ —	\$ 4,637	\$ 4,637
Loan commitment asset	\$ —	\$ —	\$ 2,240	\$ 2,240

Under ASC 480, the preferred stock warrants (see Note 7) were freestanding financial instruments that qualified as liabilities required to be recorded at their estimated fair value at the inception date and remeasured at each reported balance sheet date thereafter until settlement. The warrant exercisable into Series A-2 redeemable convertible preferred stock was exercised on May 11, 2021, at an exercise price of \$12.58606 per share for 3,178 shares of Series A-2 redeemable convertible preferred stock. Upon closing of the IPO on October 12, 2021, the warrant held by Perceptive Credit Holdings III, LP to purchase Series D redeemable convertible preferred stock was converted to a warrant exercisable to purchase 811,374 shares of common stock under the same terms as the original warrant. This common stock warrant is no longer considered “potentially redeemable” and the outstanding balance of the warrant liability has been reclassified into equity in accordance with ASC 480 for the year ended December 31, 2021.

The fair value of the warrant liability was estimated using a Black-Scholes Option Pricing Model, with the following significant unobservable inputs (Level 3):

	October 12, 2021		December 31, 2020	
	Series D		Series A-2	Series D
Stock price	\$	124.62	\$	76.92
Exercise price	\$	76.92	\$	12.59
Expected term (in years)		9.2		4.7
Volatility		55 %		50 %
Dividend rate		— %		— %
Risk-free interest rate		1.45 %		0.36 %
				76.92
				10
				50 %
				— %
				0.93 %

The Company's volatility was estimated at each valuation date based on the price history for guideline companies looking back over the number of years equal to the expected term. The Company did not change the manner in which it values assets and liabilities that are measured at fair value. The Company recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period. There were no transfers within the hierarchy during the years ended December 31, 2021 and 2020.

The fair value of the loan commitment was estimated based on the present value of future expected cash flows discounted at the Company's effective interest rate of 14.12% and 13.98% at December 31, 2021 and 2020, respectively.

The following table presents changes during the years ended December 31, 2021 and 2020 in Level 3 liabilities measured at fair value on a recurring basis:

(in thousands)	Loan Commitment	Series D Warrants	Series A Warrants	
Balances at January 1, 2020	\$	—	\$	122
Issuance		2,240		4,430
Change in estimated fair value		—		85
Balances at December 31, 2020		2,240		4,430
Exercise of warrant		—		(207)
Exercise of Tranche B loan commitment		(841)		—
Change in estimated fair value		(230)		4,230
Conversion to common share warrant		—		(8,660)
Balances at December 31, 2021	\$	1,169	\$	—

The above fair value measurements are sensitive to changes in underlying unobservable inputs. A change in those inputs could result in a significantly higher or lower fair value measurement. The full amount of the Tranche B term loan was drawn and \$0.8 million was reclassified from the loan commitment to debt discount on May 27, 2021. As of December 31, 2021, \$15.0 million under Tranche C originally remained available through March 31, 2022.

On March 30, 2022, we entered into a Third Amendment to Credit Agreement and Guaranty with Perceptive Credit Holdings III, LP pursuant to which the prior \$15.0 million Tranche C term loan, which was available through March 31, 2022 subject to several conditions, was changed to \$7.5 million and such amount was borrowed on March 30, 2022. In addition, the Third Amendment added a new \$7.5 million Tranche D term loan, which remains available through June 30, 2022 subject to several conditions, including pro forma compliance with the covenant showing total revenue of at least \$16.8 million for the twelve-month period ending March 31, 2022. In connection with entering into the above-referenced Third Amendment to the Credit Agreement, on March 30, 2022, the Company amended the warrant that had been previously issued to Perceptive Credit Holdings III, LP to purchase up to 811,374 shares of common stock at an exercise price of \$9.62 per share. The warrant exercise price was amended to \$6.00 per share.

Changes in fair value of the warrants and loan commitment is included in other expense (income), net in the consolidated statements of operations.

Note 4 - Revenue

The Company's revenue is generated primarily from the sale of products and services. Product revenue primarily consists of sales of instruments and consumables used in single cell research equipment. Service and other revenue primarily consists of revenue generated from measuring immune responses using the Company's technology.

Revenue by source

(in thousands)	Year Ended December 31,	
	2021	2020
Instruments	\$ 11,420	\$ 7,432
Consumables	4,781	1,886
Extended service warranty	681	357
Other service revenue	376	712
Total revenue	\$ 17,258	\$ 10,387

Revenue by geographic area

Based on region of destination (in thousands)	Year Ended December 31,	
	2021	2020
Americas ⁽¹⁾	\$ 12,798	\$ 7,558
Europe ⁽²⁾	2,289	878
Greater China ⁽³⁾	1,311	1,129
Asia-Pacific ⁽⁴⁾	860	822
Total revenue	\$ 17,258	\$ 10,387

(1) Region includes revenue from the United States of America and Canada

(2) Region includes revenue from the United Kingdom, Belgium, France, Czech Republic, Spain, Germany, Sweden, Italy, Israel and Switzerland

(3) Region includes revenue from China and Taiwan

(4) Region includes revenue from Singapore, Japan, Australia, and Korea

Performance obligations

The Company regularly enters into contracts with multiple performance obligations. Most performance obligations are generally satisfied within a short time after the contract execution date. As of December 31, 2021, the aggregate amount of the transaction price allocated to remaining performance obligations was \$0.9 million, of which substantially all is expected to be recognized as revenue during 2022.

Contract balances

Contract balances represent amounts presented in the consolidated balances sheets when either the Company has transferred goods or services to the customer, or the customer has paid consideration to the Company under the contract. These contract balances included accounts receivable (see Note 5) and deferred revenue. Accounts receivable balances represent amounts billed to customers for goods and services when the Company has an unconditional right to payment of the amount billed. Deferred revenue, as of December 31, 2021 and 2020 was \$0.9 million and \$0.4 million respectively. Deferred revenue represents cash consideration received from customers for which all services or products have not yet been transferred. Revenue recorded in 2021 included \$0.1 million of previously deferred revenue that was included in contract liabilities as of December 31, 2020.

Note 5 - Supplemental Balance Sheet Details

Accounts receivable, net consists of the following:

(in thousands)	December 31,	
	2021	2020
Accounts receivable	\$ 4,146	\$ 2,972
Allowance for doubtful accounts	(46)	(50)
Total accounts receivable, net	\$ 4,100	\$ 2,922

(in thousands)	December 31,	
	2021	2020
Allowance for doubtful accounts, beginning of year	\$ 50	\$ 50
Write-offs of uncollectable accounts	(4)	—
Provision for allowance for doubtful accounts	—	—
Allowance for doubtful accounts, end of year	\$ 46	\$ 50

Inventories, net consists of the following:

(in thousands)	December 31,	
	2021	2020
Raw materials	\$ 22,179	\$ 3,631
Work in process	—	28
Finished goods	2,481	356
Reserve for excess and obsolete inventory	(361)	(60)
Total inventories, net	\$ 24,299	\$ 3,955

Property and equipment, net consist of the following:

(in thousands)	December 31,	
	2021	2020
Furniture and equipment	\$ 5,585	\$ 2,848
Computers and technology	2,139	1,453
Leasehold improvements	1,073	698
Total	8,797	4,999
Accumulated depreciation	(3,019)	(1,772)
Property and equipment, net	\$ 5,778	\$ 3,227

Depreciation expense was \$1.2 million and \$0.7 million for the years ended December 31, 2021 and 2020, respectively.

Accrued expenses and other current liabilities consist of the following:

(in thousands)	December 31,	
	2021	2020
Accrued compensation	\$ 3,656	\$ 867
Accrued operating expenses	3,556	1,081
Other, including warranties	615	181
Total accrued liabilities	\$ 7,827	\$ 2,129

Accrued compensation includes commissions of \$0.9 million, vacation of \$0.4 million, and bonuses of \$2.2 million at December 31, 2021 compared to commissions of \$0.4 million, vacation of \$0.2 million and bonuses of \$0.2 million at December 31, 2020. Accrued compensation increased significantly due to the increase in number of employees hired year

over year. Accrued operating expenses as of December 31, 2021 and 2020 primarily consists of accrued vendor payments and professional services fees of \$1.8 million and \$0.6 million, respectively.

Note 6 - Intangible assets

Intangible assets consist of the following:

		December 31, 2021			
(in thousands)	Remaining Useful Life (Years)	Gross	Accumulated Amortization	Net	
Patents	9 - 14	\$ 21,607	\$ 981	\$ 20,626	
Capitalized licenses	1 - 4	670	288	382	
Total intangible assets		\$ 22,277	\$ 1,269	\$ 21,008	

		December 31, 2020			
(in thousands)	Remaining Useful Life (Years)	Gross	Accumulated Amortization	Net	
Patents	8 - 14	\$ 1,182	\$ 52	\$ 1,130	
Capitalized licenses	2 - 5	670	157	513	
Total intangible assets		\$ 1,852	\$ 209	\$ 1,643	

Amortization expense was \$1.1 million and \$0.1 million for the years ended December 31, 2021 and 2020, respectively. The amortization of capitalized intangible assets is recognized in cost of product and service revenue. The amortization of purchased intangible assets is recognized in general and administrative operating expenses.

On May 12, 2021, the Company entered into a Patent Purchase Agreement to purchase a collection of 86 patents related to DNA and RNA sequencing for an aggregate purchase price of \$20.0 million. The Company closed the acquisition on May 15, 2021.

The estimated annual amortization of intangible assets for the next five years is shown in the following table. Actual amortization expense to be reported in future periods could differ from these estimates as a result of acquisitions, divestitures, and asset impairments, among other factors.

Year (in thousands)	Estimated Annual Amortization
2022	\$ 1,675
2023	1,675
2024	1,675
2025	1,592
2026	1,564

Note 7 - Debt

On December 30, 2020, the Company closed on a \$50.0 million Credit Agreement with a significant equity investor, of which the Company borrowed \$25.0 million immediately upon closing. In May 2021, the Company borrowed an additional \$10.0 million. An additional \$15.0 million originally remained available through March 31, 2022 subject to a revenue milestone, defined as total revenue of at least \$20.0 million over the twelve-month period most recently ended. On March 30, 2022, we entered into a Third Amendment to Credit Agreement and Guaranty with Perceptive Credit Holdings III, LP pursuant to which the prior \$15.0 million Tranche C term loan, which was available through March 31, 2022 subject to several conditions, was changed to \$7.5 million and such amount was borrowed on March 30, 2022. In addition, the Third Amendment added a new \$7.5 million Tranche D term loan, which remains available through June 30, 2022.

subject to several conditions, including pro forma compliance with the covenant showing total revenue of at least \$16.8 million for the twelve-month period ending March 31, 2022.

Borrowings under the Credit Agreement bear interest at the one-month LIBOR, with a 1.75% floor, plus a 9.50% margin (11.25% at December 31, 2021). Monthly payments of interest-only are due over the term of the loan with no scheduled loan amortization. Amounts borrowed are due and payable on the maturity date, December 30, 2025. The loan is secured by substantially all of the Company's assets. Financial covenants include a \$3.0 million minimum cash balance at all times and minimum revenue amounts measured on a quarterly basis. On October 29, 2021, the Company entered into the Second Amendment to, among other things, eliminate the minimum total revenue covenant for the twelve months ending September 30, 2021 and December 31, 2021 and reset the minimum total revenue covenants thereafter. Pursuant to the Second Amendment, the minimum total revenue covenant, as amended, will resume being tested for the twelve months ending March 31, 2022.

The total minimum revenue covenant requirements for the next twelve months are as follows:

Twelve-Month Period Ended	Minimum Total Revenue (in thousands)
March 31, 2022	16,797
June 30, 2022	18,256
September 30, 2022	21,722
December 31, 2022	26,545

In connection with the Credit Agreement closing, the Company issued to the lender warrants to purchase 97,504 shares of Series D preferred stock. The warrants have a 10-year contractual life and an exercise price of \$76.92 per warrant share. The fair value at issuance was estimated at \$4.4 million and was recorded as a warrant liability. Upon closing of the IPO on October 12, 2021, the Series D redeemable convertible preferred stock warrant was converted into a warrant exercisable for a total of 811,374 shares of common stock with an exercise price of \$9.62 per warrant share. In connection with the Third Amendment to the Credit Agreement dated March 30, 2022, the exercise price of the warrants has been changed from \$9.62 per warrant share to \$6.00 per warrant share. This common stock warrant is no longer considered "potentially redeemable" and the fair value of the warrant liability as of October 12, 2021 has been reclassified into equity in accordance with ASC 480 for the year ended December 31, 2021 (see Note 3).

In addition, given that the Credit Agreement contained additional tranches of potential borrowings at inception, the Company identified and recorded within other assets on the balance sheet a \$2.2 million asset related to future loan commitments at December 30, 2020. During 2021, \$0.8 million was reclassified as a reduction in the carrying value of the \$10.0 million tranche drawn in May 2021 on a pro-rata basis, and will be amortized over the remaining term of the debt. As of December 31, 2021, a \$1.2 million asset related to the future loan commitment remains within other assets on the balance sheet. The Company determined that the loan commitment meets the definition within ASC 480 as a freestanding financial instrument to be recorded at fair value given that it is both (1) legally detachable per the explicit ability provided to the creditor allowing it to assign all or part of its interest under the Credit Agreement to any person or entity; and (2) separately exercisable given that it can be exercised or not exercised at the Company's option without impacting the outstanding balance of the original \$25.0 million borrowed upon execution of the Credit Agreement. The remaining proceeds were allocated to the value of the initial debt borrowed and the discount resulting on such debt is being amortized over the term of the Credit Agreement.

On December 31, 2021, the process of cessation of LIBOR as a reference rate takes effect. After December 31, 2021, new borrowings will no longer use LIBOR as a reference rate. Instead, these borrowings will be subject to an interest rate based on either the Secured Overnight Financing Rate ("SOFR"), which is deemed a replacement benchmark for LIBOR under the Credit Agreement, or an alternate index to be agreed upon; provided that if such alternate rate of interest shall be less than 1.75%, such rate shall be deemed to be 1.75% for the purposes of the Credit Agreement. Between December 31, 2021 and June 30, 2023, any legacy borrowings may continue to use LIBOR as the basis for interest rates. After June 30, 2023, all borrowings will be based on SOFR or the alternate index.

Note 8 - Equity**Common stock**

As of December 31, 2021 and 2020, the Company had authorized 400,000,000 shares of Common Stock, \$0.001 par value per share ("Common Stock"), of which a total of 39,036,010 shares and 2,133,904 shares were outstanding, respectively.

Preferred stock

Upon closing of the IPO on October 12, 2021, all 3,344,836 shares of redeemable convertible preferred stock that were outstanding immediately prior to the closing of the IPO automatically converted into 26,758,688 shares of Common Stock. In addition, the Company issued 1,643,374 shares of Common Stock to the holders of the redeemable convertible preferred stock outstanding immediately prior to the closing of the IPO in respect of accrued dividends thereon accrued to but not including October 12, 2021, based on the IPO price of \$15.00 per share.

Redeemable preferred stock prior to conversion was as follows:

(in thousands, except share amounts)	Series A	Series A-2	Series B	Series B-2	Series C	Series C-2	Series D
Preferred Shares authorized	253,862	293,180	376,061	237,183	564,287	515,218	1,202,549
Preferred Shares outstanding prior to conversion	253,862	293,180	376,061	237,183	564,287	515,218	1,105,045
Aggregate liquidation preference	\$ 2,849	\$ 5,930	\$ 9,890	\$ 9,724	\$ 31,241	\$ 28,676	\$ 90,315

Under the Amended and Restated Certificate of Incorporation filed upon the Company's IPO, the Company authorized 20,000,000 shares of non-redeemable preferred stock, \$0.001 par value per share ("Preferred Stock"), of which no shares were outstanding at December 31, 2021.

Note 9 - Equity based compensation

The Company's 2014 Stock Plan (the "2014 Plan") provided for the granting of stock options or restricted stock to key employees, officers, directors and consultants. Upon effectiveness of the 2021 Plan (as defined below), no further issuances were made under the 2014 Plan.

The Company's 2021 Omnibus Incentive Compensation Plan (the "2021 Plan") was adopted by its board of directors and became effective on October 7, 2021. Following the IPO, all equity-based awards are granted under the 2021 Plan. The 2021 Plan provides for the grant of both non-statutory and incentive stock options, stock appreciation rights, restricted stock awards, restricted stock units, deferred share units, cash incentive awards and other equity-based or equity-related awards to the Company's employees, officers, directors and consultants. The terms of equity awards granted under the 2021 Plan to date are consistent with those granted under the 2014 Plan, as described below. The maximum number of shares of common stock reserved under the 2021 Plan is 3,271,801, plus the number of shares of the Company's common stock underlying awards under the 2014 Plan, not to exceed 5,113,324 shares, that become available again for grant under the 2014 Plan in accordance with its terms. The share pool will automatically increase on January 1 of each year beginning with January 1, 2022 by the lesser of (i) five percent (5%) of the number of shares of common stock issued and outstanding on December 31 of the immediately preceding calendar year and (ii) such number of shares of common stock determined by the Compensation Committee.

Stock options

Stock options expire 10 years from the date of grant. The stock options and restricted stock awards generally vest 25% upon the one-year anniversary of the service inception date and then ratably each month over the remaining 36 months. Upon termination of service, any unvested stock options are forfeited and returned to the Company. Vested stock options that are not exercised within the specified period, according to the terms and conditions of the option plan, following the termination as an employee, consultant, or service provider to the Company are surrendered back to the Company. Those

stock options are added back to the 2021 Plan and made available for future grants. Compensation cost is recorded on a straight-line basis over the requisite service period of the award based on the fair value of the options issued on the measurement date.

The following table summarizes stock option activity for the year ended December 31, 2021:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (In thousands)
Outstanding as of December 31, 2020	3,076,904	\$ 0.72	7.2	
Granted	2,289,400	4.95		
Forfeited	(93,982)	1.74		
Exercised	(167,044)	0.47		
Outstanding as of December 31, 2021	<u>5,105,278</u>	\$ 2.62	7.7	\$ 34,125
Vested and expected to vest as of December 31, 2021	<u>5,105,278</u>	\$ 2.62	7.7	\$ 34,125
Exercisable at December 31, 2021	2,536,521	\$ 0.74	6.2	\$ 21,441

The weighted-average grant-date fair value of stock options awarded during the years ended December 31, 2021 and 2020 was approximately \$6.36 per share and \$0.59 per share, respectively. The aggregate grant date fair value of stock options vested during the years ended December 31, 2021 and 2020 were \$66,000 and \$44,000, respectively. As of December 31, 2021, there was a total of \$12.8 million of unrecognized employee compensation costs related to non-vested stock option awards expected to be recognized over a weighted average period of 3.4 years.

The Company estimates the fair value of stock-based compensation utilizing the Black-Scholes option pricing model, which is dependent upon several variables, such as expected term, volatility, risk-free interest rate, and expected dividends. Each of these inputs is subjective and generally requires significant judgment to determine.

The following table summarizes the range of key assumptions used to determine the fair value of stock options granted during:

	Year Ended December 31,	
	2021	2020
Risk-free interest rate	0.94% - 1.40%	0.22 %
Expected term (in years)	7	7
Expected volatility	50%- 55%	50 %
Expected dividend yield	—	—
Exercise prices	\$1.83 - \$15.05	\$1.03
Estimated fair value of common stock	\$4.20 - \$15.05	\$1.03 - \$1.50

The risk-free interest rate assumption was based upon observed interest rates appropriate for the expected term of the stock options. Prior to the Company's IPO in October 2021, the expected volatility used was based on volatility of a group of similar entities, referred to as "guideline" companies. Subsequent to the IPO, the company continued to estimate its volatility based on the volatility of a group of similar entities, referred to as its "peer group". In evaluating similarity, the Company considered factors such as industry, stage of life cycle and size. The expected term is based on the average of the vesting period and the legal term. The Company has not declared any dividends in its history and does not expect to issue dividends over the life of the stock options and therefore has estimated the dividend yield to be zero.

Restricted stock awards

Restricted stock awards are rights to receive shares of the Company's Common Stock upon meeting specified vesting requirements. The fair value of a restricted stock award is the market value as determined by the closing price of the stock on the day of grant. These awards were granted under the Company's 2021 Plan.

The following table summarizes restricted stock award activity for the year ended December 31, 2021:

	Restricted Stock Awards	Weighted Average Grant Date Fair Value
Unvested as of December 31, 2020	—	\$ —
Granted	507,013	8.46
Vested	—	—
Forfeited	—	—
Unvested as of December 31, 2021	<u>507,013</u>	<u>\$ 8.46</u>

No restricted stock awards vested during the year ended December 31, 2021. As of December 31, 2021, there was approximately \$4.3 million of total unrecognized compensation cost related to restricted stock awards. This amount is expected to be recognized over the remaining weighted-average vesting period of 3.9 years.

Employee stock purchase plan

In the third quarter of 2021, the Company approved the 2021 Employee Stock Purchase Plan (the “ESPP”), which became effective upon completion of our IPO. A total of 389,500 shares of Common Stock was initially reserved for issuance under the ESPP on October 7, 2021. The maximum number of shares of the Company’s Common Stock which will be authorized for sale under the ESPP is equal to 2,400,000 shares. The number of shares of Common Stock reserved for issuance will automatically increase on January 1 of each calendar year, beginning on January 1, 2022, through January 1, 2031, by the lesser of (1) 1% of the number of outstanding shares of Common Stock as of the last day of the immediately preceding calendar year and (2) such number of shares of Common Stock determined by the administrator of the ESPP, provided, however, that in no event shall more than 2,400,000 shares of Common Stock be issued under the ESPP. As of December 31, 2021, there has not been an offering under the ESPP and no shares of Common Stock have been purchased under the ESPP.

Expense

The following table summarizes stock-based compensation expense, and also the allocation within the consolidated statements of operations:

(in thousands)	Year Ended December 31,	
	2021	2020
Research and development	\$ 310	\$ 35
General and administrative	1,305	455
Sales and marketing	468	27
Total stock-based compensation expense	<u>\$ 2,083</u>	<u>\$ 517</u>

Note 10 - Commitments**Operating leases**

The Company has multiple operating lease commitments for office space and equipment, which expire through 2026. The future rental payments required by the Company under the operating leases are approximately as follows:

(in thousands)	Year Ended December 31,	
2022	\$	1,523
2023		1,386
2024		1,328
2025		1,187
2026		687
Thereafter		—
Total	\$	6,111

The table above includes amounts for leases that were entered into as of January 1, 2022 and a number of short-term leases. The rent expense for the years ended December 31, 2021 and 2020 was approximately \$1.4 million and \$0.9 million, respectively.

Purchase Commitments

On May 12, 2021 the Company entered into a Supply Agreement with QIAGEN GmbH (the "Supply Agreement"), pursuant to which they have agreed to supply certain reagents to the Company, and the Company has agreed to certain annual minimum purchases. The future minimum purchase values are as follows:

(in millions)	Year Ended December 31,	
2022	\$	2.5
2023		4.0
2024		5.0
2025		7.0
2026		9.0
2027		10.0
Total	\$	37.5

Note 11 - Product warranties

The Company warrants certain products generally for periods of one year following the delivery date. Accrued warranty costs are included in accrued expenses and other current liabilities.

(in thousands)	December 31,	
	2021	2020
Accrued warranty costs, beginning of year	\$ 135	\$ 85
Cost of warranty services during the year	(100)	(50)
Estimated provision for warranty costs	250	100
Accrued warranty costs, end of year	<u>\$ 285</u>	<u>\$ 135</u>

Note 12 - Income taxes

For the years ended December 31, 2021 and 2020, the Company did not have a current or deferred income tax expense or benefit as the Company has incurred losses since inception.

The effective tax rate for the Company for the years ended December 31, 2021 and 2020 was zero percent. A reconciliation of the anticipated income tax rate by applying the statutory federal income tax rate of 21% to income before taxes to the amount reported in the statement of operations is as follows:

	Year Ended December 31,	
	2021	2020
U.S. statutory federal income tax rate	21.0 %	21.0 %
State income taxes	2.2 %	4.5 %
Permanent items	(1.2)%	— %
Stock-based compensation	0.4 %	— %
Other	0.6 %	— %
Change in valuation allowance	(23.0)%	(25.5)%
Effective income tax rate	— %	— %

The tax effects of temporary difference and carryforwards that give rise to significant portions of the net deferred tax assets were as follows:

(in thousands)	December 31,	
	2021	2020
Deferred tax assets:		
Stock based compensation	\$ 702	\$ 172
Other accruals	526	64
Deferred revenue	40	78
Inventory adjustments	90	26
Intangible assets	91	5
Net operating losses	30,585	13,278
Federal and state tax credits	1,288	928
Total deferred tax assets	33,322	14,551
Valuation allowance	(33,207)	(14,489)
Deferred tax assets, net of valuation allowance	115	62
Deferred tax liabilities:		
Depreciation and amortization	(115)	(62)
Total deferred tax liabilities	(115)	(62)
Deferred tax assets and liabilities, net of valuation allowance	\$ —	\$ —

As of December 31, 2021, the Company had net operating loss carryforwards for federal purposes of approximately \$12.7 million, which expire at various dates through 2033 and approximately \$112.8 million which have no expiration. The Company also had state net operating loss carryforwards of approximately \$79.2 million, which expire at various dates through 2043. The Company had federal research and development tax credit carryforwards available to offset future federal income taxes of approximately \$1.1 million and state of Connecticut research and development tax credit carryforwards available to offset future state income taxes of approximately \$0.2 million.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) was enacted which included provisions related to NOL carryovers and carrybacks. The CARES Act amended the NOL carryback rules by allowing NOLs arising in tax years beginning after December 31, 2017 and before January 1, 2021 to be carried back to each of the 5 years preceding the year of the loss to generate a refund of previously paid income taxes. In addition, the CARES Act temporarily removed the 80% limitation under which NOLs generated post-2017 could be used to offset no more than 80% of taxable income, and allows for full use of such NOLs for tax years before January 1, 2021. The Company has evaluated the relevant provisions of the CARES Act and has determined that it does not expect to recognize any income tax benefit related to these provisions due to its net operating losses in the current year and all prior years.

The Company’s valuation allowance increased during 2021 by \$18.7 million primarily due to the generation of net operating losses.

Future realization of the tax benefits of existing temporary differences and net operating loss carryforwards ultimately depends on the existence of sufficient taxable income within the carryforward period. As of December 31, 2021 and 2020, the Company performed an evaluation to determine whether a valuation allowance was needed. The Company considered all available evidence, both positive and negative, which included the results of operations for the current and preceding years. The Company concluded that it is more likely than not that the Company will not realize or the benefits of the net deferred tax assets. Accordingly, the Company maintained a full valuation allowance as of December 31, 2021 and 2020.

Under Internal Revenue Code Section 382, if a corporation undergoes an “ownership change,” the corporation’s ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income may be limited. Generally, an ownership change occurs when certain shareholders increase their aggregated ownership by more than 50 percentage points over their lowest ownership percentage in a testing period (typically three years). The Company has not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since becoming a “loss corporation” as defined in Section 382. Future changes in stock ownership, which may be outside of the Company’s control, may trigger an ownership change. In addition, future equity offerings or acquisitions that have an equity component of the purchase price could result in an ownership change. If an ownership change has occurred or does occur in the future, utilization of the NOL carryforwards or other tax attributes may be limited, which could potentially result in the expiration of a portion of the federal and state net operating losses and tax credit carryforwards before utilization, the reduction of the Company’s gross deferred tax assets and corresponding calculation allowance, and increased future tax liability to the Company.

As of December 31, 2021 and 2020, the Company did not have any unrecognized tax benefits. The Company has completed a study for the research and development credit carryforwards through December 31, 2020, and has not yet completed a study of research and development credit carryforwards for the year ended December 31, 2021. This study, once completed, may result in an adjustment to the Company’s research and development credit carryforwards; however, until the study is completed, and any adjustment is known, no amounts are being presented as an uncertain tax position. A full valuation allowance has been provided against the Company’s research and development credits and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the balance sheets or statements of operations if an adjustment were required.

To the extent penalties and interest would be assessed on any underpayment of income tax, the Company’s policy is that such amounts would be accrued and classified as a component of income tax expense in the financial statements. As of December 31, 2021 and 2020, the Company had no accrued interest or penalties related to uncertain tax positions.

Note 13 - Technology license agreements

License and Supply and Non-Exclusive License Agreements

The Company is party to certain license and supply agreements that provide the Company with commercial access rights to certain supplies. Under certain of the Company’s supply agreements, separate from the Supply Agreement discussed in Note 10, the Company is required to make annual minimum purchases of supplies (with such minimums ranging from \$25,000 per year to \$500,000 per year under the applicable agreements) during the terms of such agreements, which ranges from 5 to 6 years. The Company is also required to pay royalties on net sales of certain products and services under the license and supply agreements at rates that range from mid single-digit to low double-digit percentage. The Company is also party to a non-exclusive sublicense agreement that provides the Company with a non-exclusive sublicense to certain patent rights. During the term of the agreement, the Company is required to pay royalties at a low single-digit percentage rate on net revenue of products and services that are covered by the licensed patent rights. This agreement also contained a provision for a \$0.2 million payment upon a change of control or IPO event, which the Company paid in December 2021. For the years ended December 31, 2021 and 2020, the Company incurred an immaterial amount in royalty expense pursuant to these agreements.

Note 14 - Legal proceedings

The Company may be party to a litigation or subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, the Company currently believes that the final outcome of these ordinary course matters will not have a material adverse effect on its business. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors. The Company is not currently a party to any material legal proceedings, and the Company’s management believes that there are currently no claims or actions pending against the Company, the ultimate disposition of which could have a material adverse effect on the Company’s results of operations or financial condition.

Note 15 - Other income (expense), net

Other income (expense), net consisted of the following:

(in thousands)	Year Ended December 31,	
	2021	2020
Grant revenue	\$2,667	\$4,1
Change in fair value of warrants and loan commitment	(4,460)	(8
Other income (expense)	165	
Other income (expense), net	\$(1,628)	\$4,0

Note 16 - Net loss per share attributable to common stockholders

The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have an anti-dilutive effect:

	Year Ended December 31,	
	2021	2020
Options outstanding to purchase common stock	5,105,278	3,076,904
Convertible preferred stock (as converted to common stock)	—	25,693,216

Note 17 - Related party transactions

The Company has license agreements with Yale University and California Institute of Technology, which are holders of Common Stock. As described in Note 7, the Company has a Credit Agreement with Perceptive Credit Holdings III, LP, which is a holder of Common Stock. There are no current receivables or payables due from or to these entities as of December 31, 2021 and 2020.

Note 18 - Employee benefit plans

The Company maintains a retirement and profit sharing plan under Section 401(k) of the Internal Revenue Code for all of its domestic employees that meet certain qualifications. Participants in the plan may elect to contribute up to the maximum allowed by law. The Company elected to match 3% of the participant's contributions beginning in the year 2021. For the year ended December 31, 2021, the Company recorded \$0.6 million of expense for company contributions.

Note 19 - Subsequent events

The Company has evaluated for subsequent events through March 30, 2022, the date these financial statements were issued. On March 30, 2022, the Company entered into a Third Amendment to Credit Agreement and Guaranty with Perceptive Credit Holdings III, LP pursuant to which the prior \$15.0 million Tranche C term loan, which was available through March 31, 2022 subject to several conditions, was changed to \$7.5 million and such amount was borrowed on March 30, 2022. In addition, the Third Amendment added a new \$7.5 million Tranche D term loan, which remains available through June 30, 2022 subject to several conditions, including pro forma compliance with the covenant showing total revenue of at least \$16.8 million for the twelve-month period ending March 31, 2022.

In connection with entering into the above-referenced Third Amendment to the Credit Agreement, on March 30, 2022, the Company amended the warrant that had been previously issued to Perceptive Credit Holdings III, LP to purchase up to 811,374 shares of common stock at an exercise price of \$9.62 per share. The warrant exercise price was amended to \$6.00 per share.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosures

Not applicable.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Form 10-K. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgement in evaluating the cost-benefit relationship of possible controls and procedures. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were not effective as of December 31, 2021 due to the material weakness in internal control over financial reporting described below.

Material Weakness in Internal Control over Financial Reporting

We previously identified a material weakness in our internal control over financial reporting. Specifically, the material weakness related to lack of maintaining a sufficient complement of personnel commensurate with the accounting and financial reporting requirements in order to have adequate segregation of key duties and responsibilities, which affected the operation of controls over the recording of journal entries and reconciliation of key accounts. This material weakness did not result in a material misstatement to our annual or interim financial statements. We are in the process of implementing measures designed to improve internal control over financial reporting to remediate the control deficiencies that led to our material weakness by, among other things, hiring qualified personnel with appropriate expertise to perform specific functions and designing and implementing improved processes and internal controls, including establishing reviews over journal entries, segregation of duties and account reconciliations.

Notwithstanding the identified material weakness, management believes that the financial statements and related financial information included in this Form 10-K fairly present, in all material respects, our balance sheets, statements of operations, statements of changes in redeemable convertible preferred stock and stockholders’ equity (deficit) and statements of cash flows as of and for the periods presented. We will continue to assess the effectiveness of our internal control over financial reporting and take steps to remediate the known material weakness expeditiously.

Changes in Internal Control over Financial Reporting

Other than the changes to remediate the material weakness from the prior quarter, there were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Form 10-K that has materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Third Amendment to Credit Agreement

On March 30, 2022, we entered into a Third Amendment to Credit Agreement and Guaranty with Perceptive Credit Holdings III, LP pursuant to which the prior \$15.0 million Tranche C term loan, which was available through March 31, 2022 subject to several conditions, was changed to \$7.5 million and such amount was borrowed on March 30, 2022. In addition, the Third Amendment added a new \$7.5 million Tranche D term loan, which remains available through June 30, 2022 subject to several conditions, including pro forma compliance with the covenant showing total revenue of at least \$16.8 million for the twelve-month period ending March 31, 2022.

Warrant Amendment

In connection with entering into the above-referenced Third Amendment to the Credit Agreement, on March 30, 2022 we amended the warrant that had been previously issued to Perceptive Credit Holdings III, LP to purchase up to 811,374 shares of common stock at an exercise price of \$9.62 per share. The warrant exercise price was amended to \$6.00 per share. The warrant provides for the further adjustment of the exercise price and the number of shares issuable upon the exercise of the warrant solely in the event of certain stock dividends, stock subdivisions, stock combinations, reorganizations, reclassifications, fundamental changes or other similar transactions, including certain defined liquidity events in which the warrant is not exercised. The warrant is exercisable until the earlier of (i) December 30, 2030, the tenth anniversary of the original issue date, or (ii) the occurrence of certain defined liquidity events.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

Part III**Item 10. Directors, Executive Officers and Corporate Governance**

The information required by this Item will be included in our 2022 Proxy Statement and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this Item will be included in our 2022 Proxy Statement and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item will be included in our 2022 Proxy Statement and is incorporated herein by reference.

Equity Compensation Plans

The following summarizes our equity compensation plan and warrants outstanding at December 31, 2021:

	Equity Compensation Plan Information		
	(a)	(b)	(c)
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	5,916,652	\$ 3.58	2,664,788
Equity compensation plans not approved by security holders	—	—	—
Total	5,916,652	\$ 3.58	2,664,788

See “Item 8. Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements- Notes 7 and 9” for a description of our outstanding warrants and stock incentive plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item will be included in our 2022 Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information required by this Item will be included in our 2022 Proxy Statement and is incorporated herein by reference.

Part IV

Item 15. Exhibits and Financial Statement Schedules

1. Financial Statements

We include this portion of Item 15 under Part II, Item 8 of this Form 10-K.

2. Financial Statement Schedules

We include the financial statement schedules required by the applicable accounting regulations of the SEC in the notes to our consolidated financial statements and incorporate that information in this Item 15 by reference.

3. Exhibits

Number	Exhibit	Exhibit Description	Incorporated by Reference			
			Form	File No.	Exhibit	Filing Date
3.1		Eighth Amended and Restated Certificate of Incorporation of IsoPlexis Corporation	8-K	001-40894	3.1	October 13, 2020
3.2		Amended and Restated Bylaws of IsoPlexis Corporation	8-K	001-40894	3.2	October 13, 2020
4.1		Form of Common Stock Certificate of IsoPlexis Corporation	S-1/A	333-258046	4.1	August 20, 2020
4.2§		Amended and Restated Investors' Rights Agreement, dated as of December 30, 2020, by and among IsoPlexis Corporation and the other parties thereto	S-1/A	333-258046	4.2	August 20, 2020
4.3		Warrant Certificate, dated as of December 30, 2020, by and between IsoPlexis Corporation and Perceptive Credit Holdings III, LP	S-1	333-258046	4.3	July 20, 2021
4.4*		Description of Capital Stock				
4.5*		Amended Warrant Certificate by and between IsoPlexis Corporation and Perceptive Credit Holdings III, LP dated March 30, 2022				
10.1		Credit Agreement and Guaranty, dated as of December 30, 2020, by and among IsoPlexis Corporation, Perceptive Credit Holdings III, L.P., as administrative agent, and the other parties thereto	S-1	333-258046	10.1	July 20, 2021
10.2		First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021, by and among IsoPlexis Corporation, Perceptive Credit Holdings III, L.P. as administrative agent, and the other parties thereto	S-1	333-258046	10.2	July 20, 2021
10.3§		Amended and Restated License Agreement, dated as of November 28, 2015, by and between IsoPlexis Corporation and Yale University	S-1	333-258046	10.3	July 20, 2021
10.4§		Amendment to the License Agreement, dated as of December 19, 2016, by and between IsoPlexis Corporation and Yale University	S-1	333-258046	10.4	July 20, 2021
10.5§		Second Amendment to the License Agreement, dated as of January 8, 2018, by and between IsoPlexis Corporation and Yale University	S-1	333-258046	10.5	July 20, 2021

10.6§	License Agreement, dated as of March 8, 2017, by and between IsoPlexis Corporation and the California Institute of Technology	S-1	333-258046	10.6	July 20, 2021
10.7§	Patent Purchase Agreement, dated as of May 12, 2021, by and among QIAGEN Sciences, LLC, QIAGEN GmbH and IsoPlexis Corporation	S-1	333-258046	10.7	July 20, 2021
10.8†	Offer Letter, dated November 18, 2019, by and between IsoPlexis Corporation and John Strahley	S-1	333-258046	10.8	July 20, 2021
10.9†	Offer Letter, dated May 5, 2020, by and between IsoPlexis Corporation and Peter Siesel	S-1	333-258046	10.9	July 20, 2021
10.10§	Third Amendment to the License Agreement, executed on July 22, 2021 and effective as of April 10, 2021, by and between IsoPlexis Corporation and Yale University	S-1/A	333-258046	10.10	August 20, 2021
10.11†	Letter Agreement, dated April 12, 2021, by and between IsoPlexis Corporation and Siddhartha Kadia	S-1/A	333-258046	10.11	August 20, 2021
10.12†	Letter Agreement, dated July 22, 2021, by and between IsoPlexis Corporation and Michael Egholm	S-1/A	333-258046	10.12	August 20, 2021
10.13†	Letter Agreement, dated July 22, 2021, by and between IsoPlexis Corporation and Jason Myers	S-1/A	333-258046	10.13	August 20, 2021
10.14†	IsoPlexis Corporation 2014 Stock Plan	S-1/A	333-258046	10.14	August 20, 2021
10.15†	Form of Notice of Grant under the IsoPlexis Corporation 2014 Stock Plan	S-1/A	333-258046	10.15	August 20, 2021
10.16†	IsoPlexis Corporation Non-Employee Director Compensation Program	S-1/A	333-258046	10.18	August 20, 2021
10.17	Form of Indemnification Agreement	S-1/A	333-258046	10.19	September 23, 2021
10.18†	IsoPlexis Corporation 2021 Omnibus Incentive Compensation Plan	S-8	333-260161	99.2	October 8, 2021
10.19†	IsoPlexis Corporation 2021 Employee Stock Purchase Plan	S-8	333-260161	99.3	October 8, 2021
10.20†	Offer Letter, dated September 27, 2021, by and between IsoPlexis Corporation and Richard W. Rew II	8-K	001-40894	10.1	October 13, 2021
10.21†	Notice of Restricted Stock Award Agreement under the 2021 Omnibus Incentive Compensation Plan	10-Q	001-40894	10.21	November 12, 2021
10.22†	Notice of Stock Option Award Agreement under the 2021 Omnibus Incentive Compensation Plan	10-Q	001-40894	10.22	November 12, 2021
10.23	Second Amendment to Credit Agreement and Guaranty, dated as of October 29, 2021, by and among IsoPlexis Corporation, Perceptive Credit Holdings III, L.P. as administrative agent, and the other parties thereto	8-K	001-40894	10.1	November 1, 2021
10.24*	Third Amendment to Credit Agreement and Guaranty, dated as of March 30, 2022, by and among IsoPlexis Corporation, Perceptive Credit Holdings III, L.P. as administrative agent, and the other parties thereto				
21.1*	Subsidiaries of the Registrant				
23.1*	Consent of Deloitte and Touche LLP				

31.1*	CEO Certification pursuant to Section 302 of the Sarbanes-Oxley Act
31.2*	CFO Certification pursuant to Section 302 of the Sarbanes-Oxley Act
32.1*†	CEO Certification pursuant to Section 906 of the Sarbanes-Oxley Act
32.2*‡	CFO Certification pursuant to Section 906 of the Sarbanes-Oxley Act
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (contained in Exhibit 101)

* Filed herewith.

† Indicates management contract or compensatory plan.

§ Portions of the exhibit, marked by brackets, have been omitted because the omitted information (i) is not material and (ii) is the type of information the Company treats as private or confidential.

‡ The certifications attached as Exhibits 32.1 and 32.2 that accompany this Annual Report on Form 10-K are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of IsoPlexis Corporation under the Securities Act of 1933, as amended, or the Securities Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

m 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirement of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

IsoPlexis Corporation

By: /s/ Sean Mackay
 Name: Sean Mackay
 Title: Chief Executive Officer and Co-Founder
 Date: March 30, 2022

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
By: <u>/s/ Sean Mackay</u> Sean Mackay	Chief Executive Officer, Co-Founder and Director (<i>Principal Executive Officer</i>)	March 30, 2022
By: <u>/s/ John Strahley</u> John Strahley	Chief Financial Officer (<i>Principal Financial Officer</i>)	March 30, 2022
By: <u>/s/ Rajesh Khakhar</u> Rajesh Khakhar	Vice President, Finance (<i>Principal Accounting Officer</i>)	March 30, 2022
By: <u>/s/ John G. Conley</u> John G. Conley	Chairman of the Board	March 30, 2022
By: <u>/s/ Michael Egholm</u> Michael Egholm	Director	March 30, 2022
By: <u>/s/ James R. Heath</u> James R. Heath	Director	March 30, 2022
By: <u>/s/ Gregory P. Ho</u> Gregory P. Ho	Director	March 30, 2022
By: <u>/s/ Siddhartha Kadia</u> Siddhartha Kadia	Director	March 30, 2022
By: <u>/s/ Daniel Wagner</u> Daniel Wagner	Director	March 30, 2022
By: <u>/s/ Jason Myers</u> Jason Myers	Director	March 30, 2022
By: <u>/s/ Adam Wieschhaus</u> Adam Wieschhaus	Director	March 30, 2022

ISOPLEXIS CORPORATION
DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

The following description summarizes the material terms of the capital stock of IsoPlexis Corporation (the "Company," "we," or "us") and provisions of our amended and restated certificate of incorporation and our amended and restated bylaws. The following description is not complete and may not contain all the information you should consider before investing in our capital stock. This description is summarized from, and qualified in its entirety by reference to, our amended and restated certificate of incorporation, our amended and restated bylaws and our amended and restated investors' rights agreement, each of which is included as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2021, and applicable provisions of Delaware law.

Authorized Capital Stock

Our authorized capital stock consists of 400,000,000 shares of common stock, par value \$0.001 per share, and 20,000,000 shares of preferred stock, par value \$0.001 per share.

Common Stock

Holders of our common stock are entitled to one vote per share on all matters submitted to a vote of stockholders, including the election of directors. Our common stockholders are not entitled to cumulative voting in the election of directors. Unless a different vote is required by applicable law or specifically required by our amended and restated certificate of incorporation or our amended and restated bylaws, if a quorum exists at any meeting of stockholders, stockholders shall have approved any matter (other than the election of directors, which is described below) if a majority of votes cast on such matter by stockholders present in person or represented by proxy at the meeting and entitled to vote on such matter are in favor of such matter. Subject to the rights of the holders of any future series of preferred stock to elect directors under specified circumstances, if a quorum exists at any meeting of stockholders, stockholders shall have approved the election of a director if a plurality of the votes cast at any meeting for the election of such director are in favor of such election.

Subject to preferences that may be applicable to any shares of preferred stock that we may designate and issue in the future, holders of our common stock are entitled to receive ratably such dividends as may be declared by our board of directors out of funds legally available therefor 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.

Upon liquidation, dissolution or winding up of the Company, holders of our common stock will be entitled to receive their ratable share of the net assets of the Company available after payment of all debts and other liabilities, subject to the prior preferential rights and payment of liquidation preferences, if any, of any outstanding shares of preferred stock. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. There are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of 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 preferred stock that we may designate in the future.

Preferred Stock

Our board of directors has the authority, subject to the limitations imposed by Delaware law or the listing rules of The Nasdaq Stock Market LLC ("Nasdaq"), without any further vote or action by our stockholders, to issue preferred stock in one or more series and to fix the designations, powers, preferences, limitations and rights of the shares of each series, including:

- dividend rates;
- conversion rights;
- voting rights;
- terms of redemption;

- liquidation preferences;
- sinking fund terms; and
- the number of shares constituting each series.

Satisfaction of any dividend preferences of outstanding shares of preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of our liquidation, dissolution or winding-up before any payment is made to the holders of shares of our common stock.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock, and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. There are no current agreements or understandings with respect to the issuance of preferred stock and our board of directors has no present intentions to issue any shares of preferred stock.

Certain Anti-Takeover Provisions of our Amended and Restated Certificate of Incorporation, our Amended and Restated Bylaws and Delaware Law

Certain provisions of our amended and restated certificate of incorporation, our amended and restated bylaws and the Delaware General Corporation Law (the “DGCL”) may discourage or make more difficult a takeover attempt that a stockholder might consider to be in the stockholder’s best interest. These provisions may also adversely affect the prevailing market price for shares of our common stock. We believe that the benefits of increased protection give us the potential ability to negotiate with the proponent of an unsolicited proposal to acquire or restructure us, which may result in an improvement of the terms of any such proposal in favor of our stockholders, and outweigh any potential disadvantage of discouraging those proposals.

Authorized but Unissued Shares of Capital Stock

Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval, subject to the applicable provisions of the DGCL and rules of Nasdaq. These additional shares may be used for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans.

One of the effects of the existence of authorized but unissued common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at a price higher than the prevailing market price.

Classified Board of Directors

Our amended and restated certificate of incorporation provides that our board of directors is divided into three classes of directors, with the classes divided as nearly equal in number as possible. The directors in each class serve for a three-year term, one class being elected each year by our stockholders, with staggered three-year terms. Only one class of directors is elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year term. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control of us or our management.

Board Vacancies and Board Size

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that any vacancies, including any newly created directorships, on our board of directors will be filled by the affirmative vote of the majority of the remaining directors then in office, even if such directors constitute less than a quorum, or by a sole

remaining director. In addition, the number of directors constituting our board of directors is permitted to be set only by a resolution adopted by a majority vote of our board of directors; provided that the number of directors shall not be fewer than five and not greater than 15 directors as provided by our amended and restated certificate of incorporation. These provisions prevent a stockholder from increasing the size of our board of directors and then gaining control of our board of directors by filling the resulting vacancies with the stockholder's own nominees. This makes it more difficult to change the composition of our board of directors and promotes continuity of management.

No Cumulative Voting

Under the DGCL, stockholders are not entitled to cumulate votes in the election of directors unless a corporation's certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation does not provide for cumulative voting.

Directors Removed Only for Cause

Our amended and restated certificate of incorporation provides that stockholders may remove directors only for cause by the affirmative vote of holders of at least 66 2/3% of the voting power of our then outstanding capital stock.

Stockholder Action and Special Meetings of Stockholders

Our amended and restated certificate of incorporation provides that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. As a result, a holder controlling a majority of our capital stock would not be able to amend our amended and restated bylaws or remove directors without holding a meeting of our stockholders called in accordance with our amended and restated certificate of incorporation. Our amended and restated certificate of incorporation further provides that special meetings of our stockholders may be called only by a majority of our board of directors, the chairperson of our board of directors or our Chief Executive Officer, thus prohibiting a stockholder from calling a special meeting. These provisions may delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our amended and restated bylaws contain advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors at our annual meeting of stockholders, and also specify certain procedural requirements regarding the form, content and timing of such notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also 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 the Company.

Amendment of Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Any amendment, alteration or repeal of our amended and restated bylaws by our stockholders requires the affirmative vote of the holders of at least 66 2/3% in voting power of all the then outstanding shares of stock entitled to vote thereon, voting together as a single class, although our amended and restated bylaws may be amended by a simple majority vote of our board of directors.

The DGCL provides generally that the affirmative vote of a majority of the outstanding shares entitled to vote thereon, voting together as a single class, is required to amend a corporation's certificate of incorporation or bylaws, unless the corporation's certificate of incorporation requires a greater percentage. Our amended and restated certificate of incorporation provides that certain specified provisions in our amended and restated certificate of incorporation may be amended, altered or repealed only by the affirmative vote of the holders of at least 66 2/3% in voting power of all the then outstanding shares of our stock entitled to vote thereon, voting together as a single class, including the following provisions:

- the provisions providing for a classified board of directors (the election and term of our directors);
- the provisions regarding filling vacancies on our board of directors and newly created directorships;

- the provisions regarding resignation and removal of directors;
- the provisions regarding stockholder action by written consent;
- the provisions regarding calling special meetings of stockholders;
- the provision establishing the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation;
- the provisions eliminating monetary damages for breaches of fiduciary duty by a director;
- the provision requiring a 66 2/3% supermajority vote for stockholders to amend our bylaws; and
- the amendment provision requiring that the above provisions be amended only with a 66 2/3% supermajority vote.

Section 203 of the Delaware General Corporation Law

We are subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for three years following the date that such stockholder became an interested stockholder, unless:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned by (1) persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a “business combination” to include mergers, asset sales and other transactions resulting in a financial benefit to a stockholder and an “interested stockholder” as a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation’s outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing changes in control of us.

Certain Provisions of Our Amended and Restated Certificate of Incorporation and Delaware Law

Dissenters’ Rights of Appraisal and Payment

Under the DGCL, with certain exceptions, our stockholders will have appraisal rights in connection with a merger or consolidation in which we are a constituent entity. Pursuant to the DGCL, stockholders who properly demand and perfect appraisal rights in connection with such merger or consolidation will have the right to receive payment of the fair value of their shares as determined by the Court of Chancery of the State of Delaware, if any, on the amount determined to be the fair value, from the effective time of the merger or consolidation through the date of payment of the judgment.

Stockholders’ Derivative Actions

Under the DGCL, any of our stockholders may bring an action in our name to procure a judgment in our favor, also known as a derivative action, provided that the stockholder bringing the action is a holder of our shares at the time of the transaction to which the action relates or such stockholder’s stock thereafter devolved by operation of law. To bring such an action, the stockholder must otherwise comply with Delaware law regarding derivative actions.

Exclusive Forum

Our amended and restated certificate of incorporation requires, to the fullest extent permitted by law, that (1) any derivative action or proceeding brought on behalf of the Company, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or stockholders to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of our amended and restated certificate of incorporation, our amended and restated bylaws or the DGCL, or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware and (4) any other action asserting a claim against us that is governed by the internal affairs doctrine, in each case, may be brought only in specified courts in the State of Delaware. As described below, this provision will not apply to suits brought to enforce any duty or liability created by the Securities Act of 1933, as amended (the "Securities Act") or the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or rules and regulations thereunder, or any other claim for which there is exclusive federal or concurrent federal and state jurisdiction.

Our amended and restated certificate of incorporation also provides that the federal district courts of the United States of America will be the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act. However, Section 22 of the Securities Act provides that federal and state courts have concurrent jurisdiction over lawsuits brought pursuant to the Securities Act or the rules and regulations thereunder. To the extent the exclusive forum provision restricts the courts in which claims arising under the Securities Act may be brought, there is uncertainty as to whether a court would enforce such a provision. Our amended and restated certificate of incorporation also provides that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to the foregoing provision; provided, however, that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. This provision does not apply to claims brought under the Exchange Act.

We recognize that the forum selection clause in our amended and restated certificate of incorporation may impose additional litigation costs on stockholders in pursuing any such claims, particularly if the stockholders do not reside in or near the State of Delaware. Additionally, the forum selection clause in our amended and restated certificate of incorporation may limit our stockholders' ability to bring a claim in a forum that they find favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. The Court of Chancery of the State of Delaware may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders.

Limitation of Liability and Indemnification of Directors and Officers

Our amended and restated certificate of incorporation includes provisions that limit the personal liability of our directors for monetary damages for breach of their fiduciary duties as directors, except to the extent that such limitation is not permitted under the DGCL. Such limitation shall not apply, except to the extent permitted by the DGCL, to (1) any breach of a director's duty of loyalty to us or our stockholders, (2) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (3) any unlawful payment of a dividend or unlawful stock repurchase or redemption, as provided in Section 174 of the DGCL, or (4) any transaction from which a director derived an improper personal benefit. These provisions will have no effect on the availability of equitable remedies such as an injunction or rescission based on a director's breach of the director's duty of care. Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to that amendment or repeal.

Our amended and restated certificate of incorporation and our amended and restated bylaws provide for indemnification, to the fullest extent permitted by the DGCL, of any person made or threatened to be made a party to any action, suit or proceeding by reason of the fact that such person is or was a director or officer of the Company, or, while a director or officer of the Company, at the request of the Company, serves or served as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or any other enterprise, against all expenses, liabilities and other losses reasonably incurred in connection with the defense or settlement of such action, suit or proceeding. In addition, we have entered into indemnification agreements with each of our current directors pursuant to which we have agreed to indemnify each such director to the fullest extent permitted by the DGCL. We are also expressly authorized to carry directors' and officers' insurance to protect us and our directors and officers for some liabilities.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, we have been informed that in the opinion of the SEC such indemnification is against public policy and is therefore unenforceable.

Registration Rights

We are party to our sixth amended and restated investors' rights agreement (the "investor rights agreement"), dated as of December 30, 2020, with certain holders of our capital stock, which provides, in relevant part, that certain holders of our common stock will be entitled to rights with respect to the registration of their shares under the Securities Act as described below. The registration rights set forth in the investor rights agreement will terminate upon the earlier of (i) a deemed liquidation event (such as (a) a merger or consolidation in which we are a constituent party, (b) the sale, lease, transfer, exclusive license or other disposition by us of all or substantially all of our assets or (c) any transaction to which we are a party in which any entity or person, or a group of related persons or entities, acquires capital stock or other equity securities representing at least a majority of the voting power of the Company (other than in connection with certain financing transactions)) and (ii) October 12, 2026 (five years following the closing of our initial public offering), or, with respect to any particular stockholder, when such stockholder ceases to hold registrable securities (as defined in the investor rights agreement). We will pay the registration expenses (other than underwriting discounts, selling commissions and other selling expenses), including the reasonable fees and disbursements of one counsel, of the holders of the securities registered pursuant to the registrations described below. However, we will not be required to bear the expenses in connection with the exercise of a demand registration if the registration request is subsequently withdrawn at the request of the selling stockholders holding a majority of the securities to be registered (in which case all selling stockholders shall bear such expenses pro rata based upon the number of shares that were to be included in the withdrawn registration), unless such selling stockholders agree to forfeit their right to one future registration.

S-1 Demand Registration Rights

Certain holders of shares of our common stock are entitled to certain Form S-1 demand registration rights pursuant to the investor rights agreement. At any time after the earlier of (i) December 30, 2023 and (ii) 180 days after the effective date of the registration statement of our initial public offering, the holders of at least 50% of the registrable securities then outstanding may make a written request that we register the offer and sale of their shares on a registration statement on Form S-1. Such request for registration must cover at least 40% of the registrable securities then outstanding, or a lesser percent if the anticipated aggregate offering price, net of payment of underwriting discounts, selling commissions and other selling expenses, is at least \$10.0 million. We are obligated to effect only one such registration. If we determine that it would be materially detrimental to us and our stockholders to effect such a demand registration, we have the right to defer such registration, not more than once in any 12-month period, for a period of up to 120 days. In addition, we will not be required to effect a demand registration during the period beginning 60 days prior to our good faith estimate of the date of the filing and ending on a date 180 days following the effectiveness of a registration statement initiated by us. In addition, in an underwritten public offering, the managing underwriter has the right, subject to specified conditions, to limit the number of shares that such holders may include for registration.

S-3 Registration Rights

Certain holders of our common stock are entitled to certain Form S-3 demand registration rights pursuant to the investor rights agreement. The holders of at least 20% of registrable securities then outstanding may make a written request that we register the offer and sale of their shares on a registration statement on Form S-3 if we are eligible to file a registration statement on Form S-3, so long as the request covers securities the anticipated aggregate offering price of which, net of underwriting discounts, selling commissions and other selling expenses, is at least \$3.0 million. These stockholders may make an unlimited number of requests for registration on Form S-3. However, we will not be required to effect a registration on Form S-3 if we have effected two such registrations within the 12-month period preceding the date of the request. Additionally, if we determine that it would be materially detrimental to us and our stockholders to effect such a registration, we have the right to defer such registration, not more than once in any 12-month period, for a period of up to 120 days. Further, we will not be required to effect a demand registration during the period beginning 30 days prior to our good faith estimate of the filing of and ending on a date 90 days following the effectiveness of a registration statement initiated by us. In addition, in an underwritten public offering, the managing underwriter has the right, subject to specified conditions, to limit the number of shares that such holders may include for registration.

Piggyback Registration Rights

The investor rights agreement provides that if we propose to register the offer and sale of our common stock under the Securities Act, in connection with the public offering of such common stock solely for cash, the holders of registrable securities will be entitled to certain “piggyback” registration rights allowing the holders to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to (i) a registration related to the sale of securities to our employees or a subsidiary’s employees pursuant to any employee benefit plan, (ii) a registration relating to a transaction covered by Rule 145 promulgated under the Securities Act, (iii) a registration on any registration form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of our registrable securities or (iv) a registration in which the only common stock being offered is common stock issuable upon conversion of debt securities that are also being registered, the holders of these registrable securities are entitled to notice of the registration and have the right, subject to certain limitations, to include their shares in the registration. We will have the right to terminate or withdraw any registration initiated pursuant to such “piggyback registration” rights described above before the effective date of such registration, whether or not any stockholder has elected to include shares of their common stock in such registration. In addition, in an underwritten public offering, the managing underwriter has the right, subject to specified conditions, to limit the number of shares that such holders may include for registration.

Listing

Our common stock is listed on the Nasdaq Global Select Market under the symbol “ISO.”

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent’s address is 150 Royall Street, Canton, MA 02021.

WARRANT CERTIFICATE

THIS WARRANT CERTIFICATE AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “**SECURITIES ACT**”), OR QUALIFIED UNDER ANY STATE OR FOREIGN SECURITIES LAWS AND MAY NOT BE OFFERED FOR SALE, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED OR ASSIGNED UNLESS (I) A REGISTRATION STATEMENT COVERING SUCH SHARES IS EFFECTIVE UNDER THE SECURITIES ACT AND IS QUALIFIED UNDER APPLICABLE STATE AND FOREIGN LAW OR (II) THE TRANSACTION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS UNDER THE SECURITIES ACT AND THE QUALIFICATION REQUIREMENTS UNDER APPLICABLE STATE AND FOREIGN LAW.

Warrant Shares Issuable: 811,374 Shares of Common Stock

Warrant Certificate No.: 2

Issue Date: December 30, 2020 (the “**Issue Date**”)

FOR VALUE RECEIVED, IsoPlexis Corporation, a Delaware corporation (the “**Company**”), hereby certifies that Perceptive Credit Holdings III, LP or any of its registered assigns (collectively, the “**Holder**”) is entitled to purchase from the Company up to 811,374 duly authorized, validly issued, fully paid and nonassessable shares of the Company’s Common Stock at the applicable per share Exercise Price (defined below), all subject to the terms, conditions and adjustments set forth below in this Warrant Certificate. Certain capitalized terms used herein are defined in **Section 1**.

The original warrant certificate for 97,504 shares of Series D Preferred Stock (the “**Original Warrant Certificate**”) was issued on the Issue Date pursuant to the terms of the Credit Agreement and Guaranty, dated as of December 30, 2020 (as amended or otherwise modified from time to time, the “**Credit Agreement**”), among the Company, as the borrower, the guarantors from time to time party thereto, the lenders from time to time party thereto and Perceptive Credit Holdings III, LP, as administrative agent. On October 12, 2021, the Company completed its initial public offering pursuant to which all shares of the Company’s outstanding Series D Preferred Stock were automatically converted into shares of the Company’s Common Stock, and pursuant to the terms of the Original Warrant Certificate, such warrant became exercisable for 811,374 shares of Common Stock at an exercise price of \$9.62. In connection with the Third Amendment to the Credit Agreement dated as of March 30, 2022 (the “**Amendment Date**”), the Company and the Holder have agreed to (i) lower the Exercise Price from \$9.62 per share to \$6.00 per share and (ii) re-issue the Original Warrant Certificate in the form of this Warrant Certificate (this “**Warrant Certificate**”) reflecting the aggregate number of shares of Common Stock, and the revised Exercise Price, in effect as of the Amendment Date. This Warrant Certificate amends and replaces the Original Warrant Certificate in its entirety. For the avoidance of doubt, the Issue Date shall remain December 30, 2020 for all purposes hereunder.

Section 1. Definitions. The following terms when used herein have the following meanings:

“**Aggregate Exercise Price**” means, with respect to any exercise of this Warrant Certificate for Warrant Shares, an amount equal to the product of (i) the number of Warrant Shares in respect of which this Warrant Certificate is then being exercised pursuant to **Sections 3** multiplied by (ii) the Exercise Price.

“**Bloomberg**” has the meaning set forth within the definition of VWAP.

“**Board**” means the board of directors of the Company.

“**Business Day**” means any day, except a Saturday, Sunday or legal holiday, on which banking institutions in the city of New York, New York are authorized or obligated by law or executive order to close.

“**Cashless Exercise**” has the meaning set forth in **Section 3(b)**.

“**Change in Control**” means a transaction or series of related transactions in which a Person, or a group of related Persons, that is not an affiliate of the Company or a stockholder, director or officer of the Company or an affiliate thereof, acquires from stockholders of the Company shares representing more than fifty percent (50%) of the outstanding voting power of the Company

“**Common Stock**” means the common stock, par value \$0.001 per share, of the Company, and any capital stock into which such Common Stock shall have been converted, exchanged or reclassified following the date hereof.

“**Common Stock Deemed Outstanding**” means, at any given time, the sum of (i) the number of shares of Common Stock actually outstanding at such time, plus (ii) the number of shares of Common Stock issuable upon exercise of Options actually outstanding at such time, plus (iii) the number of shares of Common Stock issuable upon conversion or exchange of Convertible Securities actually outstanding at such time (treating as actually outstanding any Convertible Securities issuable upon exercise of Options actually outstanding at such time), in each case, regardless of whether the Options or Convertible Securities are actually exercisable at such time; provided that Common Stock Deemed Outstanding at any given time shall not include shares owned or held by or for the account of the Company or any of its wholly owned subsidiaries.

“**Common Stock Equivalents**” means any securities of the Company which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, the Warrant Shares and any other debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“**Company**” has the meaning set forth in the preamble.

“**Convertible Securities**” means any debt, equity or other securities that are, directly or indirectly, convertible into or exchangeable for Common Stock.

“**Credit Agreement**” has the meaning set forth in the preamble.

“**Demand Registration**” has the meaning set forth in **Section 6(b)**.

“**DTC**” means the Depository Trust Company.

“**DWAC**” has the meaning set forth in **Section 3(i)**.

“**Excluded Issuance**” means (i) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants to, the Company pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board or upon exercise of options or warrants granted to such parties pursuant to any such plan or arrangement; (ii) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the Issue Date, (iii) shares of Common Stock issued or issuable pursuant to any event for which adjustment is made pursuant to Section 4, and (iv) any issuance of Warrant Shares upon the exercise of this Warrant Certificate.

“**Exercise Certificate**” has the meaning set forth in **Section 3(a)(i)**.

“**Exercise Date**” means, for any given exercise of this Warrant Certificate, whether in whole or in part, the date on which the conditions to such exercise as set forth in **Section 3** shall have been satisfied at or prior to 5:00 p.m., Eastern time, on a Business Day, including, without limitation, the receipt by the Company of the Exercise Certificate and the applicable Aggregate Exercise Price.

“**Exercise Period**” has the meaning set forth in **Section 2**.

“**Exercise Price**” means a per share price equal to \$6.00.

“**Fair Market Value**” means, if the Company’s equity securities are listed on a Trading Market, as of any particular Trading Day, (i) the VWAP of such equity securities for such day or (ii) if there have been no sales on any Trading Market on any such day, the average of the highest bid and lowest asked prices for the Company’s equity securities on all applicable Trading Markets at the end of such day. If the Company’s equity securities are not listed, quoted or otherwise available for trading, the “Fair Market Value” of the applicable class of equity securities shall be the fair market value, per share, of such equity securities as determined jointly by the Board and the Holder.

“**FAST**” has the meaning set forth in **Section 3(i)**.

“**Fundamental Change**” means any event or circumstance that constitutes or results in (i) a Change in Control or (ii) a Liquidity Event.

“**Holder**” has the meaning set forth in the preamble.

“**Investors Rights Agreement**” means that certain Sixth Amended and Restated Investors’ Rights Agreement by and among the Company, certain investors party thereto, and certain other parties dated as of December 30, 2020, as amended.

“**Issue Date**” has the meaning set forth in the preamble.

“Liquidity Event” means:

(a) a merger or consolidation in which the Company is a constituent party or a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, except for (i) any such merger or consolidation with an entity that is an affiliate of the Company or an affiliate of any shareholder of the Company or (ii) any such merger or consolidation involving the Company or a subsidiary in which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation;

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company or any subsidiary of the Company to an independent third party that is not an affiliate of the Company or an affiliate of any shareholder of the company of all or substantially all the assets of the Company and its subsidiaries taken as a whole or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Company if substantially all of the assets of the Company and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Company; or

(c) the liquidation, dissolution or winding up of the Company, whether voluntary or involuntary.

For the avoidance of doubt, a public offering of the capital stock of the Company or of any entity into which the Company has been merged or consolidated, shall not constitute a “Liquidity Event” for the purpose of this Warrant.

“Marketable Securities” means securities that (a) are tradable on an established national U.S. or non-U.S. stock exchange or reported through NASDAQ or a comparable established non-U.S. over-the-counter trading system and (b) are not subject to restrictions on transfer under the Securities Act or contractual restrictions on transfer.

“Nasdaq” means The Nasdaq Stock Market, Inc.

“Options” means any warrants or other rights or options to subscribe for or purchase Common Stock or Convertible Securities.

“OTC Bulletin Board” means the National Association of Securities Dealers, Inc. OTC Bulletin Board.

“Person” means any individual, sole proprietorship, partnership, limited liability company, corporation, joint venture, trust, incorporated organization or government or department or agency thereof.

“**Prospectus**” means the prospectus or prospectuses included in any Registration Statement, as amended or supplemented by any prospectus supplement with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference in such prospectus or prospectuses.

“**Purchase Rights**” has the meaning set forth in **Section 5**.

“**Registrable Securities**” shall mean (i) the Warrant Shares issuable upon the exercise of this Warrant Certificate and (ii) those securities defined as “Registrable Securities” under the Investors Rights Agreement. The parties hereto agree that, as such term is used in this Warrant Certificate and as such term is used in the Investors Rights Agreement, the Warrant Shares shall be deemed to be Registrable Securities for the purposes of the registration rights set forth in the Investors Rights Agreement at all times that the Holder has the right to acquire or obtain from the Company the Warrant Shares, whether or not such acquisition has actually been effected.

“**Registration Statement**” means any registration statement of the Company which covers any of the Registrable Securities, including the Prospectus, amendments and supplements to such Registration Statement, including post-effective amendments, all exhibits and all materials incorporated by reference in such Registration Statement.

“**Right of First Refusal and Co-Sale Agreement**” means that certain Sixth Amended and Restated Right of First Refusal and Co-Sale Agreement by and among the Company, certain investors party thereto, and certain other parties dated as of December 30, 2020, as amended.

“**SEC**” means the Securities and Exchange Commission or any successor thereto.

“**Securities Act**” means the Securities Act of 1933, as amended.

“**Successor Entity**” means, with respect to any Fundamental Change as a result of which the Company will not be the surviving entity, the successor entity resulting from such Fundamental Change.

“**Trading Day**” means a day on which the principal Trading Market is open for trading.

“**Trading Market**” means Nasdaq or, if the Company’s equity securities are not listed on Nasdaq, such other principal US or foreign exchange or market (including the OTC Bulletin Board) on which the Company’s equity securities are quoted or available for trading.

“**Transfer Agent**” has the meaning set forth in **Section 3(c)(ii)**.

“**Unlegended Shares**” has the meaning set forth in **Section 12(a)(iii)**.

“**Unrestricted Conditions**” has the meaning set forth in **Section 12(a)(ii)**.

“**VWAP**” means, for any security as of any day or period of days (as the case may be), the volume weighted average sale price on Nasdaq as reported by, or based upon data reported by Bloomberg Financial Markets or an equivalent, reliable reporting service reasonably acceptable to

the Holder and the Company (collectively, “**Bloomberg**”) or, if Nasdaq is not the principal trading market for such security, the volume weighted average sale price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg or, if no volume weighted average sale price is reported for such security by Bloomberg, then the last closing trade price of such security as reported by Bloomberg, or, if no last closing trade price is reported for such security by Bloomberg, the average of the bid prices of any market makers for such security that are listed in the over the counter market by the Financial Industry Regulatory Authority, Inc. or on the OTC Bulletin Board (or any successor) or in the “pink sheets” (or any successor) by the OTC Markets Group, Inc.; provided that if VWAP cannot be calculated for such security on such date in the manner provided above, the VWAP shall be the fair market value as mutually determined by the Company and the Holder.

“**Warrant**” or “**Warrant Certificate**” means this Warrant Certificate and all subsequent warrant certificates issued upon division, combination or transfer of, or in substitution for, this Warrant Certificate.

“**Warrant Register**” has the meaning set forth in **Section 7**.

“**Warrant Shares**” means the shares of Common Stock, or other capital stock of the Company then purchasable upon exercise of this Warrant Certificate in accordance with the terms of this Warrant Certificate.

Section 2. Term of Warrant Certificate. Subject to the terms and conditions hereof, at any time or from time to time on or after the Issue Date and prior to 5:00 p.m., Eastern time, on the tenth anniversary of such date or, if such day is not a Business Day, on the next preceding Business Day (the “**Exercise Period**”), the Holder of this Warrant Certificate may exercise this Warrant Certificate for all or any part of the Warrant Shares purchasable hereunder (subject to adjustment as provided herein).

Section 3. Exercise of Warrant Certificate.

(a) **Exercise Procedure.** This Warrant Certificate may be exercised from time to time on any Business Day during the Exercise Period, for all or any part of the unexercised Warrant Shares, upon:

(i) delivery to the Company at its then principal executive office of an Exercise Certificate in the form attached hereto as **Exhibit A** (each, an “**Exercise Certificate**”), duly completed (including specifying the number of Warrant Shares to be purchased) and executed; and

(ii) payment to the Company of the Aggregate Exercise Price in accordance with **Section 3(b)**.

(b) **Payment of the Aggregate Exercise Price.** Payment of the Aggregate Exercise Price shall be made, at the option of the Holder as expressed in the Exercise Certificate, by any of the following methods:

(i) by delivery to the Company of a certified or official bank check payable to the order of the Company or by wire transfer of immediately available funds to an account designated in writing by the Company, in the amount of such Aggregate Exercise Price;

(ii) by instructing the Company to withhold a number of Warrant Shares then issuable upon exercise of this Warrant Certificate with an aggregate Fair Market Value as of the Exercise Date equal to such Aggregate Exercise Price;

(iii) by surrendering to the Company (x) Warrant Shares previously acquired by the Holder with an aggregate Fair Market Value as of the Exercise Date equal to such Aggregate Exercise Price or (y) any other securities or any debt of the Company (including shares of Common Stock) having a value as of the Exercise Date equal to the Aggregate Exercise Price (which value in the case of debt, shall be the principal amount thereof plus accrued and unpaid interest, and in the case of shares of Common Stock, shall be the Fair Market Value thereof); or

(iv) any combination of the foregoing.

In the event of any withholding of Warrant Shares or surrender of other equity securities pursuant to **Section 3(b)(ii), (iii) or (iv)** (solely to the extent of such withholding or surrender, a “*Cashless Exercise*”) where the number of shares whose value is equal to the Aggregate Exercise Price is not a whole number, the number of shares withheld by or surrendered to the Company shall be rounded up to the nearest whole share and the Company shall make a cash payment to the Holder (by delivery of a certified or official bank check or by wire transfer of immediately available funds) based on the incremental fraction of a share being so withheld by or surrendered to the Company in an amount equal to the product of (x) such incremental fraction of a share being so withheld or surrendered multiplied by (y) in the case of Common Stock, the Fair Market Value per Warrant Share as of the Exercise Date, and, in all other cases, the value thereof as of the Exercise Date determined in accordance with **Section 3(b)(iii)(y)**.

For purposes of Rule 144, it is acknowledged and agreed that (i) the Warrant Shares issuable upon any exercise of this Warrant Certificate in any Cashless Exercise transaction shall be deemed to have been acquired on the Issue Date, and (ii) the holding period for any Warrant Shares issuable upon the exercise of this Warrant Certificate in any Cashless Exercise transaction shall be deemed to have commenced on the Issue Date.

(c) **Delivery of Stock Certificates.**

(i) With respect to any exercise of this Warrant Certificate by the Holder, upon receipt by the Company of an Exercise Certificate and delivery of the Aggregate Exercise Price (in accordance with **Section 3(b)**), the Company shall, within two (2) Business Days, issue and deliver (or cause its Transfer Agent to issue and deliver) in accordance with the terms hereof to or upon the order of the Holder that number Warrant Shares for the portion of this Warrant Certificate so exercised on such date, together with cash in lieu of any fraction of a share, as provided in **Section 3(d)**. The stock certificate or certificates so delivered shall be, to the extent possible, in such denomination or denominations as the exercising Holder shall reasonably request in the Exercise Certificate and shall be registered in the name of the Holder or, subject to compliance with **Section 8**, such other Person’s name as shall be designated in the Exercise Certificate. This

Warrant Certificate shall be deemed to have been exercised and such certificate or certificates of Warrant Shares shall be deemed to have been issued, and the Holder or any other Person so designated to be named therein shall be deemed to have become a holder of record of such Warrant Shares for all purposes, as of the Exercise Date.

(ii) If, at the time of exercise, the Company has a Transfer Agent, then upon the exercise of this Warrant Certificate in whole or in part, the Company shall, at its own cost and expense, take all necessary action, including obtaining and delivering an opinion of counsel, to assure that the Company's transfer agent (the "**Transfer Agent**") shall issue Warrant Shares in the name of the Holder (or its nominee) or such other Persons as designated by the Holder (in compliance with **Section 8**) and in such denominations to be specified in the applicable Exercise Certificate. The Company represents and warrants that no instructions other than the foregoing instructions will be given to the Transfer Agent and that, unless waived by the Holder, this Warrant Certificate and the Warrant Shares will, if eligible at such time, be free-trading, and freely transferable, and will not contain a legend restricting the resale or transferability of the Warrant Shares if the Unrestricted Conditions are met.

(d) **Fractional Shares.** The Company shall not be required to issue a fractional Warrant Share upon exercise of any Warrant Certificate. As to any fraction of a Warrant Share that the Holder would otherwise be entitled to purchase upon such exercise, the Company shall pay to such Holder an amount in cash (by delivery of a certified or official bank check or by wire transfer of immediately available funds) equal to the product of (i) such fraction multiplied by (ii) the Fair Market Value of one Warrant Share on the Exercise Date.

(e) **Surrender of this Warrant Certificate; Delivery of New Warrant Certificate.**

(i) The Holder shall not be required to physically surrender this Warrant Certificate to the Company until the Holder has purchased all of the Warrant Shares available hereunder and this Warrant Certificate has been exercised in full, in which case, the Holder shall, at the written request of the Company, surrender this Warrant Certificate to the Company for cancellation within three (3) Business Days after the date the final Exercise Certificate is delivered to the Company. Partial exercises of this Warrant Certificate resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Holder and any assignee, by acceptance of this Warrant Certificate, acknowledge and agree that, by reason of the provisions of this **Section 3(e)**, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.

(ii) Notwithstanding the foregoing, the Holder may request that the Company (and the Company shall), at the time of delivery of the certificate or certificates representing the Warrant Shares being issued in accordance with **Section 3(c)**, deliver to the Holder a new Warrant Certificate evidencing the rights of the Holder to purchase the unexpired and unexercised Warrant Shares called for by this Warrant Certificate. Unless otherwise agreed upon by the Holder in its

sole discretion, such new Warrant Certificate shall in all other respects be identical to this Warrant Certificate.

(f) **Valid Issuance of Warrant Certificate and Warrant Shares; Payment of Taxes.** The Company hereby represents, covenants and agrees:

(i) This Warrant Certificate is, and any Warrant Certificate issued in substitution for or replacement of this Warrant Certificate shall be, upon issuance, duly authorized and validly issued.

(ii) All Warrant Shares issuable upon the exercise of this Warrant Certificate (or any substitute or replacement Warrant Certificate) pursuant to the terms hereof shall be, upon issuance, and the Company shall take all such actions as may be necessary or appropriate in order that such Warrant Shares are, validly issued, fully paid and non-assessable, issued without violation of any preemptive or similar rights of any stockholder of the Company and free and clear of all taxes, liens and charges.

(iii) The Company shall take all such actions as may be necessary to ensure that all such Warrant Shares are issued without violation by the Company of any applicable law or governmental regulation or any requirements of any Trading Market upon which shares of Common Stock or other securities constituting Warrant Shares may be listed at the time of such exercise (except for official notice of issuance which shall be immediately delivered by the Company upon each such issuance).

(iv) The Company shall cause the Warrant Shares, immediately upon such exercise, to be listed on any Trading Market upon which shares of Common Stock or other securities constituting Warrant Shares are listed at the time of such exercise.

(v) The Company shall pay all expenses in connection with, and all taxes and other governmental charges that may be imposed with respect to, the issuance or delivery of Warrant Shares upon exercise of this Warrant Certificate.

(g) **Conditional Exercise.** Notwithstanding any other provision hereof, if an exercise of any portion of this Warrant Certificate is to be made in connection with a public offering or a Fundamental Change, 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 consummation of such transaction.

(h) **Reservation of Shares.** During the Exercise Period, the Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock or other securities constituting Warrant Shares, solely for the purpose of issuance upon the exercise of this Warrant Certificate, the maximum number of Warrant Shares issuable upon the exercise of this Warrant Certificate, and the par value per Warrant Share shall at all times be less than or equal to the Exercise Price. The Company shall not increase the par value of any Warrant Shares receivable upon the exercise of this Warrant Certificate above the Exercise Price, and shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant Certificate.

(i) **Delivery of Electronic Shares.** If the Company has a Transfer Agent and the Transfer Agent is participating in the DTC Fast Automated Securities Transfer (“*FAST*”) program, upon written request of the Holder and in lieu of delivering physical certificates representing any shares of Common Stock (including any Warrant Shares) to be delivered under or in connection with this Warrant Certificate, the Company shall use its commercially reasonable efforts to cause the Transfer Agent to electronically transmit the such Common Stock to the Holder by crediting the account of the Holder’s prime broker with the DTC through its Deposit Withdrawal Agent Commission (“*DWAC*”) system. The time periods for delivery described herein shall apply to the electronic transmittals described herein. Any delivery not effected by electronic transmission shall be effected by delivery of physical certificates.

(j) **Dispute Resolution.** In the case of any dispute as to the determination of Fair Market Value, any closing sales price or VWAP of the Company’s Common Stock, the arithmetic calculation of the Exercise Price or any other computation required to be made hereunder, in the event the Holder and the Company are unable to settle such dispute within five (5) Business Days, then either party may elect to submit the disputed matter(s) for resolution to a mutually agreeable investment bank. Such investment bank’s determination of such disputed matter(s) shall be binding upon all parties absent demonstrable error, and the Company and the Holder shall each pay one half of the fees and costs of such investment banker.

(k) **Automatic Exercise on a Liquidity Event.** If a Liquidity Event occurs with respect to the Company at any time prior to the expiration of the Exercise Period and there remain any Warrant Shares subject to this Warrant Certificate then, provided that the Fair Market Value of one Warrant Share (as determined in connection with the Liquidity Event) is greater than the Exercise Price:

(i) if the consideration to be received by the holders of the Company’s equity securities constituting Warrant Shares is cash and/or Marketable Securities, this Warrant shall be deemed automatically exercised, in full, without the requirement to deliver any Exercise Certificate, immediately prior to the closing of such Liquidity Event and the Holder shall receive, in the same proportions as the holders of the Company’s equity securities constituting Warrant Shares, such amounts of cash and/or Marketable Securities as the holders of the Company’s equity securities constituting Warrant Shares (and if the holders of such equity securities are given any choice as to the cash or Marketable Securities to be received in such Liquidity Event, then the Holder shall be given the same choice); and

(ii) if the consideration to be received by the holders of the Company’s equity securities constituting Warrant Shares is not cash and/or Marketable Securities (an “*Illiquid Sale*”), then, unless exercised by the Holder (in the Holder’s sole discretion) prior to the consummation of such Illiquid Sale, (x) this Warrant shall remain outstanding and (y) upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Illiquid Sale, at the option of the Holder, the number of shares of equity securities of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “*Alternate Consideration*”) receivable as a result of such Illiquid Sale by a holder of the number of shares of Warrant Shares for which this Warrant is exercisable immediately prior to such Illiquid Sale. For purposes of any such exercise, the determination of

the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one (1) share of the equity securities constituting Warrant Shares in such Illiquid Sale, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of equity securities constituting Warrant Shares are given any choice as to the securities, cash or property to be received in an Illiquid Sale, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Illiquid Sale. The Company shall cause any Successor Entity in an Illiquid Sale to assume in writing all of the obligations of the Company under this Warrant pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Illiquid Sale and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of equity securities receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Illiquid Sale, and with an exercise price which applies the Exercise Price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Illiquid Sale and the value of such shares of capital stock, such number of shares of capital stock and such Exercise Price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Illiquid Sale), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Illiquid Sale, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Illiquid Sale, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein.

(l) **Automatic Exercise Prior to Expiration.** If immediately prior to the expiration of the Exercise Period there remain any Warrant Shares subject to this Warrant Certificate, and as of such time, the Fair Market Value of one Warrant Share is greater than the then applicable Exercise Price, then this Warrant Certificate shall be deemed to have been automatically exercised by the Holder, in full, immediately prior to the expiration of the Exercise Period on a Cashless Exercise basis for the full number of remaining Warrant Shares, without the requirement for the delivery of an Exercise Certificate.

(m) **Holder's Exercise Limitations.** The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to this Section 3 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Exercise Certificate, the Holder (together with the Holder's affiliates, and any other persons acting as a group together with the Holder or any of the Holder's affiliates), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock Equivalents beneficially owned by the Holder and its affiliates shall include the number of shares of Common Stock Equivalents issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock Equivalents which would

be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its affiliates, and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its affiliates. Except as set forth in the preceding sentence, for purposes of this Section 3(m), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 3(m) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any affiliates) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of an Exercise Certificate shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any affiliates) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 3(m), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the SEC, as the case may be, (B) a more recent public announcement by the Company, or (C) a more recent written notice from the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written request of a Holder, the Company shall within three (3) Business Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its affiliates since the date as of which such number of outstanding shares of Common Stock was reported. The "**Beneficial Ownership Limitation**" shall be 9.99% of the number of shares of Common Stock and Common Stock Equivalents outstanding immediately after giving effect to the applicable issuance of Warrant Shares issuable upon exercise of this Warrant if at the time of exercise the Company is a "reporting issuer" under the Securities Exchange Act of 1934. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(m) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 4. Anti-Dilution Adjustments.

(a) **Adjustment to Exercise Price and Number of Warrant Shares Upon Dividend, Subdivision or Combination of Common Stock.** If the Company shall, at any time or from time to time after the Issue Date, (i) pay a dividend or make any other distribution upon the Common Stock or any other capital stock of the Company payable in shares of Common Stock or in Options

or Convertible Securities, or (ii) subdivide (by any stock split, recapitalization or otherwise) its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to any such dividend, distribution or subdivision shall be proportionately reduced and the number of Warrant Shares issuable upon exercise of this Warrant Certificate shall be proportionately increased. If the Company at any time combines (by combination, reverse stock split or otherwise) its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to any such combination shall be proportionately increased and the number of Warrant Shares issuable upon exercise of this Warrant Certificate immediately prior to such combination shall be proportionately decreased. Any adjustment under this **Section 4(a)** shall become effective at the close of business on the date the dividend, subdivision or combination becomes effective.

(b) Adjustment to Exercise Price and Number of Warrant Shares Upon Reorganization or Reclassification.

(i) Unless the Holder otherwise consents (in its sole discretion), the event of any (A) capital reorganization of the Company, (B) reclassification of the stock of the Company (other than a change in par value or from par value to no par value or from no par value to par value or as a result of a stock dividend or subdivision, split-up or combination of shares), (C) Fundamental Change or (D) other similar transaction, including a Liquidity Event in which the Warrant Certificate is not exercised (each an “*Adjustment Event*”), in each case which entitles the holders of Common Stock to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Common Stock:

(1) this Warrant Certificate shall, immediately after such Adjustment Event remain outstanding and shall thereafter, in lieu of or in addition to (as the case may be) the number of Warrant Shares then exercisable under this Warrant Certificate, be exercisable for the kind and number of shares of stock or other securities or assets of the Company resulting from such transaction to which the Holder would have been entitled upon such Adjustment Event if the Holder had exercised this Warrant Certificate in full immediately prior to the time of such Adjustment Event and acquired the applicable number of Warrant Shares then issuable hereunder as a result of such exercise (without taking into account any limitations or restrictions on the exercisability of this Warrant Certificate); and

(2) appropriate adjustment (in form and substance reasonably satisfactory to the Holder) shall be made with respect to the Holder’s rights under this Warrant Certificate to insure that the provisions of this **Section 4** shall thereafter be applicable, as nearly as possible, to this Warrant Certificate in relation to any shares of stock, securities or assets thereafter acquirable upon exercise of this Warrant Certificate.

The provisions of this **Section 4(b)** shall similarly apply to successive Adjustment Events and the Company shall not effect such Adjustment Event unless, prior to the consummation of such transaction, the successor entity has assumed the obligations of the Company under this Warrant Certificate by delivering to the Holder a written instrument substantially similar to this Warrant Certificate and reasonably satisfactory to the Holder.

(ii) Notwithstanding anything to the contrary contained herein, with respect to any corporate event or other transaction contemplated by this **Section 4(b)**, the Holder shall have the right to elect, prior to the consummation of such event or transaction, to exercise its rights under **Section 2** instead of giving effect to **Section 4(b)(i)**.

(c) **Certain Events.** If any event of the type contemplated by the provisions of this **Section 4** but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features) occurs, then the Board shall make an appropriate adjustment in the Exercise Price and the number of Warrant Shares issuable upon exercise of this Warrant Certificate so as to protect the rights of the Holder in a manner consistent with the provisions of this **Section 4**; provided that no such adjustment pursuant to this **Section 4(c)** shall increase the Exercise Price or decrease the number of Warrant Shares issuable hereunder as otherwise determined pursuant to this **Section 4**.

(d) **Certificate as to Adjustment.**

(i) As promptly as reasonably practicable following any adjustment of the Exercise Price or the number of Warrant Shares issuable upon exercise of this Warrant Certificate, but in any event not later than three (3) Business Days thereafter, the Company shall furnish to the Holder a certificate of an executive officer setting forth in reasonable detail such adjustment and the facts upon which it is based and certifying the calculation thereof.

(ii) As promptly as reasonably practicable following the receipt by the Company of a written request by the Holder, but in any event not later than three (3) Business Days thereafter, the Company shall furnish to the Holder a certificate of an executive officer certifying the Exercise Price then in effect and the number of Warrant Shares for which this Warrant Certificate is exercisable, or the amount, if any, of other shares of stock, securities or assets then issuable upon exercise of this Warrant Certificate.

(e) **Notices.** In the event that the Company shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon exercise of this Warrant Certificate):

(i) for the purpose of entitling or enabling them to receive any dividend or other distribution, to vote at a meeting (or by written consent), to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(ii) approving or enabling any capital reorganization of the Company, any reclassification of the Common Stock of the Company or any Fundamental Change;

then, and in each such case, the Company shall send or cause to be sent to the Holder at least thirty (30) days prior to the applicable record date or the applicable expected effective date, as the case may be, for the event, a written notice specifying, as the case may be, (A) the record date for such dividend, distribution, meeting or consent or other right or action, and a description of such dividend, distribution or other right or action to be taken at such meeting or by written consent, or (B) the effective date on which such Fundamental Change is proposed to take place, and the date, if any is to be fixed, as of which the books of the Company shall close or a record shall be taken

with respect to which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon exercise of this Warrant Certificate) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such Fundamental Change, and the amount per share and character of such exchange applicable to this Warrant Certificate and the Warrant Shares.

Section 5. Purchase Rights. In addition to any adjustments pursuant to **Section 4**, if at any time the Company grants, issues or sells (other than in an Excluded Issuance) any shares of Common Stock, Options, Convertible Securities or rights to purchase capital stock, securities or other property over which the holders of Common Stock have a preemptive purchase right (the “**Purchase Rights**”), then the Holder shall be entitled (but not required) to acquire, upon the same terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder would have acquired if the Holder had held the number of Warrant Shares acquirable upon complete exercise of this Warrant Certificate immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

Section 6. Registration Rights.

(a) **Investors Rights Agreement.** The Company and the Holder agree that, as of the Issue Date:

(i) The Warrant Shares and the Holder shall have certain registration rights pursuant to and as set forth in the Investors Rights Agreement, including rights to have the Warrant Shares issuable upon exercise of this Warrant Certificate included in a Registration Statement initiated pursuant to Section 2.1 (Demand Registration) or Section 2.2 (Company Registration) of the Investors Rights Agreement;

(ii) The Holder shall be deemed to be a “Holder” and a “Major Investor” for the purpose of exercising all rights granted to “Holders” and “Major Investors” (as defined in the Investors Rights Agreement) under the Investors Rights Agreement;

(iii) The Warrant Shares shall be “Registrable Securities” under the Investors Rights Agreement for the purpose of exercising all rights attached to the Registrable Securities under the Investors Rights Agreement, including prior to exercise of this Warrant Certificate, provided that, for the avoidance of doubt, the Holder may not require that the Warrant Shares be registered on a Trading Market unless and until this Warrant Certificate has been validly exercised with respect to the Warrant Shares to be so registered and such Warrant Shares are eligible to be so registered in accordance with applicable law; and

(iv) The provisions set forth in the Investors Rights Agreement, or any similar or replacement agreement relating to the registration rights of Registrable Securities (including the Warrant Shares), 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 Warrant 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 Warrant Shares.

(b) **Rule 144 Reporting.** For the avoidance of doubt, the Holder shall be a “Holder” (as defined in the Investors Rights Agreement) for all purposes of Section 2.9 (Reports Under Exchange Act) of the Investors Rights Agreement.

Section 7. Warrant Register. The Company shall keep and properly maintain at its principal executive offices a register (the “*Warrant Register*”) for the registration of this Warrant Certificate and any transfers thereof. The Company may deem and treat the Person in whose name this Warrant Certificate is registered on such register as the Holder thereof for all purposes, and the Company shall not be affected by any notice to the contrary, except any assignment, division, combination or other transfer of this Warrant Certificate effected in accordance with the provisions of this Warrant Certificate.

Section 8. Transfer of Warrant Certificate. Subject to **Section 12** hereof, this Warrant Certificate and all rights hereunder are transferable, in whole or in part, by the Holder without charge to the Holder, upon surrender of this Warrant Certificate to the Company at its then principal executive offices with a properly completed and duly executed Assignment in the form attached hereto as **Exhibit B**, together with funds sufficient to pay any transfer taxes described in **Section 3(f)(v)** in connection with the making of such transfer. Upon such compliance, surrender and delivery and, if required, such payment, the Company shall execute and deliver a new Warrant Certificate or Warrant Certificates in the name of the assignee or assignees and in the denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant Certificate evidencing the portion of this Warrant Certificate, if any, not so assigned and this Warrant Certificate shall promptly be cancelled.

Section 9. The Holder Not Deemed a Stockholder; Limitations on Liability; Right to Receive Stockholder Notices. Except as otherwise specifically provided herein, prior to the issuance to the Holder of the Warrant Shares to which the Holder is then entitled to receive upon the due exercise of this Warrant Certificate, the Holder shall not be entitled to vote or receive dividends or be deemed the holder of shares of capital stock of the Company for any purpose, nor shall anything contained in this Warrant Certificate be construed to confer upon the Holder, as such, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise. In addition, nothing contained in this Warrant Certificate shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant Certificate or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this **Section 9**, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders, including without limitation the financial information set forth in Section 3.1 of the Investors Rights Agreement and notices relating to any right of first offer or tag along right set forth in the Investors Rights Agreement and the Right of First Refusal and Co-Sale Agreement.

Section 10. Replacement on Loss; Division and Combination.

(a) **Replacement of Warrant Certificate on Loss.** Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant Certificate and upon delivery of an indemnity reasonably satisfactory to it (it being understood that a written indemnification agreement or affidavit of loss of the Holder shall be a sufficient indemnity) and, in case of mutilation, upon surrender of such Warrant Certificate for cancellation to the Company, the Company at its own expense shall execute and deliver to the Holder, in lieu hereof, a new Warrant Certificate of like tenor and exercisable for an equivalent number of Warrant Shares as this Warrant Certificate so lost, stolen, mutilated or destroyed; provided that, in the case of mutilation, no indemnity shall be required if this Warrant Certificate in identifiable form is surrendered to the Company for cancellation.

(b) **Division and Combination of Warrant Certificate.** Subject to compliance with the applicable provisions of this Warrant Certificate as to any transfer or other assignment which may be involved in such division or combination, this Warrant Certificate may be divided or, following any such division of this Warrant Certificate, subsequently combined with other Warrant Certificates, upon the surrender of this Warrant Certificate or Warrant Certificates to the Company at its then principal executive offices, together with a written notice specifying the names and denominations in which new Warrant Certificates are to be issued, signed by the respective Holders or their agents or attorneys. Subject to compliance with the applicable provisions of this Warrant Certificate as to any transfer or assignment which may be involved in such division or combination, the Company shall at its own expense execute and deliver a new Warrant Certificate or Warrant Certificates in exchange for this Warrant Certificate or Warrant Certificates so surrendered in accordance with such notice. Such new Warrant Certificate or Warrant Certificates shall be of like tenor to the surrendered Warrant Certificate or Warrant Certificates and shall be exercisable in the aggregate for an equivalent number of Warrant Shares as this Warrant Certificate or Warrant Certificates so surrendered in accordance with such notice.

Section 11. No Impairment. The Company shall not, by amendment of its Certificate of Incorporation or Bylaws, through any shareholders, voting or similar agreement, or through any 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 by it hereunder, but shall at all times in good faith assist in the carrying out of all the provisions of this Warrant Certificate and in the taking of all such action as may reasonably be requested by the Holder in order to protect the exercise rights of the Holder against dilution or other impairment, consistent with the tenor and purpose of this Warrant Certificate.

Section 12. Compliance with the Securities Act.

(a) **Agreement to Comply with the Securities Act, etc.**

(i) **Legend.** The Holder, by acceptance of this Warrant Certificate, agrees to comply in all respects with the provisions of this **Section 12** and the restrictive legend requirements set forth on the face of this Warrant Certificate and further agrees that such Holder shall not offer, sell or otherwise dispose of this Warrant Certificate or any Warrant Shares to be issued upon

exercise hereof except under circumstances that will not result in a violation of the Securities Act. Subject to **clause (ii)** below, this Warrant Certificate and all Warrant Shares issued upon exercise of this Warrant Certificate (unless registered under the Securities Act) shall be stamped or imprinted with a legend in substantially the following form:

“THIS WARRANT CERTIFICATE AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “*ACT*”), OR QUALIFIED UNDER ANY STATE OR FOREIGN SECURITIES LAWS AND MAY NOT BE OFFERED FOR SALE, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED OR ASSIGNED UNLESS (I) A REGISTRATION STATEMENT COVERING SUCH SHARES IS EFFECTIVE UNDER THE ACT AND IS QUALIFIED UNDER APPLICABLE STATE AND FOREIGN LAW OR (II) THE TRANSACTION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS UNDER THE ACT AND THE QUALIFICATION REQUIREMENTS UNDER APPLICABLE STATE AND FOREIGN LAW AND, IF THE COMPANY REQUESTS, AN OPINION SATISFACTORY TO THE COMPANY TO SUCH EFFECT HAS BEEN RENDERED BY COUNSEL.”

(ii) **Removal of Restrictive Legends.** Neither this Warrant Certificate nor any certificates evidencing Warrant Shares or any other shares of Common Stock issuable or deliverable under or in connection with this Warrant Certificate shall contain any legend restricting the transfer thereof (including the legend set forth above in **clause (i)**) in any of the following circumstances: (A) while a Registration Statement covering the sale or resale of Warrant Shares is effective under the Securities Act, (B) following any sale of this Warrant Certificate, any Warrant Shares or any other shares of Common Stock issued or delivered to the Holder under or in connection here with pursuant to Rule 144, (C) if this Warrant Certificate, Warrant Shares or any other such share of Common Stock are eligible for sale under Rule 144(b)(1), or (D) if such legend is not required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the SEC) (collectively, the “*Unrestricted Conditions*”). The Company shall at its own cost and expense cause its counsel to issue a legal opinion to the Transfer Agent if required by such Transfer Agent to effect the issuance of Warrant Shares or the or any other shares of equity securities issuable or deliverable under or in connection with this Warrant Certificate, as applicable, without a restrictive legend or removal of the legend hereunder. If the Unrestricted Conditions are met at the time of issuance of this Warrant Certificate, the Warrant Shares or such other shares of equity securities, then this Warrant Certificate, Warrant Shares or other equity securities, as the case may be, shall be issued free of all legends.

(iii) **Replacement Warrant Certificate.** The Company agrees that at such time as the Unrestricted Conditions have been satisfied it shall promptly (but in any event within three (3) Business Days) following written request from the Holder issue a replacement Warrant Certificate or replacement Warrant Shares or replacement shares in respect of such other Common Stock, as the case may be, free of all restrictive legends.

(iv) **Sale of Unlegended Shares.** The Holder agrees that the removal of the restrictive legend from this Warrant Certificate and any certificates representing securities as set forth in **Section 12(a)(ii)** above is predicated upon the Company's reliance that the Holder will sell this Warrant Certificate or any such securities pursuant to either an effective Registration Statement or otherwise pursuant to the requirements of the Securities Act, including any applicable prospectus delivery requirements, or an exemption therefrom, and that if such securities are sold pursuant to a Registration Statement, they will be sold in compliance with the plan of distribution set forth therein.

(b) **Representations of the Holder.** In connection with the issuance of this Warrant Certificate, the Holder specifically represents, as of the date hereof, to the Company by acceptance of this Warrant Certificate as follows:

(i) The Holder is an "accredited investor" as defined in Rule 501 of Regulation D promulgated under the Securities Act. The Holder is acquiring this Warrant Certificate and the Warrant Shares to be issued upon exercise hereof for investment for its own account and not with a view towards, or for resale in connection with, the public sale or distribution of this Warrant Certificate or the Warrant Shares, except pursuant to sales registered or exempted under the Securities Act.

(ii) The Holder understands and acknowledges that this Warrant Certificate and the Warrant Shares to be issued upon exercise hereof 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 laws and applicable regulations, such securities may be resold without registration under the Securities Act only in certain limited circumstances. In addition, the Holder represents that it is familiar with Rule 144 under the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

(iii) The Holder acknowledges that it can bear the economic and financial risk of its investment for an indefinite period, and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in this Warrant Certificate and the Warrant Shares. The Holder has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant Certificate and the business, properties, prospects and financial condition of the Company.

Section 13. Representations, Warranties and Covenants of the Company. The Company represents, warrants and covenants to the Holder that:

(i) the Company has the legal capacity or corporate power and authority to enter into this Warrant Certificate and to carry out its obligations hereunder. The Company is duly organized and validly existing under the laws of its jurisdiction of organization, and the execution of this Warrant Certificate and the consummation of the transactions contemplated herein have been duly authorized by all necessary action. No other act or proceeding, corporate or otherwise, on its part is necessary to authorize the execution of this Warrant Certificate or the consummation of any of the transactions contemplated hereby thereby. This Warrant Certificate has been duly

executed by the Company and constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms of this Warrant Certificate;

(ii) no consent, waiver, approval, authorization, exemption, registration, license or declaration is required to be made or obtained by the Company, other than those which have been made or obtained, in connection with (i) the execution or enforceability of this Warrant Certificate or (ii) the consummation of any of the transactions contemplated hereby;

(iii) as of the date hereof, and after giving effect to the transactions contemplated hereby, Schedule I to the Original Warrant Certificate set forth (a) the authorized capital stock of the Company; (b) the number of shares of capital stock issued and outstanding; (c) the number of shares of capital stock issuable pursuant to the Company's stock plans; and (d) the number of shares of capital stock issuable and reserved for issuance pursuant to securities exercisable for, or convertible into or exchangeable for any shares of capital stock of the Company. All of the issued and outstanding shares of capital stock of the Company have been duly authorized and are validly issued, are fully paid and nonassessable and, as of the Issue Date and except as set forth on Schedule I are not subject to any preemptive rights, rights of first refusal or similar rights, and were issued in compliance with applicable state and federal securities laws and any rights of third parties. Except as described on Schedule I, as of the Issue Date, there are no outstanding warrants, options, convertible securities or other rights, agreements or arrangements of any character under which the Company and any of its subsidiaries is or may be obligated to issue any equity securities of any kind and neither the Company nor any of its subsidiaries is currently in negotiations for the issuance of any equity securities of any kind;

(iv) all Warrant Shares issuable and deliverable pursuant to this Warrant Certificate shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the original issuance thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue);

(v) the issuance of this Warrant Certificate shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant Certificate;

(vi) the Warrant Shares, when issued and paid for in accordance with the terms of this Warrant Certificate, will be issued free and clear of all security interests, claims, liens and other encumbrances other than restrictions imposed by applicable securities laws;

(vii) the Company will take all such action as may be reasonably necessary to assure that the shares constituting Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the shares constituting Warrant Shares may be listed.

Section 14. Notices. All notices, requests, consents, claims, demands, waivers and other communications hereunder shall be in writing and shall be deemed to have been given: (a) when delivered by hand (with written confirmation of receipt); (b) when received by the addressee if

sent by a nationally recognized overnight courier (receipt requested); (c) on the date sent by facsimile or e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient; or (d) on the third day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid. Such communications must be sent to the respective parties at the addresses indicated below (or at such other address for a party as shall be specified in a notice given in accordance with this **Section 14**).

If to the Company: IsoPlexis Corporation
35 Northeast Industrial Road
Branford, Connecticut 06405
Attention: John Strahley
E-mail: john.strahley@isoplexis.com

with a copy to: Wiggin and Dana LLP
One Century Tower
265 Church Street
New Haven, Connecticut 06510
Attention: Evan Kipperman
E-mail: ekipperman@wiggin.com

If to the Holder: Perceptive Credit Holdings III, LP
c/o Perceptive Advisors LLC
51 Astor Place, 10th Floor
New York, NY 10003
Attention: Sandeep Dixit
E-mail: Sandeep@perceptivelife.com
PCOFReporting@perceptivelife.com

with a copy to: Chapman and Cutler LLP
1270 Avenue of the Americas
New York, NY 10020
Attention: Nicholas Whitney
whitney@chapman.com

Section 15. Cumulative Remedies. Except to the extent expressly provided in **Section 8** to the contrary, the rights and remedies provided in this Warrant Certificate are cumulative and are not exclusive of, and are in addition to and not in substitution for, any other rights or remedies available at law, in equity or otherwise.

Section 16. Equitable Relief. Each of the Company and the Holder acknowledges that a breach or threatened breach by such party of any of its obligations under this Warrant Certificate would give rise to irreparable harm to the other party hereto for which monetary damages would not be an adequate remedy and hereby agrees that in the event of a breach or a threatened breach by such party of any such obligations, the other party hereto shall, in addition to any and all other rights and remedies that may be available to it in respect of such breach, be entitled to seek

equitable relief, including a restraining order, an injunction, specific performance and any other relief that may be available from a court of competent jurisdiction. The Holder and the Company further acknowledge and agree that (i) the amount of loss or damages likely to be incurred by the Holder as a result of the Company's breach of any its obligations hereunder is incapable or is difficult to precisely estimate and (ii) the parties hereto are sophisticated business parties and have been represented by sophisticated and able legal and financial counsel and negotiated this Agreement at arm's length.

Section 17. Entire Agreement. This Warrant Certificate constitutes the sole and entire agreement of the parties to this Warrant Certificate with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

Section 18. Successor and Assigns. This Warrant Certificate and the rights evidenced hereby shall be binding upon and shall inure to the benefit of the parties hereto and the successors of the Company and the successors and permitted assigns of the Holder. Such successors and/or permitted assigns of the Holder shall be deemed to be a "Holder" for all purposes hereunder.

Section 19. No Third-Party Beneficiaries. This Warrant Certificate is for the sole benefit of the Company and the Holder and their respective successors and, in the case of the Holder, permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant Certificate.

Section 20. Headings. The headings in this Warrant Certificate are for reference only and shall not affect the interpretation of this Warrant Certificate.

Section 21. Amendment and Modification; Waiver. Except as otherwise provided herein, this Warrant Certificate may only 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 waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Warrant Certificate 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.

Section 22. Severability. If any term or provision of this Warrant Certificate is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Warrant Certificate or invalidate or render unenforceable such term or provision in any other jurisdiction.

Section 23. Governing Law. This Warrant Certificate shall be governed by and construed in accordance with the internal laws of the State of New York without giving effect to any choice or

conflict of law provision or rule (whether of the State of New York or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of New York.

Section 24. Submission to Jurisdiction. Any legal suit, action or proceeding arising out of or based upon this Warrant Certificate or the transactions contemplated hereby may be instituted in the federal courts of the United States of America or the courts of the State of New York in each case located in the city of New York and County of New York, and each party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by certified or registered mail to such party's address set forth herein shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or any proceeding in such courts and irrevocably waive and agree not to plead or claim in any such court that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

Section 25. Waiver of Jury Trial. EACH OF THE COMPANY AND THE HOLDER ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS WARRANT CERTIFICATE IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS WARRANT CERTIFICATE OR THE TRANSACTIONS CONTEMPLATED HEREBY.

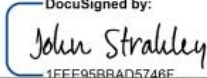
Section 26. Counterparts. This Warrant Certificate may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Warrant Certificate delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Warrant Certificate.

Section 27. No Strict Construction. This Warrant Certificate 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.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has duly executed this Warrant Certificate on the Amendment Date.

ISOPLEXIS CORPORATION

By  _____
Name: John Strahley
Title: Chief Financial Officer

Amended Warrant Signature Page

Accepted and agreed,

PERCEPTIVE CREDIT HOLDINGS III, LP

By: Perceptive Credit Opportunities GP, LLC,
its general partner

By  DocuSigned by:
79FBFAAB029047C...
Name: Sandeep Dixit
Title: Chief Credit Officer

By  DocuSigned by:
22AB09C4A7E748E...
Name: Sam Chawla
Title: Portfolio Manager

**Exhibit A
to Warrant Certificate**

FORM OF EXERCISE CERTIFICATE

(To be signed only upon exercise of Warrant Certificate)

To: _____

The undersigned, as holder of a right to purchase shares of Common Stock of IsoPlexis Corporation, a Delaware corporation (the “*Company*”), pursuant to that certain Warrant Certificate of the Company, dated as of December 30, 2020 and bearing Warrant Certificate No. [] (the “*Warrant Certificate*”), hereby irrevocably elects to exercise the purchase right represented by such Warrant Certificate for, and to purchase thereunder, [] () shares of Common Stock of the Company and herewith makes payment of [] Dollars (\$) [] therefor by the following method:

(Check all that apply):

_____ (check if applicable) The undersigned hereby elects to make payment of the Aggregate Exercise Price of [] Dollars (\$) [] for [] shares of Common Stock using the method described in **Section 3(b)(i)**.

_____ (check if applicable) The undersigned hereby elects to make payment of the Aggregate Exercise Price of [] Dollars (\$) [] for [] shares of Common Stock using the method described in **Section 3(b)(ii)**.

_____ (check if applicable) The undersigned hereby elects to make payment of the Aggregate Exercise Price of [] Dollars (\$) [] for [] shares of Common Stock using the method described in **Section 3(b)(iii)**.

Unless otherwise defined herein, capitalized terms have the meanings provided in the Warrant Certificate.

DATED: _____

PERCEPTIVE CREDIT HOLDINGS III, LP

By _____

Name:

Title:

**Exhibit B
to Warrant Certificate**

FORM OF ASSIGNMENT

THE UNDERSIGNED, Perceptive Credit Holdings III, LP, is the holder (in such capacity, the “**Holder**”) of a warrant certificate issued by IsoPlexis Corporation, a Delaware corporation (the “**Company**”), bearing Warrant Certificate No. [] (the “**Warrant Certificate**”), entitling the Holder to purchase up to [] shares of the Company’s Common Stock. Unless otherwise defined, capitalized terms used herein have the meanings ascribed thereto in the Warrant Certificate.

FOR VALUE RECEIVED, the Holder hereby sells, assigns and transfers to [NAME OF ASSIGNEE] (the “**Assignee**”) the right to acquire [all Warrant Shares entitled to be purchased upon exercise of the Warrant Certificate] [] of the Warrant Shares entitled to be purchased upon exercise of the Warrant Certificate]. In furtherance of the foregoing assignment, the Holder hereby irrevocably instructs the Company to (i) memorialize such assignment on the Warrant Register as required pursuant to **Section 7** of the Warrant Certificate, and (ii) pursuant to **Section 8** of the Warrant Certificate, execute and deliver to the Assignee [and the Holder] a new Warrant Certificate [new Warrant Certificates] reflecting the foregoing assignment ([each] a “**Substitute Warrant Certificate**”).

The Assignee acknowledges and agrees that its Substitute Warrant Certificate and the Warrant Shares to be issued upon exercise thereof are being acquired for investment and that the Assignee will not offer, sell or otherwise dispose of its Substitute Warrant Certificate or any Warrant Shares to be issued upon exercise or conversion thereof except under circumstances which will not result in a violation of the Securities Act or any applicable state securities laws. The Assignee represents and warrants for the benefit of the Company that the Assignee is an “accredited investor” within the meaning of Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended.

To the extent required pursuant to **Section 12** of the Warrant Certificate, the Assignee acknowledges and agrees that a restrictive legend shall be applied to the Assignee’s Substitute Warrant and the Warrant Shares issuable upon exercise of such certificate substantially consistent with the legend set forth in **Section 12(a)(i)**.

[SIGNATURE PAGE FOLLOWS]

PERCEPTIVE CREDIT HOLDINGS III, LP

By _____
Name:
Title:

Accepted and agreed,
[NAME OF ASSIGNEE]

By _____
Name:
Title:

THIRD AMENDMENT TO CREDIT AGREEMENT AND GUARANTY

This Third Amendment to Credit Agreement and Guaranty (herein, this “*Agreement*”) is entered into as of March 30, 2022 (the “*Third Amendment Effective Date*”), by and among IsoPlexis Corporation, a Delaware corporation (the “*Borrower*”), the Lenders party hereto (each a “*Lender*” and collectively, the “*Lenders*”) and Perceptive Credit Holdings III, LP, a Delaware limited partnership, as a lender and as administrative agent for the Lenders (in such capacity, together with its successors and assigns, the “*Administrative Agent*”).

RECITALS:

A. The Lenders have extended credit to the Borrower on the terms and conditions set forth in that certain Credit Agreement and Guaranty, dated as of December 30, 2020 (the “*Existing Credit Agreement*”; the Existing Credit Agreement as amended by the First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021, the Second Amendment to Credit Agreement and Guaranty, dated as of October 29, 2021, and this Agreement, the “*Credit Agreement*”).

B. The Borrower has requested that the Administrative Agent and the Lenders agree to amend certain provisions of the Existing Credit Agreement.

C. The parties hereto agree to amend the Existing Credit Agreement pursuant to the terms of this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. *Incorporation of Recitals; Defined Terms.* The parties hereto acknowledge that the Recitals set forth above are true and correct in all material respects. The defined terms in the Recitals set forth above are hereby incorporated into this Agreement by reference. All other capitalized terms used herein without definition shall have the same meanings herein as such terms have in the Credit Agreement.

2. *Third Amendment to Existing Credit Agreement.* Upon satisfaction of the conditions set forth in Section 5 hereof, the Borrower, the Lenders and the Administrative Agent hereby agree that the Existing Credit Agreement is hereby amended by incorporating the changes shown on the marked copy of the Existing Credit Agreement attached hereto as Annex A. Deletions of text in the Existing Credit Agreement as amended hereby are indicated by struck-through red text, and insertions of text as amended hereby are indicated by underlined blue text. Attached hereto as Annex B is a clean copy of the Credit Agreement conformed through the Third Amendment. Exhibit B to the Existing Credit Agreement is hereby amended and replaced in its entirety with the Exhibit B attached hereto as Annex C. Schedule 1 to the Existing Credit Agreement is hereby amended and replaced in its entirety with Schedule 1 hereto.

3. *Acknowledgement of Liens.* The Borrower hereby acknowledges and agrees that the Obligations owing to the Administrative Agent and the Lenders arising out of or in any

manner relating to the Loan Documents shall continue to be secured by the Liens granted as security therefor in the Loan Documents, to the extent provided for in the Loan Documents heretofore executed and delivered by the Borrower; and nothing herein contained shall in any manner affect or impair the priority of the Liens created and provided for thereby as to the indebtedness, obligations, and liabilities which would be secured thereby prior to giving effect to this Agreement.

4. *Representations And Warranties.* In order to induce the Administrative Agent and the Lenders to enter into this Agreement, the Borrower hereby represents and warrants to the Administrative Agent and the Lenders as follows:

(A) After giving effect to this Agreement, the representations and warranties of the Borrower contained in Article 7 of the Credit Agreement and in each other Loan Document shall be true and correct in all material respects on and as of the date hereof; provided that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualification therein) in all respects on such respective dates.

(B) The execution, delivery and performance of this Agreement has been duly authorized by all necessary corporate action on the part of, and duly executed and delivered by, the Borrower.

(C) No Default or Event of Default has occurred and is continuing or shall occur and be continuing immediately after giving effect to this Agreement.

5. *Conditions Precedent.* The effectiveness of this Agreement is subject to the satisfaction of the following conditions precedent:

(A) The Administrative Agent and the Lenders shall have received executed counterparts of this Agreement duly executed and delivered by the Borrower.

(B) The Administrative Agent and the Lenders shall have received (i) certified copies of the Organizational Documents of Borrower and resolutions of the board of directors (or similar governing body or committee of the board of directors, as applicable) of Borrower approving and authorizing the execution, delivery and performance of this Third Amendment and the Amended and Restated Warrant Certificate, certified as of the Third Amendment Effective Date by its secretary or assistant secretary as being in full force and effect without modification or amendment and (ii) a good standing certificate and/or compliance certificate from the applicable Governmental Authority of Borrower’s jurisdiction of formation, dated a recent date prior to the Third Amendment Effective Date.

(C) The Administrative Agent shall have received a Borrowing Notice, in accordance with Section 2.01(c)(ii) of the Credit Agreement, requesting the Borrowing of the Tranche C Loan duly executed by a Responsible Officer of Borrower.

(D) The Administrative Agent shall have received the duly executed Amended and Restated Warrant Certificate that, among other things, grants the holder thereof the right to purchase 811,374 shares of common stock of the Borrower.

6. *Reference to and Effect on the Loan Documents; No Novation.*

(A) This Agreement constitutes a Loan Document. On and after the date hereof, words of like import referring to the Credit Agreement, and each reference in the other Loan Documents to the "Credit Agreement", "thereunder", "thereof" or words of like import referring to the Credit Agreement shall mean and be a reference to the Credit Agreement after giving effect to this Agreement.

(B) Except as specifically set forth in this Agreement, the Credit Agreement and the other Loan Documents shall remain in full force and effect and are hereby ratified and confirmed.

(C) Except as expressly set forth in this Agreement, the Loan Documents and all of the obligations of the Obligors thereunder and the rights and benefits of the Administrative Agent and the Lenders thereunder remain in full force and effect. This Agreement is not a novation nor is it to be construed as a release, waiver or modification of any of the terms, conditions, representations, warranties, covenants, rights or remedies set forth in the Loan Documents, except as specifically set forth herein. Without limiting the foregoing, the Obligors agree to comply with all of the terms, conditions, and provisions of the Loan Documents except to the extent such compliance is irreconcilably inconsistent with the express provisions of this Agreement. This Agreement may not be amended, supplemented, or otherwise modified except by a written agreement entered into in accordance with Section 13.04 of the Credit Agreement. THIS AGREEMENT REPRESENTS THE FINAL AGREEMENT BETWEEN THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS OR SUBSEQUENT ORAL AGREEMENTS OF THE PARTIES. THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES.

7. *Headings.* The headings in this Agreement are included for convenience of reference only and will not affect in any way the meaning or interpretation of this Agreement.

8. *Governing Law.* This Agreement, and all questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of New York.

9. *Incorporation of Sections 13.10 and 13.11 of the Credit Agreement.* The provisions set forth in Sections 13.10 (Jurisdiction, Service of Process and Venue) and 13.11 (Waiver of Jury Trial) of the Credit Agreement shall apply to this Agreement in all respects.

10. *Counterparts.* This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement. Delivery of an executed counterpart of this Agreement by facsimile, DocuSign or a scanned copy by electronic mail shall be equally as effective as delivery of an original executed counterpart of this Agreement.

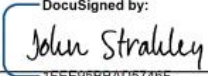
11. *Severability.* If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, or public policy, all other conditions and provisions of this Agreement will nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner adverse to any party. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties hereto will negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the extent possible.

12. *Binding Effect.* This Agreement will be binding upon and inure to the benefit of and is enforceable by the respective successors and permitted assigns of the parties hereto.

[SIGNATURE PAGES TO FOLLOW]


IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first written above.

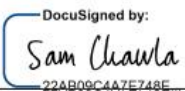
ISOPLEXIS CORPORATION, as Borrower

By:  _____
Name: John Strahley
Title: Chief Financial Officer

PERCEPTIVE CREDIT HOLDINGS III, LP,
as Administrative Agent and Lender

By: Perceptive Credit Opportunities GP, LLC,
its general partner

By: 
Name: Sandeep Dixit
Title: Chief Credit Officer

By: 
Name: Sam Chawla
Title: Portfolio Manager

SCHEDULE 1

SCHEDULE 1 TO CREDIT AGREEMENT

TRANCHE A LOAN COMMITMENTS

LENDER		TRANCHE LOAN A COMMITMENT
Perceptive Credit Holdings III, LP		\$25,000,000
	TOTAL	\$25,000,000

TRANCHE B LOAN COMMITMENTS

LENDER		TRANCHE LOAN B COMMITMENT
Perceptive Credit Holdings III, LP		\$10,000,000
	TOTAL	\$10,000,000

TRANCHE C LOAN COMMITMENTS

LENDER		TRANCHE LOAN C COMMITMENT
Perceptive Credit Holdings III, LP		\$7,500,000
	TOTAL	\$7,500,000

TRANCHE D LOAN COMMITMENTS

LENDER		TRANCHE LOAN D COMMITMENT
Perceptive Credit Holdings III, LP		\$7,500,000
	TOTAL	\$7,500,000

WARRANT SHARES

LENDER		NUMBER OF WARRANT SHARES
Perceptive Credit Holdings III, LP		811,374
	TOTAL	811,374

ANNEX A

Marked Credit Agreement



CREDIT AGREEMENT AND GUARANTY¹

DATED AS OF

DECEMBER 30, 2020

AMONG

ISOPLEXIS CORPORATION,
AS BORROWER,

THE GUARANTORS FROM TIME TO TIME PARTY HERETO,
AS GUARANTORS,

THE LENDERS FROM TIME TO TIME PARTY HERETO,
AS LENDERS,

AND

PERCEPTIVE CREDIT HOLDINGS III, LP,
AS ADMINISTRATIVE AGENT AND AS A LENDER

\$50,000,000

¹ Conformed to reflect changes from the First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021, ~~and~~ the Second Amendment to Credit Agreement and Guaranty, dated as of October 29, 2021, ~~and~~ the [Third Amendment to Credit Agreement and Guaranty, dated as of March 30, 2022](#).

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EXHIBIT B	—	Form of Borrowing Notice
EXHIBIT C	—	Form of Note
EXHIBIT D	—	Form of U.S. Tax Compliance Certificate
EXHIBIT E	—	Form of Compliance Certificate
EXHIBIT F	—	Form of Assignment Agreement
EXHIBIT G	—	Form of Security Agreement
EXHIBIT H-1	—	Form of Patent & Trademark Security Agreement
EXHIBIT H-2	—	Form of Copyright Security Agreement
EXHIBIT I	—	Form of Collateral Questionnaire

CREDIT AGREEMENT AND GUARANTY, dated as of December 30, 2020 (this “*Agreement*”), among ISOPLEXIS CORPORATION, a Delaware corporation (“*Borrower*”), certain Guarantors from time to time parties hereto, the lenders from time to time party hereto (each, as a “*Lender*” and collectively, the “*Lenders*”), and PERCEPTIVE CREDIT HOLDINGS III, LP, a Delaware limited partnership (“*Perceptive*”), as administrative agent for the Lenders (in such capacity, together with its successors and assigns, the “*Administrative Agent*”).

WITNESSETH:

Borrower has requested the Lenders to make term loans to Borrower, and the Lenders are prepared to make such loans on and subject to the terms and conditions hereof. Accordingly, the parties agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Certain Defined Terms. As used herein, the following terms have the following respective meanings:

“*Accounting Change*” has the meaning set forth in Section 1.02.

“*Accounting Change Notice*” has the meaning set forth in Section 1.02.

“*Acquisition*” means 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 similar transaction having the same effect as any of the foregoing, (a) acquires all or substantially all of the assets of any Person engaged in any business, (b) acquires all or substantially all of a business line or unit or division of any other Person, (c) acquires control of securities of a Person engaged in a business representing more than 50% of the ordinary voting power for the election of directors or other governing body if the business affairs of such Person are managed by a Board or other governing body, or (d) acquires control of more than 50% of the ownership interest in any Person engaged in any business that is not managed by a Board or other governing body.

“*Act*” has the meaning set forth in Section 13.16.

“*Administrative Agent*” has the meaning set forth in the introduction hereto.

“*Affected Financial Institution*” means (a) any EEA Financial Institution or (b) any UK Financial Institution.

“*Affiliate*” means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common

Control with the Person specified.

“*Agreement*” has the meaning set forth in the introduction hereto.

“*Amended and Restated Warrant Certificate*” means the amended and restated warrant, delivered to the Administrative Agent on the Third Amendment Effective Date that, among other things, grants the holder thereof the right to purchase the number of shares of common stock of Borrower as indicated on the Warrant Shares table on Schedule 1, as the Amended and Restated Warrant Certificate may be further amended, replaced or otherwise modified pursuant to the terms thereof.

“*Anti-Corruption Laws*” means all laws, rules and regulations of any jurisdiction applicable to the Obligors and their Affiliates concerning or relating to bribery or corruption, including, without limitation, the Foreign Corrupt Practices Act of 1977, as amended.

“*Anti-Terrorism Laws*” means any laws or regulations relating to terrorism or money laundering, including, without limitation the *Bank Secrecy Act* (31 U.S.C. §§ 5311 *et seq.*), the *Money Laundering Control Act of 1986* (18 U.S.C. §§ 1956 *et seq.*), the USA Patriot Act and any similar law enacted in the United States after the date of this Agreement.

“*Applicable Margin*” means 9.50% per annum, as such percentage may be increased by Section 3.02(d).

“*Approved Fund*” means any Person (other than a natural person) that is engaged in making, purchasing, holding or investing in bank loans and similar extensions of credit in the ordinary course of its business and that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“*Asset Sale*” has the meaning set forth in Section 9.09.

“*Assignment Agreement*” means an assignment and assumption entered into by a Lender and an assignee of such Lender in substantially the form of Exhibit F.

“*Bail-In Action*” means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

“*Bail-In Legislation*” means (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation, rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

“*Bankruptcy Code*” means Title 11 of the United States Code entitled “Bankruptcy.”

“Beneficial Ownership Regulation” has the meaning set forth in Section 13.16.

“Benefit Plan” means any employee benefit plan as defined in Section 3(3) of ERISA to which any Obligor or Subsidiary thereof incurs or otherwise has any obligation or liability, contingent or otherwise.

“Board” means, with respect to any Person, the board of directors (or equivalent governing body) of such Person or any Committee thereof.

“Borrower” has the meaning set forth in the introduction hereto.

“Borrowing” means a borrowing consisting of a Tranche A Loan made by the Lenders on the Closing Date, a Tranche B Loan made by the Lenders on the Tranche B [Loan Borrowing Date](#), [a Tranche C Loan made by the Lenders on the Tranche C](#) Loan Borrowing Date or a Tranche €D Loan made by the Lenders on the Tranche €D Loan Borrowing Date, as applicable.

“Borrowing Notice” means a notice substantially in the form attached hereto as Exhibit B.

“Business Day” means a day (other than a Saturday or Sunday) on which commercial banks are not authorized or required to close in New York City and, when determined in connection with notices and determinations in respect of LIBOR or any Loan or any funding, Interest Period or any payments in respect of the Loans, that is also a day on which dealings in dollar deposits are carried on in the London interbank market.

“Capital Lease Obligations” means, as to any Person, the obligations of such Person to pay rent or other amounts under a lease of (or other agreement conveying the right to use) real and/or personal Property which obligations are required to be classified and accounted for as a capital lease on a balance sheet of such Person under GAAP and, for purposes of this Agreement, the amount of such obligations shall be the capitalized amount thereof, determined substantially in accordance with GAAP; *provided* that any obligations that were not required to be included on the balance sheet of such Person as capital lease obligations when incurred (whether now outstanding or at any time incurred or entered into) but are subsequently re-characterized as capital lease obligations due to a change in accounting rules under GAAP after the Closing Date shall for all purposes hereunder not be treated as a Capital Lease Obligation.

“Casualty Event” means any actual or constructive loss, condemnation, destruction, confiscation, requisition, seizure or forfeiture of all or any material portion of the assets of Borrower or any other Obligor, excluding only those assets, individually or in the aggregate, subject to any such event during any calendar year with a fair market value as of the date thereof equal to or less than \$1,000,000.

“Change of Control” means (a) any “person” or “group” (within the meaning of Rule 13d-5 of the Exchange Act as in effect on the date hereof) shall own, directly or indirectly, beneficially or of record, shares representing 40% or more of the aggregate ordinary voting power represented by the issued and outstanding Equity Interests of Borrower, (b) Borrower ceases to directly own, beneficially and of record, 100% of the issued and outstanding Equity Interests of

each of its Subsidiaries, or (c) during any period of twelve (12) consecutive calendar months, the occupation of a majority of the seats (other than vacant seats) on the Board of Borrower by Persons who were neither (i) nominated by the Board of Borrower, nor (ii) appointed by directors on the Board of Borrower on the Closing Date.

“Chinese Subsidiary” means IsoPlexis Trading Co., Ltd.

“Claims” includes claims, litigation, demands, complaints, grievances, actions, applications, suits, causes of action, orders, charges, indictments, prosecutions, information (brought by a public prosecutor without grand jury indictment) or other similar processes, assessments or reassessments.

“CLIA” means the Clinical Laboratory Improvement Amendments (CLIA) of 1988, as amended from time to time, and the rules, regulations, guidelines, guidance documents and compliance policy guides issued or promulgated thereunder.

“Closing Date” means the Business Day on which all of the conditions set forth in Section 6.01 have been satisfied or waived by the Lenders and the Tranche A Loan is made.

“Closing Fee” has the meaning set forth in Section 2.03.

“Code” means the Internal Revenue Code of 1986, as amended from time to time.

“Collateral” means any Property in which a Lien is purported to be granted under any of the Security Documents (or all such Property, as the context may require).

“Collateral Questionnaire” means that certain Collateral Questionnaire and certification by a Responsible Officer of Borrower substantially in the form of attached hereto as Exhibit I and otherwise in form and substance satisfactory to the Administrative Agent.

“Commitment” means, with respect to each Lender, such Lender’s (a) Tranche A Loan Commitment, (b) Tranche B Loan Commitment ~~and~~, (c) Tranche C Loan Commitment and (d) Tranche D Loan Commitment, and “Commitments” means all such commitments of all Lenders. The aggregate Commitments of all Lenders as of the ~~First Third~~ Amendment Effective Date after giving effect to the Tranche A Loan made on the Closing Date, the Tranche B Term Loan made on the Tranche B Borrowing Date and the Tranche ~~BC~~ Term Loan made on the Tranche ~~BC~~ Borrowing Date is ~~\$15,000,000~~ 7,500,000.

“Committee” means, with respect to any board of directors (or other governing body), any committee thereof duly authorized to act on behalf of such board of directors (or other governing body).

“Commodity Account” has the meaning set forth in the Security Agreement.

“Compliance Certificate” has the meaning set forth in Section 8.01(d).

“*Connection Income Taxes*” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“*Contracts*” means any contract, license, lease, agreement, obligation, promise, undertaking, understanding, arrangement, document, commitment, entitlement or engagement under which a Person has, or will have, any liability or contingent liability (in each case, whether written or oral, express or implied, and whether in respect of monetary or payment obligations, performance obligations or otherwise), excluding the Loan Documents.

“*Control*” means, in respect of a particular Person, the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ability to exercise voting power, by contract or otherwise. “*Controlling*” and “*Controlled*” have meanings correlative thereto.

“*Controlled Account*” has the meaning set forth in Section 8.17(a)(i).

“*Copyrights*” has the meaning set forth in the Security Agreement.

“*Default*” means any Event of Default and any event that, upon the giving of notice, the lapse of time or both, would constitute an Event of Default.

“*Default Rate*” has the meaning set forth in Section 3.02(d).

“*Deposit Account*” has the meaning set forth in the Security Agreement and relates to such accounts located and/or maintained in the United States of America.

“*Designated Person*” means a person or entity:

(a) listed in the annex to, or otherwise targeted by the provisions of, the Executive Order (as disclosed by World-Check or another reputable commercially available database);

(b) named as a “Specially Designated National and Blocked Person” on the most current list published by OFAC at its official website or any replacement website or other replacement official publication of such list (as disclosed by World-Check or another reputable commercially available database); or

(c) with which the Lenders are prohibited from dealing or otherwise engaging in any transaction by any Economic Sanctions Laws.

“*Device*” means any instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar or related item, including any component, part or accessory, developed by the Obligors.

“*Disqualified Equity Interests*” means, with respect to any Person, any Equity Interest of

such Person that, by its terms (or by the terms of any security or other Equity Interest into which it is convertible or for which it is exchangeable upon exercise or otherwise), or upon the happening of any event or condition (i) matures or is mandatorily redeemable (other than solely for Qualified Equity Interests), including pursuant to a sinking fund obligation or otherwise, (ii) is redeemable at the option of the holder thereof (other than solely for Qualified Equity Interests), in whole or in part, (iii) provides for the scheduled payments of dividends or other distributions in cash or other securities that would constitute Disqualified Equity Interests, or (iv) is or becomes convertible into or exchangeable for Indebtedness or any other Equity Interests that would constitute Disqualified Equity Interests, in each case, prior to the date that is one hundred and eighty (180) days after the Stated Maturity Date; *provided* that, if such Equity Interests are issued pursuant to any plan for the benefit of directors, officers, employees or consultants of such Person or by any such plan to such directors, officers, employees or consultants, such Equity Interests shall not constitute Disqualified Equity Interests solely because they may be required to be repurchased by such Person upon the death, disability, retirement or termination of employment or service of such director, officer, employee or consultant.

“*Dollars*” and “\$” means lawful money of the United States of America.

“*Domestic Subsidiary*” means any Subsidiary that is organized under the laws of the United States, any state thereof or the District of Columbia.

“*Economic Sanctions Laws*” means:

(a) the Executive Order, the *International Emergency Economic Powers Act* (50 U.S.C. §§ 1701 *et seq.*), the *Trading with the Enemy Act* (50 U.S.C. App. §§ 1 *et seq.*), any other law or regulation promulgated thereunder from time to time and administered by OFAC and any similar law enacted in the United States after the date of this Agreement; and

(b) any other similar applicable law now or hereafter enacted in any other applicable jurisdiction.

“*EEA Financial Institution*” means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“*EEA Member Country*” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“*EEA Resolution Authority*” means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“*Environmental Law*” means any federal, state, provincial or local governmental law, rule, regulation, order, writ, judgment, injunction or decree relating to pollution or protection of the environment or the treatment, storage, disposal, release, threatened release or handling of hazardous materials, and all local laws and regulations related to environmental matters and any specific agreements entered into with any competent authorities which include commitments related to environmental matters.

“*Equity Interest*” means, with respect to any Person, any and all shares, interests, participations or other equivalents, including membership interests (however designated, whether voting or nonvoting), of equity of such Person, including, if such Person is a partnership, partnership interests (whether general or limited) and any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of property of, such partnership, but excluding debt securities convertible or exchangeable into such equity.

“*ERISA*” means the United States Employee Retirement Income Security Act of 1974, as amended.

“*ERISA Affiliate*” means, collectively, any Obligor, Subsidiary thereof, and any Person under common control, or treated as a single employer, with any Obligor or Subsidiary thereof, within the meaning of Section 414(b), (c), (m) or (o) of the Code.

“*ERISA Event*” means (i) a reportable event as defined in Section 4043 of ERISA with respect to a Title IV Plan, excluding, however, such events as to which the PBGC by regulation has waived the requirement of Section 4043(a) of ERISA that it be notified within thirty (30) days of the occurrence of such event; (ii) the applicability of the requirements of Section 4043(b) of ERISA with respect to a contributing sponsor, as defined in Section 4001(a)(13) of ERISA, to any Title IV Plan where an event described in paragraph (9), (10), (11), (12) or (13) of Section 4043(c) of ERISA is reasonably expected to occur with respect to such plan within the following thirty (30) days; (iii) a withdrawal by any Obligor or any ERISA Affiliate thereof from a Title IV Plan or the termination of any Title IV Plan resulting in liability under Sections 4063 or 4064 of ERISA; (iv) the withdrawal of any Obligor or any ERISA Affiliate thereof in a complete or partial withdrawal (within the meaning of Section 4203 and 4205 of ERISA) from any Multiemployer Plan if there is any potential liability therefore, or the receipt by any Obligor or any ERISA Affiliate thereof of notice from any Multiemployer Plan that it is in reorganization or insolvency pursuant to Section 4241 or 4245 of ERISA; (v) the filing of a notice of intent to terminate, the treatment of a plan amendment as a termination under Section 4041 or 4041A of ERISA, or the commencement of proceedings by the PBGC to terminate a Title IV Plan or Multiemployer Plan; (vi) the imposition of liability on any Obligor or any ERISA Affiliate thereof pursuant to Sections 4062(e) or 4069 of ERISA or by reason of the application of Section 4212(c) of ERISA; (vii) the failure by any Obligor or any ERISA Affiliate thereof to make any required contribution to a Plan, or the failure to meet the minimum funding standard of Section 412 of the Code with respect to any Title IV Plan (whether or not waived in accordance with Section 412(c) of the Code) or the failure to make by its due date a required installment under Section 430 of the Code with respect to any Title IV Plan or the failure to make any required contribution to a Multiemployer Plan; (viii) the determination that any Title IV Plan is considered an at-risk plan or a plan in endangered to critical

status within the meaning of Sections 430, 431 and 432 of the Code or Sections 303, 304 and 305 of ERISA; (ix) an event or condition which might reasonably be expected to constitute grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Title IV Plan or Multiemployer Plan; (x) the imposition of any liability under Title I or Title IV of ERISA, other than PBGC premiums due but not delinquent under Section 4007 of ERISA, upon any Obligor or any ERISA Affiliate thereof; (xi) an application for a funding waiver under Section 303 of ERISA or an extension of any amortization period pursuant to Section 412 of the Code with respect to any Title IV Plan; (xii) the occurrence of a non-exempt prohibited transaction under Sections 406 or 407 of ERISA for which any Obligor or any Subsidiary thereof may be directly or indirectly liable; (xiii) a violation of the applicable requirements of Section 404 or 405 of ERISA or the exclusive benefit rule under Section 401(a) of the Code by any fiduciary or disqualified person for which any Obligor or any ERISA Affiliate thereof may be directly or indirectly liable; (xiv) the occurrence of an act or omission which could give rise to the imposition on any Obligor or any ERISA Affiliate thereof of fines, penalties, Taxes or related charges under Chapter 43 of the Code or under Sections 409, 502(c), (i) or (1) or 4071 of ERISA; (xv) the assertion of a material claim (other than routine claims for benefits) against any Plan or the assets thereof, or against any Obligor or any Subsidiary thereof in connection with any such plan; (xvi) receipt from the IRS of notice of the failure of any Qualified Plan to qualify under Section 401(a) of the Code, or the failure of any trust forming part of any Qualified Plan to fail to qualify for exemption from taxation under Section 501(a) of the Code; (xvii) the imposition of any lien (or the fulfillment of the conditions for the imposition of any lien) on any of the rights, properties or assets of any Obligor or any ERISA Affiliate thereof, in either case pursuant to Title I or IV, including Section 302(f) or 303(k) of ERISA or to Section 401(a)(29) or 430(k) of the Code; or (xviii) the establishment or amendment by any Obligor or any Subsidiary thereof of any “welfare plan,” as such term is defined in Section 3(1) of ERISA, that provides post-employment welfare benefits in a manner that would increase the liability of any Obligor, other than those benefits required under the Consolidated Omnibus Budget Reconciliation Act.

“*ERISA Funding Rules*” means the rules regarding minimum required contributions (including any installment payment thereof) to Title IV Plans, as set forth in Sections 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

“*EU Bail-In Legislation Schedule*” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“*Event of Default*” has the meaning set forth in Section 10.01.

“*Excess Funding Guarantor*” has the meaning set forth in Section 11.08.

“*Excess Payment*” has the meaning set forth in Section 11.08.

“*Exchange Act*” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“*Excluded Accounts*” means deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of the employees of Borrower

and its Subsidiaries.

“Excluded Taxes” means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (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 such Recipient being organized under the laws of, or having its principal office or, in the case of a Lender, its applicable lending office located in, the jurisdiction imposing such Tax or (ii) that are Other Connection Taxes, (b) any U.S. federal withholding Taxes that are imposed on amounts payable to Lender to the extent that the obligation to withhold amounts existed on the date that (i) Lender became a “Lender” under this Agreement or (ii) Lender changes its lending office, except in each case to the extent Lender is a direct or indirect assignee of any other Lender that was entitled, at the time the assignment of such other Lender became effective, to receive additional amounts under Section 5.03 or Lender was entitled to receive additional amounts under Section 5.03 immediately before it changed its lending office, (c) any Taxes imposed in connection with FATCA, and (d) Taxes attributable to such Recipient’s failure to comply with Section 5.03(e).

“Executive Order” means the US Executive Order No. 13224 on Blocking Property and Prohibiting Transactions with Persons who commit, Threaten to Commit, or Support Terrorism.

“Expense Deposit” means a cash deposit in the amount of \$50,000 made by Borrower to an Affiliate of Perceptive Advisors LLC pursuant to the Proposal Letter for the prepayment of the Lenders’ costs and expenses (payable pursuant to Section 13.03(a) and/or the Proposal Letter) incurred prior to the Closing Date.

“FATCA” means Sections 1471 through 1474 of the Code, 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 Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities entered into in connection with the implementation of the foregoing.

“First Amendment” means the First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021, among Borrower, the Lenders and the Administrative Agent.

“First Amendment Effective Date” means May 27, 2021.

“Foreign Lender” means a Lender that is not a U.S. Person.

“Foreign Subsidiary” means any Subsidiary that is not a Domestic Subsidiary.

“GAAP” means generally accepted accounting principles in the United States of America, as in effect from time to time, set forth in the opinions and pronouncements of the Accounting Principles Board and the American Institute of Certified Public Accountants, in the statements and pronouncements of the Financial Accounting Standards Board and in such other statements by

such other entity as may be in general use by significant segments of the accounting profession that are applicable to the circumstances as of the date of determination. Subject to Section 1.02, all references to “GAAP” shall be to GAAP applied consistently with the principles used in the preparation of the financial statements described in Section 7.04(a).

“*Governmental Approval*” means any consent, authorization, approval, order, license, franchise, permit, certification, accreditation, registration, clearance, exemption, filing or notice that is issued or granted by or from (or pursuant to any act of) any Governmental Authority, including any application or submission related to any of the foregoing.

“*Governmental Authority*” means any nation, government, branch of power (whether executive, legislative or judicial), state, municipality or other political subdivision thereof and any entity exercising executive, legislative, judicial, monetary, regulatory or administrative functions of or pertaining to government, including without limitation regulatory authorities, governmental departments, agencies, commissions, bureaus, officials, ministers, courts, bodies, boards, tribunals and dispute settlement panels, and other law-, rule- or regulation-making organizations or entities of any State, territory, county, city or other political subdivision of the United States.

“*Guarantee*” of or by any Person (the “*guarantor*”) means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the “*primary obligor*”) in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; *provided*, that the term Guarantee shall not include endorsements for collection or deposit in the Ordinary Course of Business.

“*Guarantee Assumption Agreement*” means a Guarantee Assumption Agreement substantially in the form of Exhibit A by an entity that, pursuant to Section 8.11(a), is required to become a “Guarantor”.

“*Guaranteed Obligations*” has the meaning set forth in Section 11.01.

“*Guarantor*” means, collectively, each Subsidiary of Borrower on the Closing Date or joined as a Guarantor from time to time pursuant to Section 8.11(a).

“*Hazardous Material*” means any substance, element, chemical, compound, product, solid, gas, liquid, waste, by-product, pollutant, contaminant or material which is hazardous or toxic, and includes, without limitation, (a) asbestos, polychlorinated biphenyls and petroleum (including crude oil or any fraction thereof) and (b) any material classified or regulated as “hazardous” or “toxic” or words of like import pursuant to an Environmental Law.

“*Hedging Agreement*” means any interest rate exchange agreement, foreign currency exchange agreement, commodity price protection agreement or other interest or currency exchange rate or commodity price hedging arrangement.

“*Immaterial Foreign Subsidiary*” means, as of any date, any Foreign Subsidiary for which (a) the consolidated total assets of such Foreign Subsidiary and its Subsidiaries, when taken together with the consolidated total assets of all other Immaterial Foreign Subsidiaries their subsidiaries, is not in excess of 5.0% of the consolidated total assets of the Borrower and its Subsidiaries and (b) the aggregate amount of the Total Revenue of such Foreign Subsidiary and its subsidiaries on a consolidated basis, when taken together with the contribution to Total Revenue of all other Immaterial Foreign Subsidiaries and their Subsidiaries on a consolidated basis, is not in excess of 5.0% of Total Revenue of the Borrower and its Subsidiaries, in each case as of the last day of any four quarter period; *provided* that notwithstanding the foregoing, at no time shall any Guarantor existing on the Closing Date or joined hereto pursuant to Section 8.11 subsequently be deemed an Immaterial Foreign Subsidiary.

“*Indebtedness*” of any Person means, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes, loan agreements or similar instruments, (c) all obligations of such Person upon which interest charges are customarily paid, (d) all obligations of such Person under conditional sale or other title retention agreements relating to Property acquired by such Person, (e) all obligations of such Person in respect of the deferred purchase price of Property or services (excluding current accounts payable incurred in the Ordinary Course of Business not overdue by more than one hundred twenty (120) days), (f) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on Property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed, (g) all Guarantees by such Person of Indebtedness of others, (h) all Capital Lease Obligations of such Person, (i) all obligations, contingent or otherwise, of such Person as an account party in respect of letters of credit and letters of guaranty, (j) obligations under any Hedging Agreement, currency swaps, forwards, futures or derivatives transactions, (k) all obligations, contingent or otherwise, of such Person in respect of bankers’ acceptances, (l) all obligations of such Person under license or other agreements containing a guaranteed minimum payment or purchase by such Person, (m) any Disqualified Equity Interests of such Person, (n) any earnout obligation at the time such obligation is both required to be reflected as a liability on the balance sheet of such Person in accordance with GAAP and not paid after becoming due and payable and (o) all other obligations required to be classified as indebtedness of such Person under GAAP. The Indebtedness of any Person shall, without duplication, include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person’s ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor.

“*Indemnified Party*” has the meaning set forth in Section 13.03(b).

“*Indemnified Taxes*” means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any Obligation and (b) to the extent not otherwise

described in clause (a), Other Taxes.

"Ineligible Assignee" means (a) a natural person or (b) the Obligors or any of their respective Affiliates.

"Information" has the meaning set forth in Section 13.17.

"Insolvency Proceeding" means (a) any case, action or proceeding before any court or other Governmental Authority relating to bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors, or (b) any general assignment for the benefit of creditors, composition, marshaling of assets for creditors, or other, similar arrangement in respect of any Person's creditors generally or any substantial portion of such Person's creditors, in each case undertaken under U.S. Federal, state or foreign law, including the Bankruptcy Code.

"Intellectual Property" means all Patents, Trademarks, Copyrights, industrial designs, Technical Information, whether registered or not, whether domestic or foreign, including all of the following:

- (a) applications, registrations, amendments and extensions relating to any Intellectual Property;
- (b) rights and privileges arising under any applicable Laws with respect to any Intellectual Property;
- (c) rights to sue for or collect any damages from any past, present or future infringements of any Intellectual Property; and
- (d) rights of the same or similar effect or nature as described above in any jurisdiction corresponding to any Intellectual Property throughout the world.

"Interest Period" means, (a) initially, the period beginning on (and including) the Closing Date and ending on (and including) the last day of the calendar month in which the Closing Date occurs, and (b) thereafter, the period beginning on (and including) the first day of each succeeding calendar month and ending on the earlier of (and including) (x) the last day of such calendar month and (y) the Maturity Date.

"Invention" means any novel, inventive or useful art, apparatus, method, process, machine (including any article or Device), manufacture or composition of matter, or any novel, inventive and useful improvement in any art, method, process, machine (including any article or Device), manufacture or composition of matter.

"Investment" means, for any Person: (a) the acquisition (whether for cash, Property, services or securities or otherwise) of Equity Interests, bonds, notes, debentures, partnership or other ownership interests or other securities of any other Person or any agreement to make any such acquisition (including any "short sale" or any sale of any securities at a time when such securities are not owned by the Person entering into such sale); (b) the making of any deposit with,

or advance, loan, assumption of debt or other extension of credit to, any other Person (including the purchase of Property from another Person subject to an understanding or agreement, contingent or otherwise, to resell such Property to such Person), but excluding any such advance, loan or extension of credit in the nature of an ordinary course trade receivable having a term not exceeding ninety (90) days arising in connection with the sale of services, inventory or supplies by such Person in the Ordinary Course of Business; (c) the entering into of any Guarantee of, or other contingent obligation with respect to, Indebtedness or other liability of any other Person and (without duplication) any amount committed to be advanced, lent or extended to such Person; (d) entering into any joint venture; or (e) the entering into of any Hedging Agreement. The amount of an Investment will be determined at the time the Investment is made without giving effect to any subsequent changes in value.

“*IRS*” means the U.S. Internal Revenue Service or any successor agency, and to the extent relevant, the U.S. Department of the Treasury.

“*Laws*” means, collectively, all international, foreign, federal, state, provincial, territorial, municipal and local statutes, treaties, rules, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

“*Lenders*” has the meaning set forth in the introduction hereto.

“*LIBOR*” means, for any Interest Period, the rate per annum (rounded upwards if necessary, to the next 1/100%) equal to the London interbank offered rate for one-month deposits in Dollars appearing on the appropriate Bloomberg screen or the Dow Jones Markets Telerate Page 3750 as of 11:00 a.m. (London time) two (2) Business Days prior to the commencement of any Interest Period; *provided*, that in the event that such rate does not appear on the appropriate Bloomberg screen or the Dow Jones Markets Telerate Page 3750 (or otherwise on the Dow Jones Markets screen) at such time, “*LIBOR*” shall be determined by reference to such other comparable publicly available service for displaying the offered rate for deposit in Dollars in the London interbank market as may be selected by the Administrative Agent; *provided, further*, that in no event shall LIBOR be less than 1.75%.

“*Lien*” means any mortgage, lien, pledge, charge or other security interest, or any lease, title retention agreement, mortgage, restriction, easement, right-of-way, option or adverse claim (of ownership or possession) or other encumbrance of any kind or character whatsoever or any preferential arrangement that has the practical effect of creating a security interest.

“*Loan Documents*” means, collectively, this Agreement, the Notes, the Security Documents, any Guarantee Assumption Agreement, the Warrant Certificate and any subordination agreement, intercreditor agreement or other present or future document, instrument, agreement or certificate delivered to any Lender in connection with this Agreement or any of the other Loan Documents, in each case, as amended, restated, supplemented or otherwise modified.

“*Loan Exposure*” means, with respect to any Lender, as of any date of determination, the outstanding principal amount of the Loans of such Lender; *provided*, at any time prior to the making of the Loans, the Loan Exposure of any Lender shall be equal to such Lender’s Commitment.

“*Loans*” means the Tranche A Loan, Tranche B Loan ~~and the~~, Tranche C Loan and Tranche D Loan.

“*Loss*” means judgments, debts, liabilities, expenses, costs, damages or losses, contingent or otherwise, whether liquidated or unliquidated, matured or unmatured, disputed or undisputed, contractual, legal or equitable, including loss of value, professional fees, including fees and disbursements of legal counsel on a full indemnity basis, and all costs incurred in investigating or pursuing any Claim or any proceeding relating to any Claim.

“*Majority Lenders*” means, at any time, one or more Lenders having or holding Loan Exposure and representing more than 50% of the aggregate Loan Exposure of all Lenders.

“*Margin Stock*” means “margin stock” within the meaning of Regulations U and X.

“*Material Adverse Change*” and “*Material Adverse Effect*” mean a material adverse change in or effect on (a) the business, financial condition, operations and performance of the Obligors taken as a whole, (b) the ability of any Obligor to perform its obligations under any Loan Document, (c) the value of the Property comprising Collateral (taken as a whole), or (d) the legality, validity, binding effect or enforceability of the Loan Documents or the rights and remedies of any Lender under any of the Loan Documents.

“*Material Agreement*” means (a) any Contract which is listed in Schedule 7.14, (b) any other Contract to which any Obligor is a party or a beneficiary from time to time, or to which any assets or properties of any Obligor is bound, the loss or termination of which would reasonably be expected to result in a Material Adverse Effect, (c) any other Contract to which any Obligor is a party or a guarantor (or equivalent) whether existing as of the date hereof or in the future that during any period of twelve (12) consecutive months is reasonably expected to (i) result in payments or receipts (including royalty, licensing or similar payments) made to any Obligor in an aggregate amount in excess of \$1,000,000 or (ii) require payments or expenditures (including royalty, licensing or similar payments) made by any Obligor in an aggregate amount in excess of \$1,000,000, (d) the Patent Purchase Agreement, (e) the Supply Agreement and (f) the QIAGEN Assumption Agreement.

“*Material Indebtedness*” means, at any time, any Indebtedness of any Obligor, the outstanding principal amount of which, individually or in the aggregate, exceeds \$250,000.

“*Material Intellectual Property*” means all Obligor Intellectual Property, including those described in Schedule 7.05(b), whether currently owned or licensed, or acquired, developed or otherwise licensed or obtained after the date hereof (a) necessary for the operation of the business of any Obligor as currently conducted or as currently contemplated to be conducted, (b) the loss of which would reasonably be expected to have or result in a Material Adverse Effect or (c) that has a

fair market value in excess of \$1,000,000.

“*Maturity Date*” means the earlier to occur of (a) the Stated Maturity Date, and (b) the date on which the Loans are accelerated pursuant to Section 10.02.

“*Multiemployer Plan*” means any multiemployer plan, as defined in Section 4001(a)(3) of ERISA, to which any ERISA Affiliate incurs or otherwise has any obligation or liability, contingent or otherwise.

“*Net Cash Proceeds*” means,

(a) with respect to the incurrence or issuance of any Indebtedness incurred by an Obligor not permitted under Section 9.01, the excess, if any, of (i) the sum of the cash received in connection with such incurrence or issuance over (ii) the investment banking fees, underwriting discounts, commissions, costs and other reasonable expenses and other customary expenses (including reasonable attorney’s, accountant’s and other similar professional advisor’s fees), incurred by such Obligor in connection with such incurrence or issuance to third parties (other than any other Obligor or any of their respective Affiliates),

(b) with respect to any Casualty Event, the amount of cash proceeds actually received from time to time by or on behalf of an Obligor after deducting therefrom only (i) actual costs and expenses related thereto incurred by such Obligor in connection therewith and (ii) Taxes paid or payable in connection therewith, and

(c) with respect to any Asset Sale, the excess, if any, of (i) cash proceeds received in respect of such Asset Sale (including cash proceeds subsequently received (as and when received)) over (ii) the sum of (A) the direct costs of such Asset Sale then payable by the recipient of such proceeds excluding amounts payable to any Obligor, (B) sales and use taxes paid or payable by such recipient as a result thereof, (C) amounts required to be applied to repay principal, interest and prepayment premiums and penalties on Indebtedness secured by a Permitted Lien on the properties subject to such Asset Sale and (D) amounts reserved or deposited in escrow with respect to indemnity payments or price adjustments until such amounts are released to the Obligors.

“*Note*” means a promissory note executed and delivered by Borrower to any Lender in the form attached hereto as Exhibit C.

“*Obligations*” means, with respect to any Obligor, all amounts, obligations (including, without limitation, all Warrant Obligations), liabilities, covenants and duties of every type and description owing by such Obligor to any Lender or any other Indemnified Party hereunder, arising out of, under, or in connection with, any Loan 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 for the payment of money, including, without duplication, (a) all Loans, (b) all interest on the Loans (including interest at the Default Rate), 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, (c) any Prepayment Premium, and (d) all other fees, expenses (including 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 Loan Document.

“*Obligor Intellectual Property*” means Intellectual Property owned by or licensed to any of the Obligors.

“*Obligors*” means, collectively, Borrower, each Guarantor and each of their respective successors and permitted assigns.

“*OFAC*” means the Office of Foreign Assets Control of the U.S. Department of the Treasury (or any successor thereto).

“*Ordinary Course of Business*” means, with respect to the Obligors, the ordinary course of business generally consistent with past custom and practice (including with respect to nature, scope, magnitude, quantity and frequency).

“*Organizational Documents*” means (a) with respect to any corporation, its certificate or articles of incorporation or organization, as amended, and its by-laws, as amended, (b) with respect to any limited partnership, its certificate of limited partnership, as amended, and its partnership agreement, as amended, (c) with respect to any general partnership, its partnership agreement, as amended, and (d) with respect to any limited liability company, its articles of organization, as amended, and its operating agreement, as amended. In the event any term or condition of this Agreement or any other Loan Document requires any Organizational Document to be certified by a secretary of state or similar government official, the reference to any such “Organizational Document” shall only be to a document of a type customarily certified by such government official.

“*Other Connection Taxes*” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising solely from such Recipient 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 any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

“*Other Taxes*” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 5.03(g)).

“*Participant*” has the meaning set forth in Section 13.05(e).

“*Participant Register*” has the meaning set forth in Section 13.05(f).

“*Patent Purchase Agreement*” means that certain asset purchase agreement, as in effect on the First Amendment Effective Date, by and among Borrower, as QIAGEN Sciences, LLC, a Delaware limited liability company, and QIAGEN GmbH, a German corporation, collectively as sellers, dated as of May 12, 2021, whereby Borrower purchased all rights, privileges, title and interest in and to certain patents, along with the inventions described and claimed in the patents, and all rights to income, royalties and damages for infringement of the patents (the “*QIAGEN Patents*”).

“*Patents*” has the meaning set forth in the Security Documents.

“*Payment Date*” means the last day of each Interest Period; *provided* that if such last day of such Interest Period is not a Business Day, then the Payment Date for such Interest Period will be the next succeeding Business Day.

“*PBGC*” means the United States Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

“*Perceptive*” has the meaning set forth in the introduction hereto.

“*Permits*” means all permits, licenses, registrations, certificates, orders, approvals, authorizations, consents, waivers, franchises, variances and similar rights issued by or obtained from any Governmental Authority or any other Person, including, without limitation, those relating to Environmental Laws.

“*Permitted Acquisition*” means any Acquisition by any Obligor or any of its wholly-owned Subsidiaries, by (a) purchase, merger, amalgamation, license or otherwise, of all or substantially all of the assets of, all of the Equity Interests of, or a business line or unit or a division of, any Person or (b) license arrangement for the rights to use, develop, market or otherwise commercialize any Patents, Trademarks, Copyrights or other Intellectual Property (other than ordinary course, over the counter software license arrangements); *provided* that:

(i) immediately prior to, and immediately after giving effect thereto, no Default shall have occurred and be continuing or would result therefrom;

(ii) all transactions in connection therewith shall be consummated, in all material respects, in accordance with all applicable Laws and in conformity in all material respects with all applicable Governmental Approvals;

(iii) in the case of the Acquisition of all of the Equity Interests of such Person, all of the Equity Interests (except for any such securities in the nature of directors’ qualifying shares required pursuant to applicable Law) acquired, or otherwise issued by such Person or any newly formed Subsidiary of such Obligor in connection with such Acquisition, shall be owned 100% by an Obligor or any other Subsidiary of Borrower, and Borrower shall have taken, or caused to be taken, as of the date such Person becomes a Subsidiary of an Obligor, each of the actions set forth in Section 8.11, if applicable;

(iv) such Person (in the case of an Acquisition of Equity Interests) or assets (in the case of an Acquisition of assets or a division) (i) shall be engaged or used, as the case may be, in the same business or lines of business in which Borrower and/or its Subsidiaries are engaged or a business reasonably and substantially related thereto or (ii) shall have a similar customer base as Borrower and/or its Subsidiaries;

(v) Borrower shall have provided the Administrative Agent with at least ten (10) Business Days' prior written notice of any such Acquisition, together with summaries, prepared in reasonable detail, of all due diligence conducted by or on behalf of Borrower or the applicable Subsidiary prior to such Acquisition;

(vi) all of the assets or Equity Interests acquired in connection with such Acquisition shall be of a U.S. Person;

(vii) the Acquisition shall have been approved by the Board or other governing body or controlling Person of the Person acquired or the Person from whom such assets or division is acquired; and

(viii) on a *pro forma* basis after giving effect to such Acquisition, Borrower and its Subsidiaries shall be in compliance with Section 8.15.

"Permitted Cash Equivalent Investments" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than two (2) years from the date of acquisition, (b) commercial paper with an average maturity of no more than one (1) year and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc., (c) any money market funds or other investment vehicles whose principal investments are in investments described in clauses (a) or (b) above, and (d) certificates of deposit maturing no more than one (1) year after issue.

"Permitted Indebtedness" means any Indebtedness permitted under Section 9.01.

"Permitted Licenses" means (a) licenses of over-the-counter software that is commercially available to the public, (b) licenses for the use of Obligor Intellectual Property, in each case, entered into in the Ordinary Course of Business or as otherwise may be approved by the applicable Obligor's Board and so long as (i) no Event of Default has occurred and is continuing at the time such license is entered into and (ii) such license does not materially impair the Lenders from exercising their rights under any of the Loan Documents and (c) licenses pursuant to the Supply Agreement.

"Permitted Liens" means any Liens permitted under Section 9.02.

"Permitted Priority Liens" means (a) Liens permitted under Section 9.02(d), (e), (f) or (g) and (b) Liens permitted under Section 9.02(b); *provided* that such Liens are also of the type described in Section 9.02(d), (e), (f) or (g).

"Permitted Refinancing" means, with respect to any Indebtedness permitted to be

refinanced, extended, renewed or replaced hereunder, any refinancings, extensions, renewals and replacements of such Indebtedness; *provided* that such refinancing, extension, renewal or replacement shall not (a) increase the outstanding principal amount of the Indebtedness being refinanced, extended, renewed or replaced, (b) contain terms relating to outstanding principal amount, amortization, interest rate or equivalent yield, maturity, collateral security (if any) or subordination (if any), or other material terms that, taken as a whole, are less favorable in any material respect to any Obligor or the Lenders than the terms of any agreement or instrument governing the Indebtedness being refinanced, (c) contain any new requirement to grant any Lien or to give any Guarantee that was not an existing requirement of the Indebtedness being refinanced and (d) after giving effect to such refinancing, extension, renewal or replacement, no Default shall have occurred (or could reasonably be expected to occur) as a result thereof.

“*Person*” means any individual, corporation, company, voluntary association, partnership, limited liability company, joint venture, trust, unincorporated organization or Governmental Authority or other entity of whatever nature.

“*PFIC*” has the meaning set forth in Section 8.01(j).

“*Plan*” means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which Borrower or any ERISA Affiliate is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an “employer” as defined in Section 3(5) of ERISA.

“*Prepayment Premium*” has the meaning set forth in Section 3.03(a)(i).

“*Pro Rata Share*” has the meaning set forth in Section 11.08.

“*Prohibited Payment*” means any bribe, rebate, payoff, influence payment, kickback or other payment or gift of money or anything of value (including meals or entertainment) to any officer, employee or ceremonial office holder of any government or instrumentality thereof, political party or supra-national organization (such as the United Nations), any political candidate, any royal family member or any other person who is connected or associated personally with any of the foregoing that is prohibited under any Requirement of Law.

“*Projections*” has the meaning set forth in Section 7.04(b).

“*Property*” of any Person means any property or assets, or interest therein, of such Person.

“*Proportionate Share*” means, with respect to any Lender, the percentage obtained by dividing (a) the Loan Exposure of such Lender then in effect by (b) the aggregate Loan Exposure of all Lenders then in effect.

“*Proposal Letter*” means the letter agreement, dated November 27, 2020, among Borrower and Perceptive Advisors LLC, regarding the transactions contemplated hereby and the outline of proposed terms and conditions attached thereto.

“*Publicly Reporting Company*” means an issuer generally subject to the public reporting requirements of the Exchange Act.

“*QIAGEN Assumption Agreement*” means that certain assumption agreement dated as of May 12, 2021 by and among Borrower, QIAGEN Sciences, LLC, a Delaware limited liability company and QIAGEN GmbH.

“*Qualified Equity Interest*” means, with respect to any Person, any Equity Interest of such Person that is not a Disqualified Equity Interest.

“*Qualified Plan*” means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (i) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was ever obligated to make, contributions, and (ii) that is intended to be tax qualified under Section 401(a) of the Code.

“*Qualified Public Offering*” means the initial firm-commitment underwritten public offering of common Equity Interests of the Borrower pursuant to an effective registration statement filed with the SEC in accordance with the Securities Act of 1933, raising net cash proceeds of at least \$50,000,000, and in connection with such offering the common Equity Interests of the Borrower is listed for trading on the Nasdaq Stock Market’s National Market, the New York Stock Exchange, or another exchange or marketplace acceptable to the Administrative Agent in its sole discretion.

“*Recipient*” means any Lender or the Administrative Agent.

“*Redemption Date*” has the meaning set forth in Section 3.03(a).

“*Redemption Price*” has the meaning set forth in Section 3.03(a).

“*Register*” has the meaning set forth in Section 13.05(d).

“*Regulation T*” means Regulation T of the Board of Governors of the Federal Reserve System, as amended.

“*Regulation U*” means Regulation U of the Board of Governors of the Federal Reserve System, as amended.

“*Regulation X*” means Regulation X of the Board of Governors of the Federal Reserve System, as amended.

“*Representatives*” has the meaning set forth in Section 13.17.

“*Requirement of Law*” means, as to any Person, any Law applicable to or binding upon such Person or any of its Properties or revenues.

“Resignation Effective Date” has the meaning set forth in Section 12.06(a).

“Responsible Officer” of any Person means each of the president, chief executive officer and chief financial officer of such Person.

“Restricted Payment” means any dividend or other distribution (whether in cash, securities or other Property) with respect to any Equity Interest of Borrower or any of its Subsidiaries, or any payment (whether in cash, securities or other Property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such shares of capital stock of Borrower or any of its Subsidiaries or any option, warrant or other right to acquire any such shares of capital stock of Borrower or any of its Subsidiaries.

“Restrictive Agreement” means any indenture, agreement, instrument or other binding arrangement that prohibits, restricts or imposes any condition upon (a) the ability of any Obligor to create, incur or permit to exist any Lien upon any of its Property (other than (i) customary provisions in contracts (including without limitation leases and in-bound licenses of Intellectual Property) restricting the assignment thereof, (ii) restrictions or conditions imposed by any agreement governing secured Permitted Indebtedness permitted under Section 9.01(g), to the extent that such restrictions or conditions apply only to the Property securing such Indebtedness and (iii) software and other Intellectual Property licenses pursuant to which an Obligor is the licensee of the relevant software or Intellectual Property, as the case may be (in which case, any prohibition or limitation shall relate only to the assets or rights subject to the applicable license and/or the license itself)), or (b) the ability of any Obligor to pay dividends or other distributions with respect to any shares of its Equity Interests or to make or repay loans or advances to any Obligor or to Guarantee Indebtedness of any Obligor.

“Resolution Authority” means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

“Sanctions” means economic or financial sanctions, requirements or trade embargoes imposed, administered or enforced from time to time by Governmental Authorities (including, but not limited to, OFAC, the U.S. Department of State and the U.S. Department of Commerce).

“Sanctions Laws” means all laws, rules, regulations and requirements of any jurisdiction applicable to the Obligors or any party to the Loan Documents concerning or relating to Sanctions, terrorism or money laundering.

“SEC” means United States Securities and Exchange Commission.

“Second Amendment” means the [Second Amendment to Credit Agreement and Guaranty, dated as of October 29, 2021, among Borrower, the Lenders and the Administrative Agent.](#)

“Securities Account” has the meaning set forth in the Security Agreement.

“Security Agreement” means the Security Agreement, dated as of the date hereof, in

substantially the form of Exhibit G, among the Obligors, the Lenders and the Administrative Agent, granting a security interest in the personal Property constituting Collateral thereunder in favor of the Administrative Agent for the benefit of the Lenders.

“*Security Documents*” means, collectively, the Security Agreement, each Short-Form IP Security Agreement, and each other security document, control agreement or financing statement executed to perfect Liens in favor of the Administrative Agent for the benefit of the Lenders.

“*Short-Form IP Security Agreements*” means short-form copyright, patent or trademark (as the case may be) security agreements, dated as of the date hereof, in substantially the form of Exhibits H-1 and H-2, entered into by one or more Obligors in favor of the Administrative Agent for the benefit of the Lenders, each in form and substance satisfactory to the Administrative Agent.

“*Solvent*” means, with respect to any Person at any time, that (a) the present fair saleable value of the Property of such Person is greater than the total amount of liabilities (including contingent liabilities) of such Person, (b) the present fair saleable value of the Property of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, and (c) such Person has not incurred and does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person’s ability to pay as such debts and liabilities mature.

“*Stated Maturity Date*” means the fifth (5th) anniversary of the Closing Date; *provided* that if such date shall occur on a day that is not a Business Day, then the Stated Maturity Date shall be the immediately succeeding Business Day.

“*Subsidiary*” means, with respect to any Person (the “*parent*”) at any time of determination, any other Person of which more than 50% of the outstanding capital stock of such other Person having ordinary voting powers, determined on a fully diluted basis, is at the time directly or indirectly owned or controlled by the parent. Unless the context otherwise specifically requires, the term “Subsidiary” shall be a reference to a Subsidiary of Borrower.

“*Supply Agreement*” means that certain supply agreement, as in effect on the First Amendment Effective Date, by and between QIAGEN GmbH, dated as of May 12, 2021, whereby Borrower (a) licenses certain rights in the QIAGEN Patents to QIAGEN GmbH and (b) purchases certain reagents incorporating the QIAGEN Patents.

“*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.

“*Technical Information*” means all trade secrets and other proprietary or confidential information, which may include any information of a scientific, technical, or business nature in any form or medium, standards and specifications, conceptions, ideas, innovations, discoveries, Invention disclosures, all documented research, developmental, demonstration or engineering work, data, plans, specifications, reports, summaries, experimental data, manuals, models, samples, know-how, technical information, systems, methodologies, computer programs or

information technology.

“Third Amendment” means the Third Amendment to Credit Agreement and Guaranty, dated as of March 30, 2022, among Borrower, the Lenders and the Administrative Agent.

“Third Amendment Effective Date” means March 30, 2022.

“Title IV Plan” means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (a) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was obligated to make, contributions, and (b) that is or was subject to Section 412 of the Code, Section 302 of ERISA or Title IV of ERISA.

“Total Revenue” means, with respect to the Obligors, all amounts paid to and received by such Person in the ordinary course of business that, in accordance with GAAP, would be classified as net revenue.

“Trademarks” has the meaning set forth in the Security Documents.

“Tranche A Loan” means each loan advanced by a Lender pursuant to Section 2.01(a). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche A Loan on any date of determination shall mean the aggregate principal amount of the Tranche A Loan made pursuant to Section 2.01(a) that has not yet been repaid as of such date.

“Tranche A Loan Commitment” means the commitment of a Lender to make or otherwise fund a Tranche A Loan and “Tranche A Loan Commitments” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche A Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche A Loan Commitments as of the Closing Date is \$25,000,000.

“Tranche B Loan” means each loan advanced by a Lender pursuant to Section 2.01(b). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche B Loan on any date of determination shall mean the aggregate principal amount of the Tranche B Loan made pursuant to Section 2.01(b) that has not yet been repaid as of such date.

“Tranche B Loan Borrowing Date” means with respect to the Tranche B Loan, the Business Day on which all conditions set forth in Section 6.02 have been satisfied or waived by the Lenders and the Tranche B Loan is made hereunder.

“Tranche B Loan Commitment” means the commitment of a Lender to make or otherwise fund a Tranche B Loan and “Tranche B Loan Commitments” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche B Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche B Loan Commitments as of the First Amendment Effective Date is \$10,000,000.

“Tranche B Loan Commitment Termination Date” means May 28, 2021.

“Tranche C Loan” means each loan advanced by a Lender pursuant to Section 2.01(c). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche C Loan on any date of determination shall mean the aggregate principal amount of the Tranche C Loan made pursuant to Section 2.01(c) that has not yet been repaid as of such date.

“Tranche C Loan Borrowing Date” means with respect to the Tranche C Loan, the ~~Business Day on which all conditions set forth in Section 6.03 have been satisfied or waived by the Lenders and the Tranche C Loan is made hereunder~~ Third Amendment Effective Date.

“Tranche C Loan Commitment” means the commitment of a Lender to make or otherwise fund a Tranche C Loan and *“Tranche C Loan Commitments”* means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche C Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche C Loan Commitments ~~as of the First Amendment Effective~~ after giving effect to the Tranche C Term Loan made on the Tranche C Loan Borrowing Date is \$15,000,000.

“Tranche D Loan” means each loan advanced by a Lender pursuant to Section 2.01(d). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche D Loan on any date of determination shall mean the aggregate principal amount of the Tranche D Loan made pursuant to Section 2.01(d) that has not yet been repaid as of such date.

“Tranche D Loan Borrowing Date” means with respect to the Tranche D Loan, the Business Day on which all conditions set forth in Section 6.04 have been satisfied or waived by the Lenders and the Tranche D Loan is made hereunder.

“Tranche D Loan Commitment” means the commitment of a Lender to make or otherwise fund a Tranche D Loan and “Tranche D Loan Commitments” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche D Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche D Loan Commitments as of the Third Amendment Effective Date is \$7,500,000.

“Tranche ~~CD~~ Loan Commitment Termination Date” means ~~March~~ June 30, 2022.

“Transactions” means the execution, delivery and performance by each Obligor of this Agreement and the other Loan Documents to which such Obligor is a party and the other transactions contemplated hereby and thereby, including disbursement and application of the proceeds of the Loans.

“UK Financial Institution” means any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

“UK Resolution Authority” means the Bank of England or any other public administrative

authority having responsibility for the resolution of any UK Financial Institution.

“*Unrestricted Cash*” means the balance of unencumbered cash (other than cash encumbered by the Liens granted to the Lenders pursuant to the Loan Documents) and Permitted Cash Equivalent Investments (which for greater certainty shall not include any undrawn credit lines), in each case, to the extent held in a Controlled Account.

“*U.S. Person*” means a “United States person” within the meaning of Section 7701(a)(30) of the Code.

“*U.S. Tax Compliance Certificate*” has the meaning set forth in Section 5.03(f)(ii)(B)(3).

“*Warrant Certificate*” means the ~~warrant to be delivered to the Administrative Agent pursuant to Section 6.01(i) that, among other things, grants the holder thereof the right to purchase the number of shares of Series D Preferred Stock of Borrower as indicated on the Warrant Shares table on Schedule 1, as the Amended and Restated Warrant Certificate may be amended, replaced or otherwise modified pursuant to the terms thereof.~~

“*Warrant Obligations*” means, with respect to Borrower, all of its Obligations arising out of, under or in connection with, any Warrant Certificate.

“*Withdrawal Liability*” means, at any time, any liability incurred (whether or not assessed) by any ERISA Affiliate and not yet satisfied or paid in full at such time with respect to any Multiemployer Plan pursuant to Section 4201 of ERISA.

“*Write-Down and Conversion Powers*” means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

Section 1.02. Accounting Terms and Principles. All accounting determinations required to be made pursuant hereto shall, unless expressly otherwise provided herein, be made substantially in accordance with GAAP. If, after the date hereof, any change occurs in GAAP or in the application thereof (an “*Accounting Change*”) and such change would cause any amount required to be determined for the purposes of the covenants to be maintained or calculated pursuant to Article 8 or 9 to be materially different than the amount that would be determined prior to such change, then Borrower will provide a detailed notice of such change (an “*Accounting Change Notice*”) to the Administrative Agent in conjunction with the next required delivery of financial statements pursuant to Section 8.01. If Borrower requests an amendment to any provision hereof

to eliminate the effect of any Accounting Change occurring after the Closing Date or in the application thereof on the operation of such provision, regardless of whether any Accounting Change Notice is given before or after such Accounting Change or in the application thereof, then the Administrative Agent and Borrower agree that they will negotiate in good faith amendments to the provisions of this Agreement that are directly affected by such Accounting Change with the intent of having the respective positions of the Administrative Agent and Borrower after such Accounting Change conform as nearly as possible to their respective positions as of the date of this Agreement and, until any such amendments have been agreed upon, (a) the provisions in this Agreement shall be calculated as if no such Accounting Change had occurred and (b) Borrower shall provide to the Administrative Agent a written reconciliation in form and substance reasonably satisfactory to the Administrative Agent, between calculations of any baskets and other requirements hereunder before and after giving effect to such Accounting Change.

All components of financial calculations made to determine compliance with this Agreement shall be adjusted to include or exclude, as the case may be, without duplication, such components of such calculations attributable to any Acquisition or disposition of assets consummated after the first day of the applicable period of determination and prior to the end of such period, as determined in good faith by Borrower based on assumptions expressed therein and that were reasonable based on the information available to Borrower at the time of preparation of the Compliance Certificate setting forth such calculations.

Section 1.03. Interpretation. For all purposes of this Agreement, except as otherwise expressly provided herein or unless the context otherwise requires, (a) the terms defined in this Agreement include the plural as well as the singular and vice versa; (b) words importing gender include all genders; (c) any reference to a Section, Article, Annex, Schedule or Exhibit refers to a Section or Article of, or Annex, Schedule or Exhibit to, this Agreement; (d) any reference to “this Agreement” refers to this Agreement, including all Annexes, Schedules and Exhibits hereto, and the words herein, hereof, hereto and hereunder and words of similar import refer to this Agreement and its Annexes, Schedules and Exhibits as a whole and not to any particular Section, Article, Annex, Schedule, Exhibit or any other subdivision; (e) references to days, months and years refer to calendar days, months and years, respectively; (f) all references herein to “include” or “including” shall be deemed to be followed by the words “without limitation”; (g) the word “from” when used in connection with a period of time means “from and including” and the word “until” means “to but not including”; and (h) accounting terms not specifically defined herein shall be construed substantially in accordance with GAAP (except for the term “property,” which shall be interpreted as broadly as possible, including, in any case, cash, securities, other assets, rights under contractual obligations and permits and any right or interest in any property, except where otherwise noted). Unless otherwise expressly provided herein, references to organizational documents, agreements (including the Loan Documents) and other contractual instruments shall be deemed to include all subsequent amendments, restatements, extensions, supplements and other modifications thereto permitted by the Loan Documents.

Section 1.04. Divisions. For all purposes under the Loan 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.

ARTICLE 2

THE COMMITMENTS

Section 2.01. Loans.

(a) *Tranche A Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche A Loan to Borrower on the Closing Date in Dollars in a principal amount equal to such Lender's Tranche A Loan Commitment. No Lender shall have an obligation to make a Tranche A Loan in excess of such Lender's Tranche A Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.01), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least one (1) Business Day in advance of the Closing Date.

(iii) Borrower may make one borrowing under the Tranche A Loan Commitment which shall be on the Closing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche A Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche A Loan Commitment shall terminate immediately and without further action on the Closing Date after giving effect to the funding of such Lender's Tranche A Loan Commitment on such date.

(b) *Tranche B Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche B Loan to Borrower on the Tranche B Loan Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche B Loan Commitment. No Lender shall have an obligation to make a Tranche B Loan in excess of such Lender's Tranche B Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.02), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in

advance of the proposed Tranche B Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche B Loan Commitment which shall be on the Tranche B Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche B Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche B Loan Commitment shall terminate immediately and without further action on the earlier of (x) the Tranche B Loan Borrowing Date after giving effect to the funding of such Lender's Tranche B Loan Commitment on such date and (y) the Tranche B Loan Commitment Termination Date.

(c) *Tranche C Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche C Loan to Borrower on the Tranche C Loan Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche C Loan Commitment. No Lender shall have an obligation to make a Tranche C Loan in excess of such Lender's Tranche C Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.03), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in advance of the proposed Tranche C Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche C Loan Commitment which shall be on the Tranche C Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche C Loan shall be paid in full no later than the Maturity Date.

(d) *Tranche D Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche D Loan to Borrower on the Tranche D Loan Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche D Loan Commitment. No Lender shall have an obligation to make a Tranche D Loan in excess of such Lender's Tranche D Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.04), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in advance of the proposed Tranche D Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche D Loan Commitment which shall be on the Tranche D Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche D Loan shall be paid in full

no later than the Maturity Date. Each Lender's Tranche €D Loan Commitment shall terminate immediately and without further action on the earlier of (x) the Tranche €D Loan Borrowing Date after giving effect to the funding of such Lender's Tranche €D Loan Commitment on such date and (y) the Tranche €D Loan Commitment Termination Date.

(ee) Any principal amount of any Loans borrowed under Section 2.01(a), 2.01(b), 2.01(c) or 2.01(ed) hereof and subsequently repaid or prepaid may not be reborrowed.

Section 2.02. Proportionate Shares. All Loans shall be made, and all participations purchased, by the Lenders simultaneously and proportionately to their respective Proportionate Shares, it being understood that no Lender shall be responsible for any default by any other Lender in such other Lender's obligation to make a Loan hereunder or purchase a participation required hereby nor shall the Commitment of any Lender be increased or decreased as a result of a default by any other Lender in such other Lender's obligation to make a Loan requested hereunder or purchase a participation required hereby.

Section 2.03. Fees. On the Closing Date, Borrower shall pay to the Administrative Agent (out of the proceeds of the Tranche A Loan advanced by such Lenders on the Closing Date) for distribution to each Lender in accordance with its pro rata share of Loans, a non-refundable fee (the "Closing Fee") in the amount of \$750,000. Payment of the Closing Fee shall be in addition to such fees, costs and expenses due and payable pursuant to Section 12.03.

Section 2.04. Notes. Upon the request of any Lender, Borrower shall prepare, execute and deliver to such Lender one or more Notes evidencing the Loans payable to such Lender (or if requested by it, to it and its registered assigns).

Section 2.05. Use of Proceeds. Borrower shall use the proceeds of the Loans (a) for general working capital purposes and corporate purposes, (b) to refinance certain existing Indebtedness on the Closing Date and (c) to pay, in accordance with the funds flow attached to the Borrowing Notice, fees, costs and expenses incurred in connection with the Transactions.

ARTICLE 3

PAYMENTS OF PRINCIPAL AND INTEREST

Section 3.01. Repayment. There will be no scheduled repayments of principal on the Loans prior to the Maturity Date. The entire outstanding principal amount of the Loans, together with all accrued and unpaid interest thereon, will be due and payable on the Maturity Date.

Section 3.02. Interest.

(a) *Interest Generally.* Borrower agrees to pay to the Lenders interest in cash on the outstanding principal amount of the Loans for each Interest Period at a rate per annum equal to the sum of (i) LIBOR plus (ii) the Applicable Margin.

(b) *LIBOR Not Determinable.* If on or before the day on which LIBOR is to be

determined, the Majority Lenders reasonably determine that (i) LIBOR cannot be determined for any reason, (ii) LIBOR will not adequately and fairly reflect the cost of maintaining the Loans or (iii) Dollar deposits in the principal amount of the Loans are not available in the London interbank market, the Majority Lenders shall, as soon as practicable thereafter, give written notice of such determination to Borrower and the Administrative Agent. Upon any such determination, LIBOR shall be LIBOR as of the end of the immediately preceding Interest Period and shall at all times thereafter bear interest at LIBOR as of the end of the immediately preceding Interest Period. Each determination by the Majority Lenders hereunder shall be conclusive and binding absent manifest error.

(c) *Replacement to LIBOR.* If at any time the Administrative Agent reasonably determines (which determination shall be conclusive absent manifest error) that (i) the circumstances set forth in clause (b)(i) of this Section have arisen and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in clause (b)(i) of this Section have not arisen but the supervisor for the administrator of LIBOR has made a public statement identifying a specific date after which LIBOR shall no longer be used for determining interest rates for loans, then the Administrative Agent and Borrower shall endeavor to establish an alternate rate of interest to LIBOR that gives due consideration to the then-prevailing market convention for determining a rate of interest for syndicated loans in the United States at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable; *provided* that, if such alternate rate of interest shall be less than 1.75%, such rate shall be deemed to be 1.75% for the purposes of this Agreement. Notwithstanding anything to the contrary in Section 13.04, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within five (5) Business Days of the date notice of such alternate rate of interest is provided to the Lenders, a written notice from the Majority Lenders stating that such Lenders object to such amendment.

(d) *Default Interest.* Notwithstanding the foregoing, upon the occurrence and during the continuance of any Event of Default, the Applicable Margin shall increase automatically by 4.00% per annum (the interest rate, as increased pursuant to this Section 3.02(d), being the “*Default Rate*”). Notwithstanding any other provision herein, if interest is required to be paid at the Default Rate, it shall also be paid entirely in cash. If any Obligation is not paid when due under any applicable Loan Document, the amount thereof shall accrue interest at the Default Rate. Payment or acceptance of the increased rates of interest provided for in this Section 3.02(d) is not a permitted alternative to timely payment and shall not constitute a waiver of any Default or otherwise prejudice or limit any rights or remedies of the Administrative Agent or any Lender.

(e) *Payment Dates.* Accrued interest on the Loans shall be payable in arrears on each Payment Date with respect to the most recently completed Interest Period in cash, and upon the payment or prepayment of the Loans (on the principal amount being so paid or prepaid); *provided* that interest payable at the Default Rate shall be payable from time to time on demand by the Majority Lenders.

(f) *Maximum Rate.* Notwithstanding any other provision of this Agreement, in no event will any interest or rates referred to herein exceed the maximum interest rate permitted by

applicable Law. If such maximum interest rate would be exceeded by the terms hereof, the rates of interest payable hereunder will be reduced to the extent necessary so that such rates (together with any fees or other amounts which are construed by a court of competent jurisdiction to be interest or in the nature of interest) equal the maximum interest rate permitted by applicable Law and any overpayment of interest received by the Lenders before such rates are so construed will be applied, forthwith after determination of such overpayment, to pay all then outstanding interest, and thereafter to pay outstanding principal.

Section 3.03. Prepayments.

(a) *Optional Prepayments.* (i) Borrower shall have the right to optionally prepay in whole or in part (in a minimum amount of \$500,000 and integral multiples of \$100,000 in excess of that amount for each partial prepayment, or, if less, the entire outstanding principal amount of the Loans) the outstanding principal amount of the Loans on any Business Day (a "*Redemption Date*") for an amount equal to the sum of (x) the aggregate principal amount of the Loans being prepaid, (y) the prepayment premium set forth in clause (ii) below (the "*Prepayment Premium*") and (z) any accrued but unpaid interest in respect of the aggregate principal amount of the Loans being prepaid (such aggregate amount, the "*Redemption Price*"). The applicable Prepayment Premium shall be an amount calculated pursuant to Section 3.03(a)(ii).

(ii) If the Redemption Date occurs:

(A) on or prior to the first anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to seven percent (7%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(B) after the first anniversary of the Closing Date and on or prior to the second anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to six percent (6%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(C) after the second anniversary of the Closing Date and on or prior to the third anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to four percent (4%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(D) after the third anniversary of the Closing Date and on or prior to the fourth anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to three percent (3%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date; and

(E) after the fourth anniversary of the Closing Date and prior to the Stated Maturity Date, the Prepayment Premium shall be an amount equal to two percent (2%) of the aggregate outstanding principal amount of the Loans being

prepaid on such Redemption Date.

No Prepayment Premium shall be due with respect to repayment of the Loans on the Stated Maturity Date.

(iii) Payment of any Prepayment Premium under this Section 3.03 constitutes liquidated damages, not unmatured interest or a penalty, as the actual amount of damages to the Lenders as a result of the relevant triggering event, prepayment or repayment would be impracticable and extremely difficult to ascertain. Accordingly, any Prepayment Premium hereunder is provided by mutual agreement of the Obligors and the Lenders as a reasonable estimation and calculation of such actual lost profits and other actual damages of the Lenders. Without limiting the generality of the foregoing, it is understood and agreed that upon the occurrence of any prepayment event, any Prepayment Premium shall be automatically and immediately due and payable as though any prepaid or repaid portion of the Loans were voluntarily prepaid as of such date and shall constitute part of the Obligations secured by the Collateral. Any Prepayment Premium shall also be automatically and immediately due and payable if the Loans are satisfied or released by foreclosure (whether by power of judicial proceeding or otherwise), deed in lieu of foreclosure or by any other means. EACH OBLIGOR HEREBY EXPRESSLY WAIVES (TO THE FULLEST EXTENT IT MAY LAWFULLY DO SO) THE PROVISIONS OF ANY PRESENT OR FUTURE STATUTE OR OTHER LAW THAT PROHIBITS OR MAY PROHIBIT THE COLLECTION OF THE FOREGOING PREPAYMENT PREMIUM IN CONNECTION WITH ANY SUCH EVENTS. Borrower and the other Obligors expressly agree (to the fullest extent it and they may lawfully do so) that with respect to any Prepayment Premium payable under the terms of this Agreement: (A) such Prepayment Premium is reasonable and is the product of an arm's length transaction between sophisticated business parties, ably represented by counsel; (B) such Prepayment Premium shall be payable notwithstanding the then-prevailing market rates at the time payment is made; (C) there has been a course of conduct between the Lenders and the Obligors giving specific consideration in this transaction for such agreement to pay such Prepayment Premium; and (D) the Obligors shall be estopped hereafter from claiming differently than as agreed to in this paragraph. The Obligors expressly acknowledge that their agreement to pay such Prepayment Premium as herein described is a material inducement to the Lenders to provide the Commitments and to make the Loans.

(b) *Mandatory Prepayments.* Borrower shall prepay the Loans in amounts as provided below, plus the Prepayment Premium on the principal amount of the Loans being prepaid (calculated in accordance with Section 3.03(a)(ii), it being agreed that the relevant payment date shall be deemed to be the "Redemption Date" for purposes of such calculation), plus any accrued but unpaid interest and fees then due and owing, as follows:

(i) In the event of any Casualty Event, an amount equal to 100% of the Net Cash Proceeds received by any Obligor with respect thereto; *provided, however*, so long as no Default has occurred and is continuing, within one hundred eighty (180) days after receipt of such Net Cash Proceeds, the Obligors may apply the Net Cash Proceeds of any casualty policy up to \$1,000,000 with respect to any loss, but not exceeding \$2,000,000 in

the aggregate for all losses under all casualty policies during the term of this Agreement, toward the replacement or repair of destroyed or damaged property; *provided, further*, that any such replaced or repaired property shall be Collateral in which the Administrative Agent for the benefit of the Lenders has been granted a security interest under the Security Documents.

(ii) In the event any Obligor incurs Indebtedness other than Indebtedness that is permitted by Section 9.01 hereof, 100% of the Net Cash Proceeds thereof received by such Obligor. For the avoidance of doubt, any partial prepayment made pursuant to this Section 3.03(b)(ii) shall not be deemed to be a consent to any such incurrence of Indebtedness or a cure or waiver of any Event of Default which occurs in connection therewith, it being understood that any such Event of Default may only be waived with the express consent of the Majority Lenders.

(iii) In the event any Obligor consummates an Asset Sale other than an Asset Sale that is permitted by Section 9.09 hereof (other than Section 9.09(i)), 100% of the Net Cash Proceeds received by such Obligor in connection with such Asset Sale; *provided, however*, so long as no Default has occurred and is continuing, within one hundred eighty (180) days after receipt of such Net Cash Proceeds, the Obligors may use such Net Cash Proceeds not exceeding \$500,000 in the aggregate for all Asset Sales during the term of this Agreement, to purchase, replace, repair or restore properties or assets used in the Obligors' businesses; *provided, further*, that any such purchased, replaced, repaired or restored property shall be Collateral in which the Administrative Agent for the benefit of the Lenders has been granted a security interest under the Security Documents. For the avoidance of doubt, any partial prepayment made pursuant to this Section 3.03(b)(iii) shall not be deemed to be a consent to any Asset Sale or a cure or waiver of any Event of Default which occurs in connection therewith, it being understood that any such Event of Default may only be waived with the express consent of the Majority Lenders.

ARTICLE 4

PAYMENTS

Section 4.01. Payments.

(a) *Payments Generally.* Each payment of principal, interest and other amounts to be made by the Obligors under this Agreement or any other Loan Document shall be made in Dollars, in immediately available funds, without deduction, set off or counterclaim, to the deposit account of the Administrative Agent specified to Borrower from time to time, not later than 2:00 p.m. (Eastern time) on the date on which such payment shall become due (each such payment made after such time on such due date to be deemed to have been made on the next succeeding Business Day).

(b) *Application of Payments.* Each payment under this Agreement or any other Loan Document shall be applied in the following order of priority, with proceeds being applied to a succeeding level of priority only if amounts owing pursuant to the immediately preceding level of

priority have been paid in full in cash:

- (i) *first*, to the payment of any unpaid costs and expenses referred to in Section 13.03(a) then due and owing;
- (ii) *second*, in reduction of Borrower's obligation to pay any unpaid interest and any fees then due and owing including, without limitation, (x) interest payable pursuant to Section 3.02(d) and (y) any Prepayment Premium, if applicable;
- (iii) *third*, in reduction of Borrower's obligation to pay any Claims or Losses referred to in Section 13.03(b) then due and owing;
- (iv) *fourth*, to the payment of unpaid principal of the Loans on a pro rata basis;
- (v) *fifth*, in reduction of any other Obligation then due and owing; and
- (vi) *sixth*, to Borrower or such other Persons as may lawfully be entitled to or directed by Borrower to receive the remainder.

Unless otherwise directed by the Majority Lenders, all payments of principal, interest and fees under this Agreement and the other Loan Documents shall be made by the Obligors to the Lenders pro rata in accordance with the Lenders' respective Proportionate Shares of such payments.

(c) *Non-Business Days.* If the due date of any payment under this Agreement (whether in respect of principal, interest, fees, costs or otherwise) would otherwise fall on a day that is not a Business Day, such date shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension.

Section 4.02. Computations. All computations of interest and fees hereunder shall be computed on the basis of a year of 360 days and actual days elapsed during the period for which payable.

Section 4.03. Notices. Each notice of optional prepayment shall be effective only if received by the Lenders not later than 2:00 p.m. (Eastern time) on the date three (3) Business Days prior to the date of prepayment. Each notice of optional prepayment shall specify the amount to be prepaid and the date of prepayment.

Section 4.04. Set-Off.

(a) *Set-Off Generally.* Upon the occurrence and during the continuance of any Event of Default, the Administrative Agent, the Lenders and each of their respective Affiliates are hereby authorized at any time and from time to time, to the fullest extent permitted by Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other indebtedness at any time owing by the Lenders or such Affiliates to or for the credit or the account of any Obligor against any and all of the Obligations, whether or not the Lenders shall have made any demand and although such Obligations may be unmatured. Any Person

exercising rights of set-off hereunder agrees to promptly notify Borrower after any such set-off and application, *provided* that the failure to give such notice shall not affect the validity of such set-off and application. The rights of the Lenders and their respective Affiliates under this Section 4.04 are in addition to other rights and remedies (including other rights of set-off) that the Lenders and their respective Affiliates may have.

(b) *Exercise of Rights Not Required.* Nothing contained herein shall require the Administrative Agent, the Lenders or any of their respective Affiliates to exercise any such right or shall affect the right of such Persons to exercise, and retain the benefits of exercising, any such right with respect to any other indebtedness or obligation of any Obligor.

ARTICLE 5

YIELD PROTECTION

Section 5.01. Additional Costs.

(a) *Change in Requirements of Law Generally.* If, on or after the date hereof, the adoption of any Requirement of Law, or any change in any Requirement of Law, or any change in the interpretation or administration thereof by any court or other Governmental Authority charged with the interpretation or administration thereof, or compliance by any Lender (or its lending office) with any request or directive (whether or not having the force of law) of any such Governmental Authority, shall impose, modify or deem applicable any reserve (including any such requirement imposed by the Board of Governors of the Federal Reserve System), special deposit, contribution, insurance assessment or similar requirement, in each case that becomes effective after the date hereof, against assets of, deposits with or for the account of, or credit extended by, a Lender (or its lending office) or shall impose on a Lender (or its lending office) any other condition affecting the Loans or the Commitment, not as a result of any action or inaction on the part of such Lender, and the result of any of the foregoing is to increase the cost to any Lender of making or maintaining its portion of the Loans, or to reduce the amount of any sum received or receivable by any Lender under this Agreement or any other Loan Document, by an amount reasonably deemed by such Lender in good faith to be material (other than (i) Indemnified Taxes, (ii) Taxes described in clauses (b) through (d) of the definition of “*Excluded Taxes*” and (iii) Connection Income Taxes), then Borrower shall, without duplication, pay to such Lender on demand therefor such additional amount or amounts as will compensate such Lender for such increased cost or reduction. Notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to constitute a change in Requirements of Law for all purposes of this Section 5.01, regardless of the date enacted, adopted or issued.

(b) *Change in Capital Requirements.* If a Lender shall have determined that, on or after the date hereof, the adoption of any Requirement of Law regarding capital adequacy, or any

change therein, or any change in the interpretation or administration thereof by any Governmental Authority charged with the interpretation or administration thereof, or any request or directive regarding capital adequacy (whether or not having the force of law) of any such Governmental Authority, in each case that becomes effective after the date hereof, has or would have the effect of reducing the rate of return on capital of a Lender (or its parent) as a consequence of a Lender's obligations hereunder or the Loans to a level below that which a Lender (or its parent) could have achieved but for such adoption, change, request or directive by an amount reasonably deemed by it to be material, then Borrower shall pay to such Lender on demand therefor such additional amount or amounts as will compensate such Lender (or its parent) for such reduction.

(c) *Notification by Lender.* The Lenders will promptly notify Borrower of any event of which it has knowledge, occurring after the date hereof, which will entitle a Lender to compensation pursuant to this Section 5.01. Before giving any such notice pursuant to this Section 5.01(c) such Lender shall designate a different lending office if such designation (x) will, in the reasonable judgment of such Lender, avoid the need for, or reduce the amount of, such compensation and (y) will not, in the reasonable judgment of such Lender, be materially disadvantageous to such Lender. A certificate of the Lender claiming compensation under this Section 5.01, setting forth the amount or amounts to be paid to it hereunder, shall be conclusive and binding on Borrower in the absence of manifest error.

Section 5.02. Illegality. Notwithstanding any other provision of this Agreement, in the event that on or after the date hereof the adoption of or any change in any Requirement of Law or in the interpretation or application thereof by any competent Governmental Authority shall make it unlawful for a Lender or its lending office to make or maintain the Loans (and, in the opinion of such Lender, the designation of a different lending office would either not avoid such unlawfulness or would be disadvantageous to such Lender), then such Lender shall promptly notify Borrower thereof following which (a) the Lender's Commitment shall be suspended until such time as such Lender may again make and maintain the Loans hereunder and (b) if such Requirement of Law shall so mandate, the Loans shall be prepaid by Borrower on or before such date as shall be mandated by such Requirement of Law in an amount equal to the Redemption Price applicable on the date of such prepayment in accordance with Section 3.03(a); *provided* that no Prepayment Premium pursuant to Section 3.03(a)(ii) shall be due with respect thereto.

Section 5.03. Taxes.

(a) *Payments Free of Taxes.* Any and all payments by or on account of any Obligation shall be made without deduction or withholding for any Taxes, except as required by applicable Law. If any applicable Law (as determined in the good faith discretion of the Administrative Agent) requires the deduction or withholding of any Tax from any such payment by an Obligor, then such Obligor shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable Law and, if such Tax is an Indemnified Tax, then the sum payable by such Obligor shall be increased as necessary so that after such deduction or withholding for Indemnified Taxes has been made (including such deductions and withholdings for Indemnified Taxes applicable to additional sums payable under this Section 5.03) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding for Indemnified

Taxes been made. For purposes of this Section, the term “applicable Law” includes FATCA.

(b) *Payment of Other Taxes by Borrower.* Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable Law, or at the option of the Administrative Agent, timely reimburse it for, Other Taxes.

(c) *Evidence of Payments.* As soon as practicable after any payment of Taxes by Borrower to a Governmental Authority, as a withholding Tax pursuant to this Section 5.03, Borrower shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, or a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(d) *Indemnification.* Borrower shall reimburse and indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 5.03) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) *Indemnification by the Lender.* Each Lender shall severally indemnify the Administrative Agent, within ten (10) days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that Borrower has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of Borrower to do so), and (ii) any Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to such Lender from any other source against any amount due to the Administrative Agent under this paragraph (e).

(f) *Status of Lenders.* (i) Any Lender that is entitled to an exemption from, or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower and the Administrative Agent at the time or times reasonably requested by Borrower or the Administrative Agent such properly completed and executed documentation reasonably requested by Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable Law or as reasonably requested by Borrower or the Administrative Agent as will enable Borrower or the Administrative Agent to determine whether or not such Lender 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 (other than such documentation set forth in Section 5.03(f)(ii)(A), (B) or (D)) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing:

(A) any Lender that is a U.S. Person shall deliver to Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), duly completed, valid, executed copies of IRS Form W-9 (or successor form) certifying that such Lender is exempt from U.S. Federal backup withholding Tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income Tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, duly completed, valid executed copies of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "interest" article of such Tax treaty and (y) with respect to any other applicable payments under any Loan Document, duly completed, valid, executed originals of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "business profits" or "other income" article of such Tax treaty;

(2) duly completed, valid, executed copies of IRS Form W-8ECI (or successor form);

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit D to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code (a "*U.S. Tax Compliance Certificate*") and (y) executed copies of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form); or

(4) to the extent a Foreign Lender is not the beneficial owner, duly completed, valid, executed copies of IRS Form W-8IMY (or successor form), accompanied by IRS Form W-8ECI (or successor form), IRS Form W-8BEN (or successor form), IRS Form W-8BEN-E (or successor form), a U.S. Tax Compliance Certificate, IRS Form W-9 (or successor form), and/or other certification documents from each beneficial owner, as applicable; *provided* that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), executed copies of any other form prescribed by applicable Law as a basis for claiming exemption from or a reduction in U.S. Federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable Law to permit Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower and the Administrative Agent at the time or times prescribed by Law and at such time or times reasonably requested by Borrower or the Administrative Agent such documentation prescribed by applicable Law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by Borrower or the Administrative Agent as may be necessary for Borrower or the Administrative Agent to comply with its obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Recipient agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall promptly update such form or certification or promptly notify Borrower and the Administrative Agent in writing of its legal inability to do so.

(g) *Treatment of Certain Refunds.* If any party to this Agreement determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 5.03 (including by the payment of additional amounts pursuant to this Section 5.03), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such

indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the written request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this Section 5.03(g), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this Section 5.03(g) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts giving rise to such refund had never been paid. This Section 5.03(g) shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(h) *Mitigation Obligations.* If Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or to any Governmental Authority for the account of any Lender pursuant to Section 5.01 or this Section 5.03, then such Lender shall (at the request of Borrower) use commercially reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign and delegate its rights and obligations hereunder to another of its offices, branches or Affiliates if, in the sole reasonable judgment of such Lender, such designation or assignment and delegation would (i) eliminate or reduce amounts payable pursuant to Section 5.01 or this Section 5.03, as the case may be, in the future, (ii) not subject such Lender to any unreimbursed cost or expense and (iii) not otherwise be disadvantageous to such Lender.

(i) *Survival.* Each party's obligations under this Article 5 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all Obligations under any Loan Document.

Section 5.04. Delay in Requests. Failure or delay on the part of any Lender to demand compensation pursuant to this Article 5 shall not constitute a waiver of such Lender's right to demand such compensation; *provided* that Borrower shall not be required to compensate a Lender pursuant to this Article for any increased costs incurred or reductions suffered more than six (6) months prior to the date that such Lender notifies Borrower of the change in Law giving rise to such increased costs or reductions, and of such Lender's intention to claim compensation therefor (except that, if the change in Law giving rise to such increased costs or reductions is retroactive, then the six (6) month period referred to above shall be extended to include the period of retroactive effect thereof).

ARTICLE 6

CONDITIONS PRECEDENT

Section 6.01. Conditions to Tranche A Loan; Closing Date. The obligation of each Lender to make the Tranche A Loan on the Closing Date shall not become effective until the following

conditions precedent shall have been reasonably satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche A Loan hereunder):

(a) *Organization and Capitalization.* The organizational structure and pro-forma capitalization of the Obligors, after giving effect to the Transactions, as set forth on Schedule 7.19 shall be satisfactory to the Administrative Agent.

(b) *Terms of Material Agreements.* The Administrative Agent shall be satisfied in its sole discretion with the terms and conditions of all of the Obligors' Material Agreements.

(c) *No Law Restraining Transactions.* No applicable Law or regulation shall restrain, prevent or, in the reasonable judgment of the Administrative Agent, impose materially adverse conditions upon the Transactions.

(d) *Lien Searches.* The Administrative Agent shall be satisfied with Lien searches regarding the Obligors made prior to the Closing Date.

(e) *Documentary Deliveries.* The Administrative Agent shall have received the following documents, each of which shall be in form and substance satisfactory to the Administrative Agent:

(i) *Agreement.* This Agreement duly executed and delivered by Borrower and each of the other parties hereto.

(ii) *Security Documents.*

(A) The Security Documents, including, without limitation, the Security Agreement, each Short-Form IP Security Agreement and financing statements, each in form and substance satisfactory to the Administrative Agent and duly executed and delivered by each of the Obligors and the other parties thereto.

(B) The Collateral Questionnaire, duly executed and delivered by a Responsible Officer of Borrower, substantially in the form of Exhibit I hereto and otherwise in form and substance satisfactory to the Administrative Agent.

(C) Without limitation, all other documents and instruments reasonably required to perfect the Administrative Agent's Lien on, and security interest in, the Collateral required to be delivered on or prior to the Closing Date shall have been duly executed and delivered and be in proper form for filing, and shall create in favor of the Administrative Agent, a perfected Lien on, and security interest in, the Collateral, subject to no Liens other than Permitted Liens.

(iii) *Note.* Any Notes requested in accordance with Section 2.04.

(iv) *Approvals.* Borrower shall certify to the Administrative Agent that all material licenses, consents, authorizations and approvals of, and notices to and filings and registrations with, any Governmental Authority (including all foreign exchange approvals) in connection with the Transactions have been made or obtained, and all material third-party consents and approvals, necessary in connection with the execution, delivery and performance by the Obligor of the Loan Documents and the Transactions have been obtained.

(v) *Organizational Documents.* (A) Certified copies of the Organizational Documents of each Obligor and of resolutions of the Board (or similar governing body) of each Obligor approving and authorizing the execution, delivery and performance of this Agreement and each of the other Loan Documents to which it is a party, certified as of the Closing Date by a Responsible Officer of such Obligor as being in full force and effect without modification or amendment; (B) a good standing certificate and/or compliance certificate from the applicable Governmental Authority of each Obligor's (x) jurisdiction of incorporation and (y) jurisdiction(s) in which it is qualified as a foreign corporation or other entity to do business (except where failure to be in good standing would not, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect), each dated a recent date prior to the Closing Date; and (C) such other documents as the Administrative Agent may reasonably request.

(vi) *Incumbency Certificate.* A certificate of each Obligor as to the authority, incumbency and specimen signatures of the persons who have executed the Loan Documents and any other documents in connection herewith on behalf of the Obligor.

(vii) *Opinion of Counsel.* A favorable opinion, dated as of the Closing Date, of Wiggin and Dana LLP, counsel to each Obligor in form reasonably acceptable to the Administrative Agent and its counsel.

(viii) *Evidence of Insurance.* Certificates from Borrower's insurance broker or other evidence satisfactory to the Administrative Agent that all insurance required to be maintained pursuant to Section 8.05 is in full force and effect.

(ix) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(a)(ii) duly executed and delivered by a Responsible Officer of Borrower, in form and substance satisfactory to the Administrative Agent.

(f) *Due Diligence.* The Administrative Agent shall have received and be satisfied with all due diligence regarding the Obligor (including without limitation historical financial statements, Projections, technical, operational, legal, intellectual property, commercial market forecasts, clinical and regulatory assessments, supply chain,

securities, labor, Tax, litigation, environmental, reimbursement and regulatory authority matters) in its sole discretion.

(g) *Indebtedness.* As of the Closing Date, after giving effect to the Transactions, no Obligor shall have Indebtedness other than the Obligations and any Indebtedness specified on Schedule 7.13A. All amounts due or outstanding in respect of any Indebtedness other than the Obligations and any Indebtedness specified on Schedule 7.13A shall have been repaid in full, all commitments (if any) in respect thereof terminated, all guarantees (if any) thereof discharged and released and all security therefor (if any) released, together with all fees and other amounts owing thereon, or documentation in form and substance satisfactory to the Administrative Agent to effect such release upon such repayment and termination shall have been delivered to the Administrative Agent.

(h) *Closing Fees, Expenses, Etc.* The Lenders and their Affiliates shall have received for their own account, the Closing Fee and all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03, after deducting therefrom the Expense Deposit.

(i) *Warrant Certificate.* The Administrative Agent shall have received the executed Warrant Certificate, dated as of the Closing Date.

(j) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Closing Date; provided that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(k) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(l) *Miscellaneous.* The Administrative Agent and each Lender shall have received such other opinions, instruments, certificates and documents as the Administrative Agent or such Lender shall have reasonably requested with prior notice to Borrower.

(m) *Equity Raise.* Borrower shall have completed the Series D preferred equity raise on terms and provisions reasonably satisfactory to the Administrative Agent, which results in minimum gross cash proceeds to Borrower of at least \$75,000,000.

Section 6.02. Conditions to Tranche B Loan; Tranche B Loan Borrowing Date. The obligation of each Lender to make the Tranche B Loan on the Tranche B Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or

waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche B Loan hereunder):

(a) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(b)(ii) requesting the Borrowing of the Tranche B Loan duly executed by a Responsible Officer of Borrower and Borrower's updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.

(b) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche B Loan Borrowing Date; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(c) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

Section 6.03. Conditions to Tranche C Loan; Tranche C Loan Borrowing Date. The obligation of each Lender to make the Tranche C Loan on the Tranche C Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche C Loan hereunder):

(a) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(c)(ii) requesting the Borrowing of the Tranche C Loan duly executed by a Responsible Officer of Borrower and Borrower's updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.

(b) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche C Loan Borrowing Date; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(c) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(d) *Expenses, Etc.* The Lenders and their Affiliates shall have received for their

own account, all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03.

Section 6.04. Conditions to Tranche D Loan; Tranche D Loan Borrowing Date. The obligation of each Lender to make the Tranche D Loan on the Tranche D Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche D Loan hereunder):

(a) Borrowing Notice. The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(d)(ii) requesting the Borrowing of the Tranche D Loan duly executed by a Responsible Officer of Borrower and Borrower's updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.

(b) Representations and Warranties. The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche D Loan Borrowing Date; provided that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(c) No Default. No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(d) Officer's Certificate. A certificate, dated as of the Tranche ~~€D~~ Borrowing Date and signed by a Responsible Officer of Borrower, confirming compliance with the conditions set forth in this Section ~~6.03~~6.04.

(e) Milestone. The Administrative Agent shall have received evidence satisfactory to the Administrative Agent that Borrower ~~has received Total Revenue of at least \$20,000,000 for the twelve (12) month period most recently ended~~ is in pro-forma compliance with the revenue covenant in Section 8.15(b) for the fiscal quarter ending March 31, 2022.

(f) Expenses, Etc. The Lenders and their Affiliates shall have received for their own account, all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03.

The borrowing of the Loans shall constitute a certification by Borrower to the effect that the conditions set forth in Section 6.01, Section 6.02, Section 6.03 and Section ~~6.03~~6.04, as applicable, have been fulfilled as of the Closing Date, the Tranche B Loan Borrowing Date, the Tranche C

Loan Borrowing Date or the Tranche CD Loan Borrowing Date, or waived by the Administrative Agent on behalf of the Lenders, as applicable.

ARTICLE 7

REPRESENTATIONS AND WARRANTIES

In order to induce the Lenders to enter into this Agreement and to extend the Loans hereunder, each Obligor represents and warrants to the Administrative Agent and the Lenders, on the Closing Date, on the Tranche B Loan Borrowing Date, on the Tranche C Loan Borrowing Date and on the Tranche CD Loan Borrowing Date, as applicable, that the following statements are true and correct:

Section 7.01. Power and Authority. Each Obligor and each of its Subsidiaries (a) is duly organized, validly existing and in good standing under the Laws of its jurisdiction of organization, (b) has all requisite corporate (or equivalent) power, and has all material governmental licenses, authorizations, consents and approvals necessary to own its assets and carry on its business as now being or as proposed to be conducted except to the extent that failure to have the same would not reasonably be expected to have a Material Adverse Effect, (c) is qualified to do business and is in good standing in all jurisdictions in which the nature of the business conducted by it makes such qualification necessary except where failure to so qualify would not (either individually or in the aggregate) reasonably be expected to have a Material Adverse Effect, and (d) has full power, authority and legal right to make and perform each of the Loan Documents and, in the case of Borrower, to borrow the Loans hereunder.

Section 7.02. Authorization; Enforceability. The Transactions are within each Obligor's corporate (or equivalent) powers and have been duly authorized by all necessary corporate (or equivalent) action and, if required, by all necessary shareholder or other equity holder action. The Loan Documents have been duly executed and delivered by each Obligor party thereto and constitutes, and each of the other Loan Documents to which it is a party when executed and delivered by such Obligor will constitute, a legal, valid and binding obligation of such Obligor, enforceable against each Obligor in accordance with its terms, except as such enforceability may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or similar Laws of general applicability affecting the enforcement of creditors' rights and (b) the application of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

Section 7.03. Governmental and Other Approvals; No Conflicts. The Transactions (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any other Person, except for (i) such as have been obtained or made and are in full force and effect, (ii) filings and recordings in respect of perfecting or recording the Liens created pursuant to the Security Documents and (iii) those consents listed on Schedule 7.03, (b) will not violate any Requirement of Law or the Organizational Documents of any Obligor or any order of any Governmental Authority, other than any such violations that, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect, (c) will not violate or result in a default under any Material Agreement, or give rise to a right thereunder to

require any payment to be made by any such Person, and (d) will not result in the creation or imposition of any Lien (other than Permitted Liens) on any asset of any Obligor or any of its Subsidiaries.

Section 7.04. Financial Statements; Projections; Material Adverse Change.

(a) *Financial Statements.* Borrower has heretofore furnished to the Administrative Agent certain financial statements as provided for in Section 8.01. Such financial statements present fairly, in all material respects, the financial position and results of operations and cash flows of the Obligors as of such dates and for such periods substantially in accordance with GAAP, subject to quarterly or year-end adjustments and the absence of footnotes. No Obligor has any material contingent liabilities or liabilities for taxes, long-term lease or unusual forward or long-term commitments not disclosed in the aforementioned financial statements.

(b) *Projections.* On and as of the Closing Date, the projections of the Obligors (collectively, the “*Projections*”) are based on good faith estimates and assumptions made by the management of Borrower; *provided*, the Projections are not to be viewed as facts and that actual results during the period or periods covered by the Projections may differ from such Projections and that the differences may be material; *provided, further*, as of the Closing Date, the management of Borrower believes that the Projections are reasonable and attainable.

(c) *No Material Adverse Change.* Since December 31, 2019, no event, circumstance or change has occurred that has caused or evidences, either in individually or in the aggregate, a Material Adverse Change.

Section 7.05. Properties.

(a) *Property Generally.* Each Obligor has good and marketable fee simple title to, or valid leasehold or license interests in, all its real and personal Property material to its business, subject only to Permitted Liens and except as would not reasonably be expected to interfere with its ability to conduct its business as currently conducted or to utilize such properties for their intended purposes.

(b) *Intellectual Property.* (i) Schedule 7.05(b) lists, with respect to each Obligor, all United States and foreign registrations of and applications for Patents, Trademarks, Copyrights, and industrial designs that are Obligor Intellectual Property, including the applicable jurisdiction, registration or application number and date, as applicable thereto, a designation as to whether it is Material Intellectual Property, and a designation as to whether it is licensed or owned by Obligor.

(ii) Each Obligor (A) owns or possesses all legal and beneficial rights, title and interest in and to Material Intellectual Property designated on Schedule 7.05(b) as being owned by such Obligor and (B) has the right to use the Material Intellectual Property licensed to such Obligor, in each case free and clear of any Liens or Claims of any kind, other than Permitted Liens.

(iii) To Obligors’ knowledge, the Material Intellectual Property does not violate any license or infringe any valid and enforceable Intellectual Property right of another.

(iv) Other than with respect to the Material Agreements, or as permitted by this Agreement, the Obligors have not assigned or otherwise transferred ownership of, or agreed to assign or otherwise transfer ownership of, any Material Intellectual Property, in whole or in part, to any Person who is not an Obligor.

(v) Other than as set forth on Schedule 7.05(b), the Obligors have not received any written communications, nor is there any pending or, to each Obligor's knowledge, threatened action in writing, suit, proceeding or claim in writing by another, alleging that any of the Obligors has violated, infringed, diluted or misappropriated any Intellectual Property of another.

(vi) There is no pending or, to any Obligor's knowledge, threatened action in writing, suit, proceeding or claim in writing by another: (a) challenging an Obligor's rights in or to any Material Intellectual Property owned by such Obligor; or (b) challenging the validity, enforceability or scope of any Material Intellectual Property owned by an Obligor.

(vii) Each Obligor has taken commercially reasonable precautions to protect the secrecy, confidentiality and value of the Material Intellectual Property (including without limitation, by requiring that all relevant current and former employees, contractors and consultants of the Obligors execute written confidentiality and invention assignment Contracts).

(viii) Each Obligor has complied with the material terms of each Material Agreement pursuant to which Intellectual Property has been licensed to the Obligors (which material terms shall include, but not be limited to, pricing and duration of the agreement).

(ix) All maintenance fees, annuities, and the like due or payable on the Patents within Material Intellectual Property have been timely paid or the failure to so pay was the result of an intentional decision by the applicable Obligor, which would not reasonably be expected to result in a Material Adverse Change. All documents and instruments necessary to register or apply for or renew registration of all Patents, Trademarks and Copyrights within the Material Intellectual Property have been validly executed, delivered and filed in a timely manner with the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

(x) To each Obligor's knowledge, there are no material defects in any of the Patents within Material Intellectual Property and no such Patents within Material Intellectual Property have ever been finally adjudicated to be invalid, unpatentable or unenforceable for any reason in any administrative, arbitration, judicial or other proceeding.

(xi) To each Obligor's knowledge, no Obligor has received any written notice asserting that the Patents within the Material Intellectual Property are invalid, unpatentable or unenforceable and, to each Obligor's knowledge, no Obligor has engaged in any conduct, or omitted to perform any necessary act, the result of which would invalidate or render unpatentable or unenforceable any such Patent within the Material Intellectual Property.

(xii) Each employee and consultant has signed a written agreement assigning to the applicable Obligor all intellectual property rights that are related to such Obligor's business as now conducted and as presently proposed to be conducted and confidentiality provisions protecting

trade secrets and confidentiality information of the Obligors.

(xiii) To the knowledge of each Obligor, no third party is infringing upon or misappropriating, or violating any material license or agreement with such Obligor relating to any Material Intellectual Property.

Section 7.06. No Actions or Proceedings.

(a) *Litigation.* There is no litigation, investigation or enforcement proceeding pending or threatened in writing with respect to any Obligor by or before any Governmental Authority or arbitrator (i) that either individually or in the aggregate would reasonably be expected to have a Material Adverse Effect or (ii) that involves this Agreement or the Transactions.

(b) *Environmental Matters.* The operations and the real Property of the Obligors comply with all applicable Environmental Laws, except to the extent the failure to so comply, either individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. To each Obligor's knowledge, there have been no conditions, occurrences or release of Hazardous Materials which would reasonably be expected to have a Material Adverse Effect.

(c) *Labor Matters.* No Obligor has engaged in unfair labor practices and there are no pending or, to any Obligor's knowledge, threatened in writing labor actions, disputes, grievance or arbitration proceedings involving the employees of any Obligor, in each case that would reasonably be expected to have a Material Adverse Effect. There is no material strike or work stoppage in existence or threatened in writing against any Obligor.

Section 7.07. Compliance with Laws and Agreements. Each Obligor is in compliance with all Requirements of Law (including CLIA and Environmental Laws) and all Contracts binding upon it or its Property, except (other than with respect to Material Intellectual Property) where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

Section 7.08. Taxes. Each Obligor has timely filed or caused to be filed all federal income and other material Tax returns and reports required to have been filed and has paid or caused to be paid all federal income and other material Taxes required to have been paid by it, except Taxes that are being contested in good faith by appropriate proceedings and for which such Obligor has set aside on its books adequate reserves with respect thereto substantially in accordance with GAAP.

Section 7.09. Full Disclosure. Borrower has disclosed to the Lenders all Material Agreements to which any Obligor is party, and all other matters to its knowledge, that, individually or in the aggregate, would reasonably be expected to result in a Material Adverse Effect. None of the reports, financial statements, certificates or other information furnished by or on behalf of the Obligors to the Lenders in connection with the negotiation of this Agreement and the other Loan Documents or delivered hereunder or thereunder (as modified or supplemented by other information so furnished) contains any material misstatement of material fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that, with respect to projected financial

information, Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

Section 7.10. Regulation.

(a) *Investment Company Act.* No Obligor is an “investment company” as defined in, or subject to regulation under, the Investment Company Act of 1940.

(b) *Margin Stock.* No Obligor is engaged principally, or as one of its important activities, in the business of extending credit for the purpose, whether immediate, incidental or ultimate, of buying or carrying Margin Stock, and no part of the proceeds of the Loans will be used to buy or carry any Margin Stock in violation of Regulation T, U or X.

Section 7.11. Solvency. The Obligors, on a consolidated basis, are and, immediately after giving effect to the Borrowings, the use of proceeds thereof, and the consummation of the Transactions, will be, Solvent.

Section 7.12. Subsidiaries. Except as set forth on Schedule 7.12 (as such Schedule may be updated by Borrower from time to time), Borrower has no direct or indirect Subsidiaries.

Section 7.13. Indebtedness and Liens. Set forth on Schedule 7.13A is a complete and correct list of all Permitted Indebtedness of each Obligor described in Section 9.01(b) as of the date hereof. Set forth on Schedule 7.13B is a complete and correct list of all Permitted Liens described in Section 9.02(b) granted by an Obligor with respect to its respective Property and outstanding as of the date hereof.

Section 7.14. Material Agreements. Set forth on Schedule 7.14 (as such Schedule may be updated by Borrower from time to time) is a complete and correct list of (i) each Material Agreement and (ii) each Contract creating or evidencing any Material Indebtedness, together with a summary reference to the product or purpose of each such Material Agreement and such Contract, to which an Obligor is a party. Accurate and complete copies of each such Contract listed on such schedule have been made available to the Lenders. No Obligor is in default in any material respect under any such Material Agreement or such Contract creating or evidencing any Material Indebtedness listed on such schedule, and no Obligor has knowledge of any default in any material respect by any counterparty to such Material Agreement or such Contract. Except as otherwise disclosed on Schedule 7.14 (as such Schedule may be updated by Borrower from time to time), all material vendor purchase agreements and provider Contracts of the Obligors, and all Material Agreements including a grant of rights under any Intellectual Property to an Obligor, are in full force and effect without material modification from the form in which the same were disclosed to the Lenders.

Section 7.15. Restrictive Agreements. None of the Obligors is party to any Restrictive Agreement, except (i) those listed on Schedule 7.15 or otherwise permitted under Section 9.11, (ii) restrictions and conditions imposed by Law or by the Loan Documents, (iii) any stockholder agreement or investor rights agreement, charter, by laws or other organizational documents of an Obligor and (iv) limitations associated with Permitted Liens.

Section 7.16. Real Property. No Obligor or any of its Subsidiaries owns or leases (as tenant thereof) any real Property on the date hereof, except as described on Schedule 7.16.

Section 7.17. Pension and Other Plans. Schedule 7.17 sets forth, as of the date hereof, a complete and correct list of, and that separately identifies, (a) all Title IV Plans, (b) all Multiemployer Plans and (c) all material Benefit Plans. Each Benefit Plan, and each trust thereunder, intended to qualify for Tax exempt status under Section 401 or 501 of the Code or other Requirements of Law so qualifies. Except for those that would not, in the aggregate, have a Material Adverse Effect, (x) each Benefit Plan is in compliance with applicable provisions of ERISA, the Code and other Requirements of Law, (y) there are no existing or pending (or to the knowledge of any Obligor or Subsidiary thereof, threatened) claims (other than routine claims for benefits in the normal course), sanctions, actions, lawsuits or other proceedings or investigation involving any Benefit Plan to which any Obligor or Subsidiary thereof incurs or otherwise has or would have an obligation or any liability or Claim and (z) no ERISA Event is reasonably expected to occur. Borrower and each of its ERISA Affiliates has met all applicable requirements under the ERISA Funding Rules with respect to each Title IV Plan, and no waiver of the minimum funding standards under the ERISA Funding Rules has been applied for or obtained. As of the most recent valuation date for any Title IV Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Code) is at least 60%, and neither Borrower nor any of its ERISA Affiliates knows of any facts or circumstances that would reasonably be expected to cause the funding target attainment percentage to fall below 60% as of the most recent valuation date. As of the date hereof, no ERISA Event has occurred in connection with which obligations and liabilities (contingent or otherwise) remain outstanding. No ERISA Affiliate would have any Withdrawal Liability as a result of a complete withdrawal from any Multiemployer Plan on the date this representation is made.

Section 7.18. Collateral; Security Interest. Each Security Document is effective to create in favor of the Administrative Agent for the benefit of the Lenders a legal, valid and enforceable security interest in the Collateral subject thereto and each such security interest is perfected to the extent required by (and has the priority required by) the applicable Security Document, subject to Permitted Liens. The Security Documents collectively are effective to create in favor of the Administrative Agent for the benefit of the Lenders a legal, valid and enforceable security interest in the Collateral, which upon the filing of financing statements and other similar statements filed in the appropriate offices, such security interests are perfected security interests (subject only to Permitted Liens) to the extent that such perfection may be obtained by such filing.

Section 7.19. Capitalization. All of the issued and outstanding securities of each Obligor have been duly authorized, are validly issued, fully paid, and non-assessable. As of the Closing Date and except as set forth on Schedule 7.19, there are no outstanding or authorized options, warrants, purchase rights, subscription rights, conversion rights, exchange rights, or other contracts or commitments that could require the Obligors to issue, sell, or otherwise cause to become outstanding any of their ownership interests. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, or similar rights with respect to the Obligors. None of the Equity Interests in any Obligor has been mortgaged, assigned or pledged in favor of any Person, other than pursuant to the Security Agreement.

Section 7.20. Insurance. Each Obligor has obtained (and is maintaining), insurance for its assets (including the Collateral) and business as required under the Loan Documents.

Section 7.21. Certain Fees. Except as described on Schedule 7.21, no broker's or finder's fee will be payable in connection with the execution and delivery of this Agreement.

Section 7.22. Sanctions Laws. Obligor and, to the knowledge of the Obligor, any director, officer or employee of an Obligor acting on behalf of the Obligor, are in compliance with the Sanctions Laws.

Section 7.23. Anti-Corruption Laws. No Obligor nor any of its Subsidiaries has, nor, to the knowledge of any Responsible Officer of any Obligor, has any director, officer, agent or employee of any Obligor acting on behalf of such Obligor (i) taken any action, directly or indirectly, that would result in a violation by such Persons of the Anti-Corruption Laws, (ii) made, offered to make, promised to make or authorized the payment or giving of, directly or indirectly, any Prohibited Payment or (iii) been subject to any investigation by any Governmental Authority with regard to any actual or alleged Prohibited Payment.

Section 7.24. Anti-Terrorism Laws. The Obligor (i) have taken reasonable measures to ensure compliance with applicable Economic Sanctions Laws and Anti-Terrorism Laws, (ii) are not Designated Persons and (iii) have not used any part of the proceeds from any advance on behalf of any Designated Person or has not used, directly by it or indirectly through any Subsidiary, such proceeds in connection with any investment in, or any transactions or dealings with, any Designated Person.

ARTICLE 8

AFFIRMATIVE COVENANTS AND FINANCIAL COVENANTS

Each Obligor covenants and agrees with the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than the Warrant Obligations and inchoate indemnity obligations) have been paid in full in cash:

Section 8.01. Financial Statements and Other Information. It will furnish to the Administrative Agent for distribution to the Lenders:

- (a) as soon as available and in any event within thirty-five (35) days after the end of each month prior to a Qualified Public Offering, the consolidated balance sheet of the Obligor as of the end of each such month, and the related consolidated statements of income and cash flows of the Obligor for such month and the portion of the fiscal year through the end of such month, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with a certificate of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of the Obligor as at such date and the results of operations of the Obligor for the period ended on such date and have been prepared substantially in accordance with GAAP consistently applied, subject to

changes resulting from normal, quarterly or year-end adjustments and except for the absence of notes;

(b) as soon as available and in any event within forty-five (45) days after the end of the first three fiscal quarters of each fiscal year, the consolidated balance sheet of the Obligors as of the end of such quarter, and the related consolidated statements of income and cash flows of the Obligors for such quarter and the portion of the fiscal year through the end of such quarter, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with (i) a certificate of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of the Obligors as at such date and the results of operations of the Obligors for the period ended on such date and have been prepared substantially in accordance with GAAP consistently applied, subject to changes resulting from normal quarterly or year-end adjustments and except for the absence of footnotes and (ii) a management's discussion and analysis of the financial condition and results of operations, including the Obligors' liquidity and capital resources; *provided* that, if the Borrower is a Publicly Reporting Company, the Borrower's filing of a Quarterly Report on Form 10-Q with the SEC shall be deemed to satisfy the requirements of this Section 8.01(b) on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(c) as soon as available and in any event within one hundred fifty (150) days after the end of each fiscal year, the consolidated balance sheet of the Obligors as of the end of such fiscal year, and the related consolidated statements of income, shareholders' equity and cash flows of the Obligors for such fiscal year, prepared substantially in accordance with GAAP consistently applied, all in reasonable detail and setting forth in comparative form the figures for the previous fiscal year, accompanied by (i) a report and opinion thereon of Cohn Reznick LLP or another independent certified public accountant acceptable to the Administrative Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any "going concern" or like qualification or exception (other than solely with respect to, or expressly resulting solely from, the repayment of the Loans on the Stated Maturity Date) or any qualification or exception as to the scope of such audit and (ii) a management's discussion and analysis of the financial condition and results of operations, including the Obligors' liquidity and capital resources; *provided* that, if the Borrower is a Publicly Reporting Company, the Borrower's filing of a Yearly Report on Form 10-K with the SEC shall be deemed to satisfy the requirements of this Section 8.01(c) on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(d) within thirty-five (35) days after the end of each month, a compliance certificate of a Responsible Officer of Borrower as of the end of the applicable accounting period (which delivery may, unless a Lender requests executed originals, be by electronic communication including email and shall be deemed to be an original authentic counterpart thereof for all purposes) in the form of Exhibit E (a "Compliance Certificate") which, for purposes of clarification, shall (i) demonstrate the Obligors' compliance with

Section 8.15(a) in respect of such month, (ii) for each month end that coincides with the end of a fiscal quarter of Borrower, state that the representations and warranties made by the Obligor in Article 7 are true in all material respects on and as of the date thereof; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualification therein) in all respects, (iii) for each month end that coincides with the end of a fiscal quarter of Borrower, demonstrate Borrower’s compliance with Section 8.15(b) in respect of such fiscal quarter and (iv) for each month end that coincides with the end of a fiscal year of Borrower, provide Obligor’s updated Schedules to this Agreement (if any);

(e) promptly, and in any event within five (5) Business Days after receipt thereof by an Obligor, copies of each notice or other correspondence received from any securities regulator or exchange to the authority of which an Obligor is subject concerning any investigation or possible investigation or other inquiry by such agency regarding financial or other operational results of such Obligor;

(f) the information regarding insurance maintained by the Obligor as and when required under Section 8.05;

(g) promptly following the Lenders’ written request at any time, proof of the Obligor’s compliance with Section 8.15(a);

(h) within ten (10) days of delivery, copies of all periodic reports distributed by Borrower to its shareholders generally; *provided* that (i) any such material may be redacted by Borrower to exclude information relating to the Loan Documents or the Lenders and (ii) the Lenders shall not be entitled to receive statements, reports and notices relating to topics that (x) are subject to attorney-client privilege or (y) present a conflict of interest for the Lenders;

(i) a financial forecast for the Obligor for each fiscal year, including forecasted balance sheets, statements of income and cash flows of the Obligor, all of which shall be prepared on a consolidated basis and delivered not later than February 28 of such fiscal year;

(j) promptly following any Lender’s written request, certification that such Obligor is not a passive foreign investment company (“PFIC”) within the meaning of Sections 1291 through 1297 of the Code, or, if such Obligor determines that it is a PFIC, such information as would allow the Lender to make a qualified electing fund election with respect to the stock of the Obligor;

(k) after Borrower becomes a Publicly Reporting Company, within five (5) Business Days of filing, provide access (via posting and/or links on Borrower’s web site) to all reports on Form 10-K and Form 10-Q filed with the SEC, any Governmental

Authority succeeding to any or all of the functions of the SEC or with any national securities exchange; and within five (5) Business Days of filing, provide notice and access (via posting and/or links on Borrower's web site) to all reports on Form 8-K filed with the SEC, and copies of (or access to, via posting and/or links on Borrower's web site) all other reports, proxy statements and other materials filed by Borrower with the SEC, any Governmental Authority succeeding to any of the functions of the SEC or with any national securities exchange;

(l) promptly after the receipt thereof, a copy of any "management letter" received from its certified public accounts and the management's response thereto; and

(m) such other information respecting the operations, properties, business or condition (financial or otherwise) of the Obligors (including with respect to the Collateral) as the Lenders may from time to time reasonably request.

Section 8.02. Notices of Material Events. It will furnish to the Administrative Agent for distribution to the Lenders written notice of the following promptly after a Responsible Officer of an Obligor first learns of the existence of:

(a) the occurrence of any Default or Event of Default;

(b) the occurrence of any event with respect to any Obligor's Property resulting in a Loss, to the extent not covered by insurance, aggregating \$250,000 or more;

(c) (i) any proposed Acquisition by any Obligor that would reasonably be expected to result in environmental liability under Environmental Laws in excess of \$250,000, and (ii) in each case, to the extent that any of the following would reasonably be expected to result in liability in excess of \$250,000: (A) spillage, leakage, discharge, disposal, leaching, migration or release of any Hazardous Material required to be reported to any Governmental Authority under applicable Environmental Laws, and (B) all actions, suits, claims, notices of violation, hearings, investigations or proceedings pending, or threatened in writing against or affecting any Obligor or any of its Subsidiaries or with respect to the ownership, use, maintenance and operation of their respective businesses, operations or properties, relating to Environmental Laws or Hazardous Material;

(d) the assertion of any environmental matter by any Person in writing against, or with respect to the activities of, any Obligor or any of its Subsidiaries and any alleged violation of or non-compliance with any Environmental Laws or any permits, licenses or authorizations, in each case, which would reasonably be expected to involve damages in excess of \$250,000 other than any environmental matter or alleged violation that, if adversely determined, would not (either individually or in the aggregate) have a Material Adverse Effect;

(e) the filing or commencement of any action, suit or proceeding by or before any arbitrator or Governmental Authority against or directly affecting any Obligor or any of its Subsidiaries, in each case, that would reasonably be expected to result in a Material

Adverse Effect;

(f) (i) on or prior to any filing by any ERISA Affiliate of any notice of intent to terminate any Title IV Plan, a copy of such notice and (ii) promptly, and in any event within ten (10) days, after any Responsible Officer of any ERISA Affiliate knows or has reason to know that a request for a minimum funding waiver under Section 412 of the Code has been filed with respect to any Title IV Plan or Multiemployer Plan, a notice (which may be made by telephone if promptly confirmed in writing) describing such waiver request and any action that any ERISA Affiliate proposes to take with respect thereto, together with a copy of any notice filed with the PBGC or the IRS pertaining thereto;

(g) within five (5) Business Days of obtaining written notice or knowledge thereof, (i) the termination of any Material Agreement; (ii) the receipt by any Obligor or any of its Subsidiaries of a written notice under any Material Agreement (and a copy thereof) asserting a default by such Obligor or any of its Subsidiaries where such alleged default would permit such counterparty to terminate such Material Agreement; (iii) the entering into any new Material Agreement by an Obligor (and a copy thereof); or (iv) any amendment to a Material Agreement that would be materially adverse to the Lenders (and a copy thereof) (which includes, but is not limited to, any amendments to provisions relating to pricing and term), *provided* that notices required under this subsection (g) may be delivered with Borrower's monthly Compliance Certificate unless any of the foregoing events would reasonably be expected to have a Material Adverse Effect;

(h) any product recalls, safety alerts, corrections, withdrawals, marketing suspensions, removals or the like conducted, to be undertaken or issued by any Obligor or any of its Subsidiaries, whether or not at the request, demand or order of any Governmental Authority;

(i) within five (5) Business Days of obtaining written notice or knowledge thereof, any infringement or other violation by any Person of any Obligor Intellectual Property that would reasonably be expected to result in a Material Adverse Effect;

(j) within five (5) Business Days of obtaining written notice or knowledge thereof, a material licensing agreement or arrangement entered into by any Obligor or any of its Subsidiaries in connection with any material infringement or alleged infringement of the Intellectual Property of another Person;

(k) within five (5) Business Days of obtaining written notice or knowledge thereof, any written claim by any Person that the conduct of any Obligor's (or any Subsidiary thereof) business, including the development, manufacture, use, sale or other commercialization of any product, infringes any Intellectual Property of such Person, except to the extent any such claim would not reasonably be expected to result in a Material Adverse Effect;

(l) the reports and notices as and when required by the Security Documents;

(m) within thirty (30) days of the date thereof, or, if earlier, on the date of delivery of any financial statements pursuant to Section 8.01, notice of any material change in accounting policies or financial reporting practices by the Obligor;

(n) promptly after the occurrence thereof, notice of any labor controversy resulting in or threatening to result in any strike, work stoppage, boycott, shutdown or other material labor disruption against or involving an Obligor (or any Subsidiary thereof);

(o) any other development that results in, or would reasonably be expected to result in, a Material Adverse Effect;

(p) concurrently with the delivery of financial statements under Section 8.01(a), (b) or (c), the creation or other acquisition of any Intellectual Property by any Obligor or any Subsidiary after the date hereof and during such prior fiscal year which is registered or becomes registered or the subject of an application for registration with the United States Copyright Office or the United States Patent and Trademark Office, as applicable, or with any other equivalent foreign Governmental Authority; and

(q) any change to any Obligor's ownership of Deposit Accounts, Securities Accounts and Commodity Accounts, by delivering to the Lenders an updated Schedule 7 to the Security Agreement setting forth a complete and correct list of all such accounts as of the date of such change.

Each notice delivered under this Section 8.02 shall be accompanied by a statement of a Responsible Officer of Borrower setting forth in reasonable detail the event or development requiring such notice and any action taken or proposed to be taken with respect thereto.

Notwithstanding any contrary provision of this Agreement or any other Loan Document (including, without limitation, Sections 8.01 and 8.02), until such time as the Administrative Agent provides written notice to Borrower that it no longer desires to receive information that constitutes material non-public information, Borrower shall provide any information required pursuant to the terms hereof, including any information that may be material non-public information, to the Administrative Agent; *provided*, that notwithstanding the foregoing, Borrower shall at all times comply with Section 8.01(d)(i)-(iii), 8.01(k) and 8.02(a).

Section 8.03. Existence; Maintenance of Properties, Etc. (a) It will, and will cause each of its Subsidiaries to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence; *provided* that the foregoing shall not prohibit any merger, amalgamation, consolidation, liquidation or dissolution permitted under Section 9.03.

(b) It shall, and shall cause each of its Subsidiaries to, maintain and preserve all rights, licenses, permits, privileges and franchises material to the conduct of its business, and maintain and preserve all of its assets and properties necessary to the conduct of its business in good working order and condition, ordinary wear and tear and damage from casualty or condemnation excepted.

(c) It shall, and shall cause each of its Subsidiaries to, use commercially reasonable efforts to cause each new employee and contractor to execute and deliver a customary confidentiality, non-disclosure and Intellectual Property assignment agreement that includes a waiver of moral rights.

Section 8.04. Payment of Obligations. It will, and will cause each of its Subsidiaries to, pay and discharge (i) all federal income and other material Taxes, fees, assessments and governmental charges or levies imposed upon it or upon its properties or assets prior to the date on which penalties attach thereto, and all lawful claims for labor, materials and supplies which, if unpaid, might become a Lien (other than a Permitted Lien) upon any properties or assets of any Obligor, except to the extent such Taxes, fees, assessments or governmental charges or levies, or such claims, are being contested in good faith by appropriate proceedings and are adequately reserved against substantially in accordance with GAAP, (ii) all lawful claims which, if unpaid, would by Law become a Lien upon its Property not constituting a Permitted Lien and (iii) all other obligations if the failure to discharge such obligation would reasonably be expected to result in a Material Adverse Effect.

Section 8.05. Insurance. At its own cost and expense, it will, and will cause each of its Subsidiaries, to obtain and maintain, with financially sound and reputable insurers, insurance of the kinds, and in the amounts, as are consistent with customary practices and standards of its industry in the same or similar locations, it being understood and agreed that the insurance held by the Obligors on the Closing Date is deemed to fulfill this requirement on the date hereof. All of the insurance policies required pursuant to this Section 8.05 will name the Administrative Agent as a "loss payee," "additional insured" or "mortgagee," as applicable and as its interests may appear. Borrower will use its commercially reasonable efforts to ensure, or to cause others to ensure, that all insurance policies required pursuant to this Section 8.05 shall provide that they shall not be terminated or cancelled nor shall any policy be materially changed in a manner adverse to the insured Person without at least thirty (30) days' written notice to insured Person and the Administrative Agent. Receipt of notice of termination or cancellation of any such insurance policies shall entitle the Administrative Agent to renew any such policies, all in accordance with the first sentence of this Section 8.05 or otherwise to obtain similar insurance in place of such policies, in each case at the expense of Borrower (payable within three (3) Business Days of Borrower's receipt of written demand therefor) and, unless an Event of Default has occurred and is continuing, with the prior written consent of Borrower (such consent not to be unreasonably withheld). The amount of any such expenses shall accrue interest at the Default Rate if not paid when due and shall constitute "Obligations." All of the insurance policies required hereby will be evidenced by one or more certificates of insurance, together with appropriate loss payee or additional insured clauses or endorsements in favor of the Administrative Agent as required by this Section, delivered to the Administrative Agent on or before the Closing Date (or, with respect to such endorsements, within the time period set forth in Section 8.19) and at such other times as the Administrative Agent may request from time to time.

Section 8.06. Books and Records; Inspection Rights. It will, and will cause each of its Subsidiaries to, keep proper books of record and account in which full, true and correct entries are made of all dealings and transactions in relation to its business and activities. It will, and will cause each of its Subsidiaries to, permit any representatives designated by the Administrative

Agent, upon reasonable prior notice and at reasonable times, to visit and inspect its properties, to examine and make extracts from its books and records, and to discuss its affairs, finances and condition with its officers and independent accountants, all at such reasonable times during normal business hours and with reasonable advance notice as the Administrative Agent may request. It will, and will cause each of its Subsidiaries to, pay all reasonable and documented out-of-pocket expenses incurred by the Administrative Agent (a) so long as no Default has occurred and is continuing, for no more than two (2) such inspections each calendar year and (b) during a continuing Default, all such inspections.

Section 8.07. Compliance with Laws. (a) It will, and will cause each of its Subsidiaries to, (i) comply in all material respects with all Requirements of Law (including Environmental Laws) and (ii) comply in all material respects with all terms of outstanding Indebtedness and all Material Agreements, except (other than with respect to Material Intellectual Property) where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

(b) Each Obligor will maintain, and will cause each of its Subsidiaries to maintain, all records required to be maintained by a Governmental Authority, except where failure to do so, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect.

Section 8.08. Licenses. It will, and will cause each of its Subsidiaries to, obtain and maintain all licenses, authorizations, consents, filings, exemptions, registrations and other Governmental Approvals necessary in connection with the execution, delivery and performance of the Loan Documents, the consummation of the Transactions or the operation and conduct of its business and ownership of its properties, except where failure to do so would not reasonably be expected to have a Material Adverse Effect.

Section 8.09. Action under Environmental Laws. It will, and will cause each of its Subsidiaries to, upon a Responsible Officer becoming aware of the release of any Hazardous Materials or the existence of any environmental liability under applicable Environmental Laws with respect to their respective businesses, operations or properties, take all actions, at their cost and expense, as shall be required by applicable Law to investigate and clean up the condition of their respective businesses, operations or properties, including all required removal, containment and remedial actions, and restore their respective businesses, operations or properties to a condition, in each case in material compliance with applicable Environmental Laws.

Section 8.10. Use of Proceeds. The proceeds of the Loans will be used only as provided in Section 2.05. No part of the proceeds of the Loans will be used, whether directly or indirectly, for any purpose that violates any of the Regulations of the Board of Governors of the Federal Reserve System, including Regulations T, U and X.

Section 8.11. Certain Obligations Respecting Subsidiaries; Further Assurances; Intellectual Property.

(a) *Subsidiaries.* It will take such action, and will cause each of its Subsidiaries to take

such action, from time to time as shall be necessary to ensure that all Subsidiaries are “Guarantors” hereunder. Without limiting the generality of the foregoing, in the event that any Obligor shall form or acquire any new Subsidiary, it and its Subsidiaries will promptly and in any event within fifteen (15) days (or such longer time as consented to by the Administrative Agent in writing) of the formation or Acquisition of such Subsidiary:

(i) cause such new Subsidiary to become a “Guarantor” hereunder, and a “Grantor” under the Security Documents, pursuant to a Guarantee Assumption Agreement;

(ii) take such action or cause such Subsidiary to take such action (including delivering such Equity Interests together with undated transfer powers executed in blank) as shall be necessary to create and perfect valid and enforceable first priority (subject to Permitted Priority Liens) Liens on substantially all of the personal Property of such new Subsidiary as collateral security for the obligations of such new Subsidiary hereunder;

(iii) to the extent that the parent of such Subsidiary is not a party to the Security Documents or has not otherwise pledged Equity Interests in its Subsidiaries in accordance with the terms of the Security Documents and this Agreement, cause the parent of such Subsidiary to execute and deliver a pledge agreement in favor of the Lenders, in respect of all outstanding issued shares of such Subsidiary; and

(iv) deliver such proof of corporate action, incumbency of officers, opinions of counsel and other documents as is consistent with those delivered by each Obligor pursuant to Section 6.01 or as the Majority Lenders shall have requested;

provided, that solely with respect to any Subsidiary that is an Immaterial Foreign Subsidiary, no such actions shall be required other than a pledge by owner of such Immaterial Foreign Subsidiary of 100% of the Equity Interests of such Immaterial Foreign Subsidiary, which pledge shall, at the Administrative Agent’s discretion be perfected under the Law of such Immaterial Foreign Subsidiary’s jurisdiction of formation. For the avoidance of doubt, in the event that any Subsidiary ceases to qualify as an Immaterial Foreign Subsidiary, it shall be required to comply with clauses (a)(i)-(iii) hereof as if it was formed or Acquired on the date it ceased to qualify as an Immaterial Foreign Subsidiary.

(b) *Further Assurances.* It will, and will cause each of its Subsidiaries to, take such action from time to time as shall reasonably be requested in writing by the Majority Lenders to effectuate the purposes and objectives of this Agreement. Without limiting the generality of the foregoing, it will, and will cause each Person that is required to be a Guarantor to, take such action from time to time (including executing and delivering such assignments, security agreements, control agreements and other instruments) as shall be reasonably requested in writing by the Majority Lenders to create, in favor of the Lenders, perfected security interests and Liens (subject to Permitted Liens) in substantially all of the personal Property of such Obligor as collateral security for the Obligations; *provided* that any such security interest or Lien shall be subject to the relevant requirements of the Security Documents.

(c) *Intellectual Property.* In the event that any Obligor creates, develops or acquires

Obligor Intellectual Property during the term of this Agreement, then the provisions of this Agreement shall automatically apply thereto and any such Obligor Intellectual Property shall automatically constitute part of the Collateral under the Security Documents, without further action by any party, in each case from and after the date of such creation, development or acquisition (except that any representations or warranties of any Obligor shall apply to any such Obligor Intellectual Property only from and after the date, if any, subsequent to such acquisition that such representations and warranties are brought down or made anew as provided herein). In the event that any Obligor holds or acquires Obligor Intellectual Property during the term of this Agreement, then, upon the request of the Administrative Agent, such Obligor shall take any action as shall be reasonably necessary and reasonably requested by the Administrative Agent to ensure that the provisions of this Agreement and the Security Agreement shall apply thereto and any such Obligor Intellectual Property shall constitute part of the Collateral under the Security Documents

Section 8.12. Termination of Non-Permitted Liens. In the event that any Responsible Officer of Borrower shall become aware or be notified by the Lenders of the existence of any outstanding Lien against any Property of any Obligor, which Lien is not a Permitted Lien, such Obligor shall use its best efforts to promptly terminate or cause the termination of such Lien.

Section 8.13. Non-Consolidation. It will, and will cause each of its Subsidiaries to, (i) maintain entity records and books of account separate from those of any other entity which is an Affiliate of such entity; and (ii) not commingle its funds or assets with those of any other entity which is an Affiliate of such entity.

Section 8.14. Anti-Terrorism and Anti-Corruption Laws. No Obligor shall engage in any transaction that violates any of the applicable prohibitions set forth in any Economic Sanctions Law, Anti-Terrorism Law, or the *US Foreign Corrupt Practices Act of 1977* (15 USC. §§ 78dd-1 *et seq.*). None of the funds or assets of such Obligor or any Subsidiary that are used to repay the Loans shall constitute property of, or shall be beneficially owned by, any Designated Person or, to such Obligor's knowledge, be the direct proceeds derived from any transactions that violate the prohibitions set forth in any applicable Economic Sanctions Law, and no Designated Person shall have any direct or indirect interest in such Obligor insofar as such interest would violate any Economic Sanctions Laws applicable to such Obligor.

Section 8.15. Financial Covenants.

(a) *Minimum Liquidity.* Borrower shall ensure that the Obligors shall have aggregate Unrestricted Cash of not less than \$3,000,000 at all times.

(b) *Minimum Total Revenue.* As of the end of the fiscal quarter ended March 31, 2022 and each fiscal quarter thereafter, the Obligors shall maintain, on a consolidated basis, Total Revenue for the twelve (12) month period most recently ended on such date of not less than the amount set forth in the table below:

<i>Twelve-Month Period Ended</i>	<i>Minimum Total Revenue</i>
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<i>Twelve-Month Period Ended</i>	<i>Minimum Total Revenue</i>
March 31, 2022	\$16,797,000
June 30, 2022	\$18,256,000
September 30, 2022	\$21,722,000
December 31, 2022	\$26,545,000
March 31, 2023	\$30,179,000
June 30, 2023	\$35,221,000
September 30, 2023	\$40,649,000
December 31, 2023	\$46,660,000
March 31, 2024	\$51,615,000
June 30, 2024	\$57,102,000
September 30, 2024	\$63,486,000
December 31, 2024	\$71,575,000
March 31, 2025	\$85,526,000
June 30, 2025	\$92,295,000
September 30, 2025	\$99,058,000
December 31, 2025	\$106,016,000

Section 8.16. Maintenance of Material Agreements, Intellectual Property, Etc. Such Obligor will, and will cause each of its Subsidiaries (to the extent applicable) to: (i) maintain in full force and effect for the term thereof all Material Agreements, or other rights necessary for the current operations of such Obligor's or such Subsidiary's business, as the case may be and (ii) maintain in full force and effect all Material Intellectual Property owned or controlled by such Obligor or any such Subsidiary that is used in and necessary for the current operations of such Obligor's or such Subsidiary's business, as the case may be; *provided* that Borrower may terminate the Supply Agreement in accordance with its terms if such termination would not be reasonably expected to adversely affect the Lenders in any material respect.

Section 8.17. Cash Management. It will:

(a) subject to Section 8.19, maintain all Deposit Accounts, Securities Accounts, Commodity Accounts and lockboxes (other than Excluded Accounts) with a bank or financial institution that has executed and delivered to the Administrative Agent an account control agreement, in form and substance reasonably acceptable to the Administrative Agent (each such Deposit Account, Securities Account, Commodity Account and lockbox, a “*Controlled Account*”); and

(b) deposit promptly, and in any event no later than five (5) Business Days after the date of receipt thereof, all cash, checks, drafts or other similar items of payment relating to or constituting payments made in respect of any and all accounts and other rights and interests into Controlled Accounts.

Section 8.18. Board Observer Rights Until the Obligations have been paid in full in cash, Borrower shall permit the Administrative Agent on behalf of all of the Lenders (the “*Observer*”) to attend and observe (but not vote) at all meetings of Borrower’s (or any Subsidiary’s, as applicable) Board or any Committee, whether in person, by telephone or otherwise as requested by the Observer. Borrower and such Subsidiaries shall notify the Observer in writing at the same time as furnished to members of the applicable Board or Committee of (i) the date and time for each general or special meeting of any such Board or Committee and (ii) the adoption of any resolutions or actions by any such Board or any such Committee by written consent (describing, in reasonable detail, the nature and substance of such action). Borrower and each of its Subsidiaries shall concurrently deliver to the Observer all notices and any materials delivered to the official members of such Board or Committee in connection with a meeting or action to be taken by written consent, including a draft of any material resolutions or actions proposed to be adopted by written consent. The Observer shall be free prior to such meeting or adoption by written consent to contact members of any applicable Board or Committee and discuss the pending actions to be taken. Notwithstanding the foregoing, the Observer shall not be entitled to receive materials relating to, or be in attendance for, any discussions relating to topics which (x) are subject to attorney client privilege or (y) present a conflict of interest for the Observer. All such discussions and materials shall be subject to the confidentiality provisions set forth in Section 13.17.

Section 8.19. Post-Closing Obligations. Within the time periods specified on Schedule 8.19 (as each may be extended by the Administrative Agent in its sole discretion), complete such undertakings as are set forth on Schedule 8.19.

ARTICLE 9

NEGATIVE COVENANTS

Each Obligor covenants and agrees with the Administrative Agent and the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than the Warrant Obligations and inchoate indemnity obligations) have been paid in full in cash:

Section 9.01. Indebtedness. It will not, and will not permit any of its Subsidiaries to,

create, incur, assume or permit to exist any Indebtedness, whether directly or indirectly, except:

- (a) the Obligations;
- (b) Indebtedness existing on the date hereof and set forth in Schedule 7.13A and Permitted Refinancings thereof;
- (c) accounts payable to trade creditors for goods and services and current operating liabilities (not the result of the borrowing of money) incurred in the Ordinary Course of Business;
- (d) Indebtedness consisting of guarantees resulting from endorsement of negotiable instruments for collection by it or any of its Subsidiaries in the Ordinary Course of Business;
- (e) unsecured Indebtedness of an Obligor to any other Obligor; *provided* such Indebtedness is pledged to the Administrative Agent for the benefit of the Lenders under the Security Agreement and otherwise subordinate in right of payment to the Obligations;
- (f) Guarantees by any Obligor of Indebtedness of any other Obligor;
- (g) purchase money Indebtedness and Capital Lease Obligations; *provided* that (i) if secured, the collateral therefor consists solely of the assets being financed, the products and proceeds thereof and books and records related thereto, (ii) in the case of purchase money Indebtedness, such Indebtedness shall not constitute less than 75% of the aggregate consideration paid with respect to such asset, and (iii) the aggregate outstanding principal amount of such Indebtedness does not exceed \$~~1,000,000~~7,000,000 at any time;
- (h) unsecured workers' compensation claims, payment obligations in connection with health, disability or other types of social security benefits, unemployment or other insurance obligations, reclamation and statutory obligations, in each case incurred in the Ordinary Course of Business;
- (i) Indebtedness under Hedging Agreements permitted pursuant to Section 9.05(f);
- (j) Indebtedness approved in advance in writing by the Majority Lenders;
- (k) Indebtedness of Borrower and its Subsidiaries with respect to corporate credit cards not to exceed \$250,000 at any time outstanding;
- (l) Indebtedness of Borrower pursuant to the minimum purchase and termination fee provisions of the Supply Agreement; and
- (m) so long as no Default shall have occurred and is continuing at the time of such Indebtedness is incurred, or after giving effect thereto, other unsecured Indebtedness

in an aggregate principal amount not to exceed \$500,000 at any time outstanding.

Section 9.02. Liens. It will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Lien on any Property now owned by it, except:

- (a) Liens securing the Obligations;
- (b) any Lien on any Property of any Obligor existing on the date hereof and set forth in Schedule 7.13B; *provided* that (i) no such Lien shall extend to any other Property of such Obligor and (ii) any such Lien shall secure only those obligations which it secures on the date hereof and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof;
- (c) Liens securing Indebtedness permitted under Section 9.01(g); *provided* that such Liens are restricted solely to the collateral described in Section 9.01(g);
- (d) Liens imposed by Law which were incurred in the Ordinary Course of Business, including (but not limited to) carriers', warehousemen's, landlords' and mechanics' liens, liens relating to leasehold improvements and other similar liens arising in the Ordinary Course of Business and which (i) do not in the aggregate materially detract from the value of the Property subject thereto or materially impair the use thereof in the operations of the business of such Person or (ii) are being contested in good faith by appropriate proceedings, which proceedings have the effect of preventing the forfeiture or sale of the Property subject to such liens and for which adequate reserves have been made if required substantially in accordance with GAAP;
- (e) Liens, pledges or deposits made in the Ordinary Course of Business in connection with bids, contracts, leases, appeal bonds, workers' compensation, unemployment insurance or other similar social security legislation;
- (f) Liens securing Taxes, assessments and other governmental charges, the payment of which is not yet due or is being contested in good faith by appropriate proceedings promptly initiated and diligently conducted and for which such reserve or other appropriate provisions, if any, as shall be required by GAAP shall have been made;
- (g) servitudes, easements, rights of way, restrictions and other similar encumbrances on real Property imposed by applicable Laws and encumbrances consisting of zoning or building restrictions, easements, licenses, restrictions on the use of Property or minor imperfections in title thereto which, in the aggregate, are not material, and which do not in any case materially detract from the value of the Property subject thereto or interfere with the ordinary conduct of the business of any of the Obligors;
- (h) bankers' liens, rights of setoff and similar Liens incurred in the Ordinary Course of Business and arising in connection with the Obligors' deposit accounts or securities accounts held at financial institutions solely to secure payment of fees and similar costs and expenses of such financial institutions with respect to such accounts;

- (i) Liens in connection with transfers permitted under Section 9.09;
- (j) any judgment lien or lien arising from decrees or attachments not constituting an Event of Default;
- (k) leases or subleases of real property granted in the Ordinary Course of Business, and leases, subleases, nonexclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the Ordinary Course of Business;
- (l) Liens in favor of customs and revenue authorities arising as a matter of law to secure the payment of custom duties in connection with the importation of goods, not securing an amount in the aggregate in excess of \$100,000 at any given time;
- (m) Liens on a deposit account of the Obligors and the cash and cash equivalents therein, in each case, securing Indebtedness described in Section 9.01(k); and
- (n) Permitted Licenses solely to the extent that such Permitted License would constitute a Lien;

provided that no Lien otherwise permitted under any of the foregoing Sections 9.02 (excluding Sections 9.02(a) and 9.02(n)) shall apply to any Material Intellectual Property.

Section 9.03. Fundamental Changes and Acquisitions. It will not, and will not permit any of its Subsidiaries to, (i) enter into or consummate any transaction of merger, amalgamation or consolidation, including without limitation, a reverse-triangular merger, or other similar transaction or series of related transactions, (ii) liquidate, wind up or dissolve itself (or suffer any liquidation or dissolution) (including in connection with any division or plan of division under Delaware law or any comparable event under a different jurisdiction's laws), (iii) make or consummate any Acquisition, (iv) make any initial public offering that is not a Qualified Public Offering or (v) sell or issue any Disqualified Equity Interests, except:

- (a) Investments permitted under Section 9.05;
- (b) Permitted Acquisitions for (i) aggregate cash consideration not to exceed \$2,000,000 and (ii) total consideration not to exceed \$5,000,000, in each case, for the course of this Agreement;
- (c) the merger, amalgamation or consolidation of any Obligor with or into any other Obligor, *provided* that (i) if Borrower is a party to such merger, amalgamation or consolidation, Borrower shall be the surviving entity and (ii) if a Domestic Subsidiary is a party to such merger, amalgamation or consolidation with a Foreign Subsidiary, the Domestic Subsidiary shall be the surviving entity; and
- (d) the purchase of the QIAGEN Patents pursuant to the Patent Purchase Agreement.

Section 9.04. Lines of Business. It will not, and will not permit any of its Subsidiaries to, engage to any material extent in any business other than the business engaged in on the date hereof by such Obligor, or a business reasonably related, incidental or complementary thereto or reasonable extensions thereof.

Section 9.05. Investments. It will not, and will not permit any of its Subsidiaries to, make, directly or indirectly, or permit to remain outstanding any Investments except:

(a) Investments outstanding on the date hereof and identified in Schedule 9.05 and any modification, replacement, renewal or extension thereof to the extent not involving new or additional Investments;

(b) operating deposit accounts with banks;

(c) extensions of credit in the nature of accounts receivable or notes receivable arising from the sales of goods or services in the Ordinary Course of Business;

(d) Permitted Cash Equivalent Investments;

(e) (i) Investments consisting of 100% of the ownership of the Equity Interests of its Subsidiaries, (ii) intercompany Investments by Borrower or a Subsidiary in any Guarantor or (iii) Investments by Borrower or any Subsidiary acquired in connection with a Permitted Acquisition;

(f) Hedging Agreements entered into in the ordinary course of any Obligor's financial planning solely to hedge interest rate risks (and not for speculative purposes) in respect of Permitted Indebtedness and in aggregate amount for all such Hedging Agreements not in excess of \$500,000;

(g) Investments consisting of prepaid expenses, negotiable instruments held for collection or deposit, security deposits with utilities, landlords and other like Persons, and deposits in connection with workers' compensation and similar deposits, in each case made in the Ordinary Course of Business;

(h) Investments received in connection with any Insolvency Proceedings in respect of any customers, suppliers or clients and in settlement of delinquent obligations of, and other disputes with, customers, suppliers or clients;

(i) Investments permitted under Section 9.01(e) and Section 9.03;

(j) 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;

(k) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the Ordinary Course of Business, and (ii) loans

to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's Board in an aggregate amount not to exceed \$100,000 for subclauses (i) and (ii) in any fiscal year;

(l) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, Investments in Immaterial Foreign Subsidiaries in an aggregate amount not to exceed \$250,000 in any fiscal year; and

(m) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, other Investments in an amount not to exceed \$100,000 in any fiscal year; and

(n) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, Investments in the Chinese Subsidiary in an aggregate amount not to exceed: (i) \$2,000,000 in the fiscal year ending December 31, 2022 and (ii) \$2,500,000 in any fiscal year thereafter.

Section 9.06. Restricted Payments. It will not, and will not permit any of its Subsidiaries to, declare or make, or agree to pay or make, directly or indirectly, any Restricted Payment, other than:

(a) dividends and stock splits with respect to any Equity Interests of Borrower or any of its Subsidiaries payable solely in additional shares of its Qualified Equity Interests;

(b) any Restricted Payment by a Subsidiary to Borrower;

(c) any purchase, redemption, retirement, or other Acquisition by Borrower or any of its Subsidiaries of shares of its capital stock or other Equity Interests with the proceeds received from a substantially concurrent issue of new shares of its capital stock or other Equity Interests;

(d) dividends paid by any Guarantor to any other Obligor;

(e) cashless exercises of options and warrants;

(f) repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements, stockholder rights plans, director or consultant stock option plans, or similar plans in an aggregate amount not to exceed \$100,000 in any fiscal year;

(g) the making of cash payments in lieu of the issuance of fractional shares upon the conversion of convertible securities (or in connection with the exercise of warrants or similar securities) not to exceed \$25,000 in any fiscal year; and

(h) the issuance of the Warrant Certificate and cash payments made to redeem, purchase, repurchase or retire the Warrant Obligations in accordance with the terms of the Warrant Certificate.

Section 9.07. Payments of Indebtedness. It will not, and will not permit any of its Subsidiaries to, make any payments in respect of any Material Indebtedness other than (i) payments of the Obligations and (ii) so long as no Default has occurred and is continuing or would result therefrom, scheduled payments of other Permitted Indebtedness and, in the case of repayment of intercompany Indebtedness permitted in reliance upon Section 9.01(e), subject to any subordination agreement entered into in connection therewith.

Section 9.08. Change in Fiscal Year. It will not, and will not permit any of its Subsidiaries to, change the last day of its fiscal year from that in effect on the date hereof, without prior written notice to the Administrative Agent, except to change the fiscal year of a Subsidiary acquired in connection with a Permitted Acquisition to conform its fiscal year to that of Borrower.

Section 9.09. Sales of Assets, Etc. It will not, and will not permit any of its Subsidiaries to, sell, lease, exclusively license (in terms of geography or field of use), as a licensor, transfer (including in connection with any division or plan of division under Delaware law or any comparable event under a different jurisdiction's laws) or otherwise dispose of any of its Property (including accounts receivable and Equity Interests of Subsidiaries), or forgive, release or compromise any amount owed to any Obligor or any of its Subsidiaries, in each case, in one transaction or series of transactions (any thereof, an "Asset Sale"), except:

- (a) transfers of cash in the Ordinary Course of Business for equivalent value;
- (b) sales or leases of products and services in the Ordinary Course of Business on ordinary business terms;
- (c) the forgiveness, release or compromise of any amount owed to any Obligor in the Ordinary Course of Business;
- (d) entering into, or becoming bound, by a Permitted License to the extent not otherwise prohibited by this Agreement;
- (e) development and other collaborative arrangements where such arrangements provide for the license or disclosure of Patents, Trademarks, Copyrights or other Intellectual Property rights of any Obligor in the Ordinary Course of Business and consistent with general market practices where such license requires periodic payments based on per unit sales of a product over a period of time; *provided* that such licenses must be true licenses that do not result in a legal transfer of title of the licensed Property or otherwise constitute sales transactions in substance,;
- (f) a sale, lease, exclusive license, transfer or other disposition (including by way of abandonment, cancellation or trade-in) of any Property that is obsolete, worn out, surplus or no longer used or useful in connection with the business of the Obligors or with

respect to which a newer and improved version is available;

(g) dispositions resulting from Casualty Events;

(h) any transaction permitted under Section 9.02, 9.03, 9.05 and 9.20; and

(i) so long as no Default shall have occurred and is continuing at the time of such Asset Sale, or after giving effect thereto, Asset Sales of other property not to exceed \$250,000 in the aggregate per fiscal year.

Section 9.10. Transactions with Affiliates. It will not, and will not permit any of its Subsidiaries to, sell, lease, license or otherwise transfer any assets to, or purchase, lease, license or otherwise acquire any assets from, or otherwise engage in any other transactions with, any of its Affiliates, except:

(a) transactions between or among the Obligor;

(b) any transaction permitted under Section 9.01, 9.05, 9.06 or 9.09;

(c) customary compensation and indemnification of, and other employment arrangements with, directors, officers and employees of any Obligor in the Ordinary Course of Business;

(d) transactions upon fair and reasonable terms that are no less favorable to any Obligor than would be obtained in a comparable arm's-length transaction with a Person not an Affiliate;

(e) the transactions set forth on Schedule 9.10; and

(f) cash equity contributions by Borrower's investors in Borrower or its Subsidiaries (other than Disqualified Equity Interests).

Section 9.11. Restrictive Agreements. It will not, and will not permit any of its Subsidiaries to, directly or indirectly, enter into, incur or permit to exist any Restrictive Agreement other than (i) restrictions and conditions imposed by Law or by the Loan Documents, (ii) Restrictive Agreements listed on Schedule 7.15, (iii) any stockholder agreement or investor rights agreement, charter, by laws or other organizational documents of an Obligor or (iv) limitations associated with Permitted Liens or with any transaction permitted under Section 9.01, 9.03, 9.05, 9.06 or 9.09.

Section 9.12. Organizational Documents, Material Agreements. (a) It will not, and will not permit any of its Subsidiaries to, enter into any amendment to or modification of any Organizational Document that would be reasonably expected to adversely affect the Lenders in any material respect, without the prior written consent of the Administrative Agent.

(b) It will not, and will not permit any of its Subsidiaries to (i) enter into any material waiver, amendment or modification of any Material Agreement (including, but not

limited to, any amendments to provisions relating to pricing and term) that would be reasonably expected to adversely affect the Lenders in any material respect or (ii) take or omit to take any action that results in the termination of, or permits any other Person to terminate, any Material Agreement or Material Intellectual Property that would be reasonably expected to adversely affect the Lenders in any material respect, without, in each case, the prior written consent of the Administrative Agent; *provided* that Borrower may terminate the Supply Agreement in accordance with its terms if such termination would not be reasonably expected to adversely affect the Lenders in any material respect.

Section 9.13. Operating Leases. It will not, and will not permit any of its Subsidiaries to, make any expenditures in respect of operating leases, except for:

- (a) real estate operating leases entered into in the Ordinary Course of Business;
- and
- (b) operating leases that would not cause the Obligors, on a consolidated basis, to make payments exceeding \$500,000 in any fiscal year.

Section 9.14. Sales and Leasebacks. Except as permitted by Section 9.01(g), it will not, and will not permit any of its Subsidiaries to, become liable, directly or indirectly, with respect to any lease, whether an operating lease or a Capital Lease Obligation, of any Property (whether real, personal, or mixed), whether now owned or hereafter acquired, which (i) any Obligor has sold or transferred or is to sell or transfer to any other Person and (ii) any Obligor intends to use for substantially the same purposes as Property which has been or is to be sold or transferred.

Section 9.15. Hazardous Material. It will not, and will not permit any of its Subsidiaries to, use, generate, manufacture, install, treat, release, store or dispose of any Hazardous Material, except in compliance with all applicable Environmental Laws or where the failure to comply would not reasonably be expected to result in a Material Adverse Change.

Section 9.16. Accounting Changes. It will not, and will not permit any of its Subsidiaries to, make any significant change in accounting treatment, except as required or permitted by GAAP.

Section 9.17. Compliance with ERISA. No ERISA Affiliate shall cause or suffer to exist (a) any event that would result in the imposition of a Lien with respect to any Title IV Plan or Multiemployer Plan or (b) any other ERISA Event that would, in the aggregate, have a Material Adverse Effect. No Obligor or any Subsidiary thereof shall cause or suffer to exist any event that could result in the imposition of a Lien with respect to any Benefit Plan that would have a Material Adverse Effect.

Section 9.18. Deposit Accounts. It will not, and will not permit any of its Subsidiaries to, establish or maintain any bank account that is not a Controlled Account (other than an Excluded Account) and will not, and will not permit any of its Subsidiaries to, deposit proceeds in a bank account that is not a Controlled Account; *provided*, up to two (2) months of payroll expenses may be on deposit in Excluded Accounts in the aggregate at any time.

Section 9.19. Outbound Licenses. It will not, and will not permit any of its Subsidiaries to, enter into or become bound by any outbound license or agreement unless such outbound license or agreement is a Permitted License.

Section 9.20. Inbound Licenses. It will not, and will not permit any of its Subsidiaries to, enter into or become bound by any inbound license or agreement (other than Permitted Licenses) unless (i) no Default has occurred and is continuing, (ii) such Obligor has provided written notice to the Administrative Agent of the material terms of such license or agreement with a description of its anticipated and projected impact on such Obligor's business or financial condition, and (iii) such Obligor has taken such commercially reasonable actions as the Administrative Agent may reasonably request to obtain the consent of, or waiver by, any Person whose consent or waiver is necessary for the Administrative Agent to be granted a valid and perfected security interest in such license or agreement allowing the Administrative Agent to fully exercise its rights under any of the Loan Documents in the event of a disposition or liquidation of the rights, assets or property that is the subject of such license or agreement; *provided* that the aggregate amounts to be paid under all such inbound licenses pursuant to this Section 9.20 shall not exceed an amount equal to \$1,000,000 per fiscal year.

ARTICLE 10

EVENTS OF DEFAULT

Section 10.01. Events of Default. Each of the following events shall constitute an "Event of Default":

(a) Borrower shall fail to pay any principal on the Loan when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise; or

(b) any Obligor shall fail to pay any Obligation (other than an amount referred to in Section 10.01(a)) when and as the same shall become due and payable, and such failure shall continue unremedied for a period of three (3) Business Days; or

(c) any representation or warranty made by or on behalf of an Obligor or any of its Subsidiaries in or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, or in any report, certificate, financial statement or other document furnished pursuant to or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, shall: (i) prove to have been incorrect when made or deemed made to the extent that such representation or warranty contains any materiality or Material Adverse Effect qualifier; or (ii) prove to have been incorrect in any material respect when made or deemed made to the extent that such representation or warranty does not otherwise contain any materiality or Material Adverse Effect qualifier; or

(d) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in Sections 8.01, 8.02, 8.03(a) (with respect to such Obligor's

existence), 8.10, 8.11, 8.13, 8.15, 8.17, 8.18, 8.19 or Article 9; or

(e) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in this Agreement (other than those specified in Section 10.01(a), (b) or (d)) or any other Loan Document, and, in the case of any failure that is capable of cure, such failure shall continue unremedied for a period of thirty (30) or more days; or

(f) any Obligor shall fail to make any payment in respect of any Material Indebtedness, when and as the same shall become due and payable after giving effect to any applicable grace or cure period as originally provided by the terms of such Indebtedness; or

(g) (i) any material breach of, or “event of default” or similar event under, the Contract governing any Material Indebtedness shall occur and such breach or “event of default” or similar event shall continue unremedied, uncured or unwaived after a period of five (5) Business Days after the expiration of any cure period thereunder, or (ii) any event or condition occurs (A) that results in any Material Indebtedness becoming due prior to its scheduled maturity or (B) that enables or permits (with or without the giving of notice, the lapse of time or both) the holder or holders of such Material Indebtedness or any trustee or agent on its or their behalf to cause such Material Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity; *provided* that this Section 10.01(h) shall not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the Property securing such Material Indebtedness; or

(h) any Obligor or any of its Subsidiaries:

(i) ceases to be Solvent, or generally does not or becomes unable to pay its debts or meet its liabilities as the same become due, or admits in writing its inability to pay its debts generally, or declares any general moratorium on its indebtedness, or proposes a compromise or arrangement or deed of company arrangement between it and any class of its creditors; or

(ii) shall (A) voluntarily commence any proceeding or file any petition seeking liquidation, reorganization or other relief under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, (B) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in Section 10.01(i), (C) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for an Obligor or for a substantial part of its assets, (D) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (E) make a general assignment for the benefit of creditors or (F) take any action for the purpose of effecting any of the foregoing; or

(i) an involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of an Obligor

or any Subsidiary of an Obligor or its debts, or of a substantial part of its assets, under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for an Obligor or any Subsidiary of an Obligor or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for sixty (60) days or an order or decree approving or ordering any of the foregoing shall be entered; or

(j) one or more judgments for the payment of money in an aggregate amount in excess of \$250,000 (excluding any amounts covered by insurance as to which the applicable carrier has accepted coverage) shall be rendered against any Obligor or any combination thereof and the same shall remain undischarged for a period of forty-five (45) consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to attach or levy upon any assets of any Obligor to enforce any such judgment; or

(k) an ERISA Event shall have occurred that, when taken together with all other ERISA Events that have occurred, would reasonably be expected to result in liability of the Obligors and their Subsidiaries in an aggregate amount exceeding (i) \$250,000 in any year or (ii) \$500,000 for all periods until repayment of all Obligations (other than the Warrant Obligations); or

(l) a Change of Control shall have occurred; or

(m) a Material Adverse Change shall have occurred; or

(n) (i) any Lien created by any of the Security Documents shall at any time not constitute a valid and perfected Lien in favor of the Administrative Agent on Collateral with an aggregate value in excess of \$250,000, free and clear of all other Liens (other than Permitted Liens) except due to the action or inaction of the Administrative Agent or any Lender(s), (ii) except as permitted herein the Security Documents or any Guarantee of any of the Obligations shall for whatever reason cease to be in full force and effect, or (iii) any of the Security Documents or any Guarantee of any of the Obligations, or the enforceability thereof, shall be repudiated or contested by any Obligor.

Section 10.02. Remedies. (a) Upon the occurrence of any Event of Default, then, and in every such event (other than an Event of Default described in Section 10.01(h) or (i)), and at any time thereafter during the continuance of such event, the Majority Lenders may, by notice to Borrower, take either or both of the following actions, at the same or different times: (i) terminate the Commitments, and thereupon the Commitments shall terminate immediately, and (ii) declare the Loans then outstanding to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and all fees and other Obligations, shall become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(b) Upon the occurrence of any Event of Default described in Section 10.01(h) or (i), the Commitments shall automatically terminate and the principal amount of the Loans then outstanding, together with accrued interest thereon and all fees and other Obligations, shall automatically become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(c) If any Lender collects any money or property pursuant to this Article 10, they shall pay out the money or property in the order set forth in Section 4.01(b).

Section 10.03. Prepayment Premium and Redemption Price. For the avoidance of doubt, any Prepayment Premium (as a component of the Redemption Price) shall be due and payable at any time the Loans become due and payable prior to the Stated Maturity Date 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 Borrower in accordance with Section 10.02(a), or automatically, in accordance with Section 10.02(b)), by operation of law or otherwise (including, without limitation, on account of any bankruptcy filing), except as otherwise specified herein. In view of the impracticability and extreme difficulty of ascertaining the actual amount of damages to the Lenders or profits lost by the Lenders as a result of such acceleration, and by mutual agreement of the parties as to a reasonable estimation and calculation of the lost profits or damages of the Lenders, any Prepayment Premium shall be due and payable upon such date. Each Obligor hereby waives any defense to payment, whether such defense may be based in public policy, ambiguity, or otherwise. The Obligors and the Lenders acknowledge and agree that any Prepayment Premium due and payable in accordance with this Agreement shall not constitute unmatured interest, whether under Section 502(b)(3) of the Bankruptcy Code or otherwise. Each Obligor further acknowledges and agrees, and waives any argument to the contrary, that payment of such amount does not constitute a penalty or an otherwise unenforceable or invalid obligation.

ARTICLE 11

GUARANTEE

Section 11.01. The Guarantee. The Guarantors hereby jointly and severally guarantee to the Administrative Agent and each Lender, and its successors and assigns, the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of the principal of and interest on the Loans, all fees and other amounts and Obligations from time to time owing to the Administrative Agent and any Lender by Borrower under this Agreement or under any other Loan Document and by any other Obligor under any of the Loan Documents, in each case strictly in accordance with the terms thereof (such obligations being herein collectively called the “*Guaranteed Obligations*”). The Guarantors hereby further jointly and severally agree that if Borrower shall fail to pay in full when due (whether at stated maturity, by acceleration or otherwise) any of the Guaranteed Obligations, the Guarantors 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.

Section 11.02. Obligations Unconditional. The obligations of the Guarantors under Section 11.01 are absolute and unconditional, joint and several, irrespective of the value, genuineness, validity, regularity or enforceability of the obligations of Borrower under 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 applicable 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 11.02 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 time for any performance of or compliance with any of the Guaranteed Obligations shall be extended, or such performance or compliance shall be 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;

(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, any Lender as security for any of the Guaranteed Obligations shall fail to be perfected.

The Guarantors hereby expressly waive diligence, presentment, demand of payment, protest and all notices whatsoever, and any requirement that the Administrative Agent or any Lender exhaust any right, power or remedy or proceed against Borrower under this Agreement or any other agreement or instrument referred to herein, or against any other Person under any other guarantee of, or security for, any of the Guaranteed Obligations.

Section 11.03. Reinstatement. The obligations of the Guarantors under this Article 11 shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of Borrower 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 the Administrative Agent and each Lender on demand for all reasonable out-of-pocket costs and expenses (including reasonable fees of counsel) incurred by such Persons in connection with such rescission or restoration, including any such reasonable out-of-pocket 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.

Section 11.04. Subrogation. The Guarantors hereby jointly and severally agree that, until the payment and satisfaction in full of all Guaranteed Obligations (other than the Warrant Obligations) and the expiration and termination of the Commitments, they shall not exercise any right or remedy arising by reason of any performance by them of their guarantee in Section 11.01, whether by subrogation or otherwise, against Borrower or any other guarantor of any of the Guaranteed Obligations or any security for any of the Guaranteed Obligations.

Section 11.05. Remedies. The Guarantors jointly and severally agree that, as between the Guarantors, on one hand, and the Lenders, on the other hand, the obligations of Borrower under this Agreement and under the other Loan Documents may be declared to be forthwith due and payable as provided in Article 10 (and shall be deemed to have become automatically due and payable in the circumstances provided in Article 10) for purposes of Section 11.01 notwithstanding any stay, injunction or other prohibition preventing such declaration (or such obligations from becoming automatically due and payable) as against Borrower 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 Borrower) shall forthwith become due and payable by the Guarantors for purposes of Section 11.01.

Section 11.06. Instrument for the Payment of Money. Each Guarantor hereby acknowledges that the guarantee in this Article 11 constitutes an instrument for the payment of money, and consents and agrees that each Lender, at its 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.

Section 11.07. Continuing Guarantee. The guarantee in this Article 11 is a continuing guarantee, and shall apply to all Guaranteed Obligations whenever arising.

Section 11.08. 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 Pro Rata 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 11.08 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 11 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 11.08, (i) "Excess Funding Guarantor" means, in respect of any Guaranteed Obligations, a Guarantor that has paid an amount in excess of its Pro Rata 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 Pro Rata Share of

such Guaranteed Obligations and (iii) “*Pro Rata Share*” means, as of the date of determination, 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 Borrower and the Guarantors hereunder and under the other Loan Documents) of all of the Guarantors, determined (A) with respect to any Guarantor that is a party hereto on the Closing Date, as of such date, and (B) with respect to any other Guarantor, as of the date such Guarantor becomes a Guarantor hereunder.

Section 11.09. 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 11.01 would otherwise, taking into account the provisions of Section 11.08, 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 11.01, then, notwithstanding any other provision hereof to the contrary, the amount of such liability shall, without any further action by such Guarantor, the Administrative Agent, the Lenders 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.

ARTICLE 12

ADMINISTRATIVE AGENT

Section 12.01. Appointment. Each of the Lenders hereby irrevocably appoints Perceptive to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article 12 are solely for the benefit of the Administrative Agent and the Lenders, and neither Borrower nor any other Obligor will have rights as a third-party beneficiary of any of such provisions. It is understood and agreed that the use of the term “agent” herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable Law. Instead, such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

Section 12.02. Rights as a Lender. The Person serving as the Administrative Agent hereunder will have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent, and the term “Lender” or

“Lenders” will, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity to the extent such Person is a Lender. The Lenders acknowledge and agree that such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for, and generally engage in any kind of business with, Borrower, the other Obligor or any other Subsidiaries or Affiliates of the Obligor as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

Section 12.03. Exculpatory Provisions. (a) The Administrative Agent will not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder are administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent:

(i) will not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing;

(ii) will not 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 Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Majority Lenders (or such other number or percentage of the Lenders as will be expressly provided for herein or in the other Loan Documents); *provided* that the Administrative Agent will not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable Law, including any action that may be in violation of the automatic stay under any Insolvency Proceeding; and

(iii) will not, except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and will not be liable for the failure to disclose, any information relating to the Obligor or any of its Subsidiaries or Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity.

(b) The Administrative Agent will not be liable for any action taken or not taken by it (i) with the consent or at the request of the Majority Lenders (or such other number or percentage of the Lenders as will be necessary, or as the Administrative Agent believes in good faith will be necessary, under the circumstances), or (ii) in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and non-appealable judgment. The Administrative Agent will be deemed not to have knowledge of any Default unless and until notice describing such Default is given to the Administrative Agent in writing by Borrower or a Lender.

(c) The Administrative Agent will 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 Loan 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, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Article 6 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

Section 12.04. Reliance by Administrative Agent. The Administrative Agent will be entitled to rely upon, and will not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and will not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of the Loans that by its terms must be fulfilled to the satisfaction of a Lender, the Administrative Agent may presume that such condition is satisfactory to such Lender unless the Administrative Agent has received notice to the contrary from such Lender prior to the making of such Loans. The Administrative Agent may consult with legal counsel (who may be counsel for Borrower), independent accountants and other experts selected by it, and will not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

Section 12.05. Delegation of Duties. The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Administrative Agent. The Administrative Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Affiliates. The exculpatory provisions of this Section will apply to any such sub-agent and to the Affiliates of the Administrative Agent and any such sub-agent, and will apply to their respective activities in connection with the syndication of the facility as well as activities as Administrative Agent. The Administrative Agent will not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and non-appealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agents.

Section 12.06. Resignation of Agent. (a) The Administrative Agent may at any time give notice of its resignation to the Lenders and Borrower, which notice shall set forth the effective date of such resignation (the "*Resignation Effective Date*"), such date not to be earlier than the thirtieth (30th) day following the date of such notice. The Majority Lenders and Borrower shall mutually agree upon a successor to the Administrative Agent. If the Majority Lenders and Borrower are unable to so mutually agree and no successor shall have been appointed within twenty-five (25) days after the retiring Administrative Agent gives notice of its resignation, then the retiring Administrative Agent may (but will not be obligated to), on behalf of the Lenders, appoint a successor Administrative Agent it shall designate (in its reasonable discretion after consultation with Borrower and the Majority Lenders). Whether or not a successor has been appointed, such resignation will become effective in accordance with such notice on the Resignation Effective Date.

(b) With effect from the Resignation Effective Date (i) the retiring Administrative Agent will be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any Collateral held by the Administrative Agent on behalf of the Lenders under any of the Loan Documents, the retiring Administrative Agent will continue to hold such Collateral until such time as a successor Administrative Agent is appointed) and (ii) except for any indemnity payments owed to the retiring Administrative Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent will instead be made by or to each Lender directly, until such time, if any, as the Majority Lenders appoint a successor Administrative Agent as provided for above. Upon the acceptance of a successor's appointment as Administrative Agent hereunder, such successor will succeed to and become vested with all of the rights, powers, privileges and duties of the retiring Administrative Agent (other than any rights to indemnity payments owed to the retiring Administrative Agent), and the retiring Administrative Agent will be discharged from all of its duties and obligations hereunder or under the other Loan Documents. The fees payable by Borrower to a successor Administrative Agent will be the same as those payable to its predecessor unless otherwise agreed between Borrower and such successor. After the retiring Administrative Agent's resignation hereunder and under the other Loan Documents, the provisions of this Article 12 and Sections 13.03 and 13.06 will continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Affiliates in respect of any actions taken or omitted to be taken by any of them while the retiring Administrative Agent was acting as Administrative Agent.

Section 12.07. Non-Reliance on Administrative Agent and Other Lenders. Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender or any of their Affiliates and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender or any of their Affiliates and based on such documents and information as it will from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

Section 12.08. Administrative Agent May File Proofs of Claim. In case of the pendency of any Insolvency Proceeding or any other judicial proceeding relative to Borrower, the Administrative Agent (irrespective of whether the principal of the Loans will then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent has made any demand on Borrower) will be entitled and empowered (but not obligated), by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans and all other Obligations that are owing and unpaid hereunder or under any other Loan Document and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and the Administrative Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and the Administrative Agent and their respective agents and counsel and all other amounts due the Lenders and the Administrative Agent under this Agreement or any other Loan Document) allowed in such

judicial proceeding; and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same.

Any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make any payments of the type described above in this Section 12.08 to the Administrative Agent and, in the event that the Administrative Agent consents to the making of such payments directly to the Lenders, to pay to the Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of the Administrative Agent and its agents and counsel, and any other amounts due the Administrative Agent under this Agreement or any other Loan Document.

Section 12.09. Collateral and Guaranty Matters; Appointment of Administrative Agent. (a) Without limiting the provisions of Section 12.08, the Lenders irrevocably agree as follows:

(i) the Administrative Agent is authorized, at its option and in its discretion, to release any Lien on any property granted to or held by the Administrative Agent under any Loan Document (A) on the date when all Obligations have been satisfied in full in cash (other than Warrant Obligations and contingent obligations as to which no claims have been asserted), (B) 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 disposition permitted under the Loan Documents, or (C) subject to Sections 13.01 and 13.04, if approved, authorized or ratified in writing by the Majority Lenders; and

(ii) the Administrative Agent is authorized, at its option and discretion, to release any Guarantor from its obligations hereunder if such Person ceases to be a Subsidiary as a result of a transaction permitted under the Loan Documents.

Upon request by the Administrative Agent at any time, each Lender will confirm in writing the Administrative Agent's authority to release or subordinate its interest in particular types or items of Collateral, or to release any Guarantor from its obligations under its guaranty pursuant to this Section 12.09.

(b) The Administrative Agent will not be responsible for or have a duty to ascertain or inquire into any representation or warranty regarding the existence, value or collectability of the Collateral, the existence, priority or perfection of the Administrative Agent's Lien thereon, or any certificate prepared by any Obligor in connection therewith, nor will the Administrative Agent be responsible or liable to the Lenders for any failure to monitor or maintain any portion of the Collateral.

(c) Each Lender hereby appoints the Administrative Agent as its collateral agent under each of the Security Documents and agrees that, in so acting, the Administrative Agent will have all of the rights, protections, exculpations, indemnities and other benefits provided to the Administrative Agent under this Agreement, and hereby authorizes and directs the Administrative Agent, on behalf of such Lender and all Lenders, without the necessity of any notice to or further

consent from any of the Lenders, from time to time to (i) take any action with respect to any Collateral or any Security Document which may be necessary to perfect and maintain perfected the Liens on the Collateral granted pursuant to any such Security Document or protect and preserve the Administrative Agent's ability to enforce the Liens or realize upon the Collateral, (ii) act as collateral agent for each Lender for purposes of acquiring, holding, enforcing and perfecting all Liens created by the Loan Documents and all other purposes stated therein, (iii) enter into intercreditor or subordination agreements, as the case may be, in connection with Indebtedness permitted pursuant to Sections 9.01(e) and 9.01(l), as applicable, (iv) enter into non-disturbance or similar agreements in connection with licensing agreements and arrangements permitted by this Agreement and the other Loan Documents and (v) otherwise to take or refrain from taking any and all action that the Administrative Agent shall deem necessary or advisable in fulfilling its role as collateral agent under any of the Security Documents.

ARTICLE 13

MISCELLANEOUS

Section 13.01. No Waiver. No failure on the part of the Administrative Agent or the Lenders to exercise and no delay in exercising, and no course of dealing with respect to, any right, power or privilege under any Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege under any Loan Document preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The remedies provided herein are cumulative and not exclusive of any remedies provided by Law.

Section 13.02. Notices. All notices, requests, instructions, directions and other communications provided for herein (including any modifications of, or waivers, requests or consents under, the Loan Documents) shall be given or made in writing (including by telecopy or electronic mail) delivered, if to Borrower, another Obligor, the Administrative Agent or the Lenders, to its address specified on Schedule 2 hereto or its Guarantee Assumption Agreement, as the case may be, or at such other address as shall be designated by such party in a notice to the other parties. Except as otherwise provided in this Agreement, all such communications shall be deemed to have been duly given upon receipt of a legible copy thereof, in each case given or addressed as aforesaid.

Section 13.03. Expenses, Indemnification-

(a) *Expenses.* Borrower agrees to pay or reimburse (i) the Administrative Agent and the Lenders for all of their reasonable and documented out of pocket costs and expenses (including the reasonable fees and expenses of Chapman and Cutler LLP, counsel to the Administrative Agent) in connection with (x) the negotiation, preparation, execution and delivery of this Agreement and the other Loan Documents and the making of the Loans (exclusive of post-closing costs); *provided* that, so long as the Borrowing of the Tranche A Loan is made, such fees shall be credited against the Expense Deposit paid by Borrower, (y) post-closing costs and (z) the negotiation or preparation of any amendment, modification, supplement or waiver of any of the terms of this Agreement or any of the other Loan Documents (whether or not consummated) and (ii) the Administrative Agent and the Lenders for all of their reasonable and documented out of pocket

costs and expenses (including the reasonable fees and expenses of legal counsel) in connection with any enforcement or collection proceedings resulting from the occurrence of an Event of Default.

(b) *Indemnification.* Each Obligor hereby indemnifies the Administrative Agent, the Lenders, their respective Affiliates, and their respective directors, officers, employees, attorneys, agents and advisors (each, an “*Indemnified Party*”) from and against, and agrees to hold them harmless against, any and all Claims and Losses of any kind (including reasonable fees and disbursements of counsel), joint or several, that is incurred by or asserted or awarded against any Indemnified Party, in each case arising out of or in connection with or relating to any investigation, litigation or proceeding or the preparation of any defense with respect thereto arising out of or in connection with or relating to this Agreement or any of the other Loan Documents or the Transactions or any use made or proposed to be made with the proceeds of the Loans, whether or not such investigation, litigation or proceeding is brought by an Obligor, any of its shareholders or creditors, an Indemnified Party or any other Person, or an Indemnified Party is otherwise a party thereto, and whether or not any of the conditions precedent set forth in Article 6 are satisfied or the other Transactions contemplated by this Agreement are consummated, except to the extent such Claim or Loss is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from any Indemnified Party’s gross negligence or willful misconduct. No Obligor shall assert any claim against any Indemnified Party, on any theory of liability, for consequential, indirect, special or punitive damages arising out of or otherwise relating to this Agreement or any of the other Loan Documents or any of the Transactions or the actual or proposed use of the proceeds of the Loans. This Section shall not apply to Taxes other than Taxes relating to a non-Tax Claim or Loss governed by this Section 13.03(b).

Section 13.04. Amendments. Except as otherwise expressly provided in this Agreement, any provision of this Agreement or any other Loan Document (except for the Warrant Certificate, which may be amended, modified, waived or supplemented in accordance with the terms thereof) may be amended, modified, waived or supplemented only by an instrument in writing signed by Borrower, the Administrative Agent and the Majority Lenders; *provided that:*

(a) no amendment, waiver or consent shall, unless in writing and signed by all of the Lenders, do any of the following at any time:

(i) change the percentage of (x) the Commitments or (y) the aggregate unpaid principal amount of the Loans that, in each case, shall be required for the Lenders or any of them to take any action hereunder (including pursuant to any change to the definition of “*Majority Lenders*”);

(ii) release one or more Guarantors (or otherwise limit such Guarantors’ liability with respect to the Obligations owing to the Lenders under the Guarantees) if such release or limitation is in respect of all or substantially all of the value represented by the Guarantees to the Lenders;

(iii) release, or subordinate the Lenders’ Liens in, all or substantially all of the Collateral in any transaction or series of related transactions (other than in

connection with any sale of Collateral permitted herein); or

(iv) amend any provision of this Section 13.04;

(b) no amendment, waiver or consent shall, unless in writing and signed by each Lender specified below for such amendment, waiver or consent:

(i) increase the Commitments of a Lender without the consent of such Lender;

(ii) reduce the principal of, or stated rate of interest on, or any Prepayment Premium payable on, the Loans owed to a Lender or any fees or other amounts stated to be payable hereunder or under the other Loan Documents to such Lender without the consent of such Lender;

(iii) postpone any date scheduled for any payment of principal of, or interest on, the Loans, any date scheduled for payment or for any date fixed for any payment of fees hereunder (excluding the due date of any mandatory prepayment of a Loan), in each case payable to a Lender without the consent of such Lender;

(iv) change the order of application of prepayment of the Loans from the application thereof set forth in the applicable provisions of Section 4.01(b)(ii) in any manner that adversely affects the Lenders without the consent of holders of a majority of the Commitments or Loans outstanding or otherwise change any provision requiring the pro rata distributions hereunder among the Lenders without all Lenders' consent; or

(v) modify Section 2.02 without the consent of each Lender directly and adversely affected thereby.

Section 13.05. Successors and Assigns.

(a) *General.* The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that (i) no Obligor may assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of the Administrative Agent and each Lender (and any attempted assignment or transfer by such Obligor without such consent shall be null and void) and (ii) no Lender may assign or otherwise transfer its rights or obligations hereunder except in accordance with this Section. Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants (to the extent provided in paragraph (e) of this Section) and, to the extent expressly contemplated hereby, the Indemnified Parties of the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) *Amendments to Loan Documents; Majority Lender Vote.* Each of the Lenders and the Obligors agrees to enter into such amendments to the Loan Documents, and such additional

Security Documents and other instruments and agreements, in each case in form and substance reasonably acceptable to the Lenders and the Obligors, as shall reasonably be necessary to implement and give effect to any assignment made by any Lender (or any direct or indirect assignee thereof) from time to time under this Section 13.05.

(c) *Assignments by Lenders.* (i) Subject to the conditions set forth in paragraph (c)(ii) below, any Lender may assign to one or more Persons (other than an Ineligible Assignee) all or a portion of its rights and obligations under the Loan Documents (including all or a portion of its Commitment and the Loans at the time owing to it) with the prior written consent (such consent not to be unreasonably withheld) of the Administrative Agent, provided that no consent of the Administrative Agent shall be required for an assignment of any Commitment or of all or any portion of a Loan to a Lender, an Affiliate of a Lender or an Approved Fund.

(ii) Assignments shall be subject to the following additional conditions:

(A) except in the case of an assignment to a Lender or an Affiliate of a Lender or an assignment of the entire remaining amount of the assigning Lender's Commitment or Loans, the amount of the Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment Agreement with respect to such assignment is delivered to the Administrative Agent) shall not be less than \$500,000, unless the Administrative Agent otherwise consents;

(B) each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement and the other Loan Documents; and

(C) the parties to each assignment shall execute and deliver to the Administrative Agent (with a copy to the Borrower, *provided* that the failure to give such copy to the Borrower shall not affect the validity of such Assignment Agreement) an Assignment Agreement in form and substance reasonably satisfactory to Administrative Agent.

(iii) Subject to acceptance and recording thereof pursuant to paragraph (d) of this Section, from and after the effective date specified in each Assignment Agreement, the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment Agreement, have the rights and obligations of a Lender under the Loan Documents, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment Agreement, be released from its obligations under the Loan Documents (and, in the case of an Assignment Agreement covering all of the assigning Lender's rights and obligations under the Loan Documents, such Lender shall cease to be a party hereto). Any assignment or transfer by a Lender of rights or obligations under the Loan Documents that does not comply with this Section 13.05 shall be treated for purposes of the Loan Documents as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (e) of this Section.

(d) *Register.* The Administrative Agent, acting for this purpose as a non-fiduciary agent of Borrower, shall maintain at one of its offices a copy of each Assignment Agreement delivered to

it and a register for the recordation of the names and addresses of the Lenders, and the Commitment of, and principal amount (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the “*Register*”). The entries in the Register shall be conclusive absent manifest error, and Borrower, the Administrative Agent, and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice. No assignment shall be effective for purposes of this Agreement unless (i) it has been recorded in the Register as provided in this paragraph and (ii) any written consent to such assignment required by paragraph (b) of this Section has been obtained.

(e) *Participations.* Any Lender may at any time, without the consent of, or notice to, Borrower, sell participations to any Person (a “*Participant*”), other than an Ineligible Assignee, in all or a portion of such Lender’s rights and obligations under the Loan Documents (including all or a portion of its Commitment and the Loans owing to it); *provided* that (i) such Lender’s obligations under the Loan Documents shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) Borrower shall continue to deal solely and directly with such Lender in connection therewith.

(f) Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; *provided* that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver that would (i) increase or extend the term of such Lender’s Commitment, (ii) extend the date fixed for the payment of principal or interest on the Loans or any portion of any fee hereunder payable to the Participant, (iii) reduce the amount of any such payment of principal, or (iv) reduce the rate at which interest is payable thereon to a level below the rate at which the Participant is entitled to receive such interest. Borrower agrees that each Participant shall be entitled to the benefits of Section 5.03 (subject to the requirements and limitations therein, including the requirements under Section 5.03(f) (it being understood that the documentation required under Section 5.03(f) shall be delivered to Borrower and the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to Section 13.05(a), *provided* that such Participant (A) agrees to be subject to the provisions of Section 5.03(h) as if it were an assignee under Section 13.05(a); and (B) shall not be entitled to receive any greater payment under Section 5.03, with respect to any participation, than its participating Lender would have been entitled to receive, unless the sale of the participation to such Participant is made with Borrower’s prior written consent. To the extent permitted by Law, each Participant also shall be entitled to the benefits of Section 4.04(a) as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant’s interest in the Loans or other obligations under the Loan Documents (the “*Participant Register*”); *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant’s interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment,

loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary.

(g) *Certain Pledges.* Subject to Section 13.05(d), the Lenders may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement and any other Loan Document to secure obligations of the Lenders, including any pledge or assignment to secure obligations to a Federal Reserve Bank or another central bank; *provided* that no such pledge or assignment shall release the Lenders from any of their obligations hereunder or substitute any such pledgee or assignee for the Lenders as a party hereto.

Section 13.06. Survival. The obligations of Borrower under Sections 5.01, 5.02, 5.03, 13.03, 13.05, 13.09, 13.10, 13.11, 13.12, 13.13, 13.14 and Article 11 (solely to the extent guaranteeing any of the obligations under the foregoing Sections) shall survive the repayment of the Obligations and the termination of the Commitments and, in the case of any Lender's assignment of any interest in the Commitments or the Loans hereunder, shall survive, in the case of any event or circumstance that occurred prior to the effective date of such assignment, the making of such assignment, notwithstanding that such Lenders may cease to be a "Lender" hereunder. In addition, each representation and warranty made, or deemed to be made by a notice of the Loans, herein or pursuant hereto shall survive the making of such representation and warranty.

Section 13.07. Captions. The table of contents and captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Agreement.

Section 13.08. Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the parties hereto may execute this Agreement by signing any such counterpart. Delivery of an executed signature page of this Agreement by facsimile transmission, electronic transmission (in PDF format) or DocuSign shall be effective as delivery of a manually executed counterpart hereof. The words "execution," "signed," "signature," and words of like import in any Assignment Agreement shall be deemed to include electronic signatures 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 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.

Section 13.09. GOVERNING LAW. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS, THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER AND THEREUNDER, AND ALL CLAIMS, DISPUTES AND MATTERS ARISING HEREUNDER OR THEREUNDER OR RELATED HERETO OR THERETO, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS EXECUTED IN AND TO BE PERFORMED ENTIRELY

WITHIN THAT STATE, WITHOUT REFERENCE TO CONFLICTS OF LAWS PROVISIONS (OTHER THAN SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW).

Section 13.10. JURISDICTION, SERVICE OF PROCESS AND VENUE.

(a) *SUBMISSION TO JURISDICTION.* EACH OBLIGOR AGREES THAT ANY SUIT, ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT TO WHICH IT IS A PARTY OR ANY JUDGMENT ENTERED BY ANY COURT IN RESPECT THEREOF SHALL BE BROUGHT IN THE SUPREME COURT OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY OR IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK AND IRREVOCABLY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF EACH SUCH COURT FOR THE PURPOSE OF ANY SUCH SUIT, ACTION, PROCEEDING OR JUDGMENT.

(b) *Alternative Process.* Nothing herein shall in any way be deemed to limit the ability of the Lenders to serve any such process or summonses in any other manner permitted by applicable Law.

(c) *WAIVER OF VENUE, ETC.* EACH OBLIGOR IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF THE VENUE OF ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AND HEREBY FURTHER IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY CLAIM THAT ANY SUCH SUIT, ACTION OR PROCEEDING BROUGHT IN ANY SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM. A FINAL JUDGMENT (IN RESPECT OF WHICH TIME FOR ALL APPEALS HAS ELAPSED) IN ANY SUCH SUIT, ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN ANY COURT TO THE JURISDICTION OF WHICH SUCH OBLIGOR IS OR MAY BE SUBJECT, BY SUIT UPON JUDGMENT.

Section 13.11. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER LOAN DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY.

Section 13.12. WAIVER OF IMMUNITY. TO THE EXTENT THAT ANY OBLIGOR MAY BE OR BECOME ENTITLED TO CLAIM FOR ITSELF OR ITS PROPERTY OR REVENUES ANY IMMUNITY ON THE GROUND OF SOVEREIGNTY OR THE LIKE FROM SUIT, COURT JURISDICTION, ATTACHMENT PRIOR TO JUDGMENT, ATTACHMENT IN AID OF EXECUTION OF A JUDGMENT OR EXECUTION OF A JUDGMENT, AND TO THE EXTENT THAT IN ANY SUCH JURISDICTION THERE MAY BE ATTRIBUTED SUCH AN IMMUNITY (WHETHER OR NOT CLAIMED), SUCH OBLIGOR HEREBY IRREVOCABLY AGREES NOT TO CLAIM AND HEREBY

IRREVOCABLY WAIVES SUCH IMMUNITY WITH RESPECT TO ITS OBLIGATIONS UNDER THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS.

Section 13.13. Entire Agreement. This Agreement and the other Loan Documents constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Each Obligor acknowledges, represents and warrants that in deciding to enter into this Agreement and the other Loan Documents or in taking or not taking any action hereunder or thereunder, it has not relied, and will not rely, on any statement, representation, warranty, covenant, agreement or understanding, whether written or oral, of or with the Lenders other than those expressly set forth in this Agreement and the other Loan Documents.

Section 13.14. Severability. If any provision hereof is found by a court to be invalid or unenforceable, to the fullest extent permitted by applicable Law the parties agree that such invalidity or unenforceability shall not impair the validity or enforceability of any other provision hereof.

Section 13.15. No Fiduciary Relationship. The Administrative Agent, each Lender and their Affiliates (collectively, solely for purposes of this paragraph, the “Lenders”), may have economic interests that conflict with those of the Obligors, their stockholders and/or their Affiliates (collectively, solely for purposes of this paragraph, the “Obligors”). The Obligors acknowledge that the Lenders have no fiduciary relationship with, or fiduciary duty to, any Obligor arising out of or in connection with this Agreement or the other Loan Documents, and the relationship between each Lender and each Obligor are solely that of creditors and debtors. This Agreement and the other Loan Documents do not create a joint venture among the parties.

Section 13.16. USA Patriot Act. The Administrative Agent and the Lenders hereby notify the Obligors that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the “Act”) and 31 C.F.R. § 1010.230 (the “Beneficial Ownership Regulation”), they are required to obtain, verify and record information that identifies the Obligors, which information includes the name and address of each Obligor and other information that will allow the Administrative Agent and such Lender to identify each Obligor in accordance with the Act and Beneficial Ownership Regulation, including a beneficial ownership certification in form and substance acceptable to the Administrative Agent.

Section 13.17. Treatment of Certain Information; Confidentiality. The Lenders agree to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed to (a) its Affiliates and to its and its Affiliates’ respective partners, directors, officers, employees, agents, trustees, advisors and representatives (collectively, “Representatives”) (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such information and instructed to keep such Information confidential), (b) to the extent requested by any regulatory authority purporting to have jurisdiction over it (including any self-regulatory authority, such as FINRA or the National Association of Insurance Commissioners) or any exchange, (c) to the extent required by the applicable Laws or by any subpoena or similar legal process, (d) to any other party hereto, (e) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating

to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (f) subject to an agreement containing provisions substantially the same as those in this Section, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement or (ii) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction relating to Borrower or any Guarantor and its obligation, (g) with the consent of Borrower or (h) to the extent such Information (x) becomes publicly available other than as a result of a breach of this Section or (y) becomes available to the Lender, or any of its respective Representatives on a nonconfidential basis from a source other than Borrower or any other Obligor. For purposes of this Section, "Information" means all information received from an Obligor relating such Obligor or its Subsidiary or any of their respective businesses, except that the term "Information" shall not include, and the Lenders shall not be subject to any confidentiality obligation with respect to any information that (i) is or becomes available to the Lender or any of its Representatives on a nonconfidential basis prior to disclosure by an Obligor or its Subsidiary, (ii) becomes available to a Lender or any of its Representatives after disclosure by Borrower or any other Obligor from a source that, to the knowledge of such Lender, is not subject to a confidentiality obligation to Borrower or such other Obligor (iii) is or becomes publicly available other than as a result of a breach by such Lender, or (iv) is developed by a Lender or any of its Representatives. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

In the case of any Lender that has elected to receive material non-public information pursuant to the last paragraph of Section 8.02, such Lender acknowledges that (a) the Information may include material non-public information concerning an Obligor or its Subsidiary, as the case may be, (b) it has developed compliance procedures regarding the use of material non-public information and (c) it will handle such material non-public information in accordance with applicable Law, including United States federal and state securities Laws.

Section 13.18. Releases of Guarantees and Liens. (a) Notwithstanding anything to the contrary contained herein or in any other Loan Document, each Lender agrees, and the Administrative Agent is hereby irrevocably authorized by each Lender and given a limited power of attorney by each Lender to perform the actions described hereafter in this Section 13.18 (without requirement of notice to or consent of any Lender except as expressly required by Section 13.04) to take any action reasonably requested by Borrower having the effect of releasing any Collateral or Obligations (i) to the extent necessary to permit consummation of any transaction not prohibited by any Loan Document or that has been consented to by the Lenders or (ii) under the circumstances described in paragraph (b) below.

(b) At such time as the Loans and the other Obligations (other than the inchoate indemnity obligations) under the Loan Documents shall have been paid in full in cash and the Commitments have been terminated, the Collateral shall be released from the Liens created by the Security Documents, and the Security Documents and all obligations (other than those expressly stated to survive such termination) of the Administrative Agent and each Obligor under the Security Documents shall terminate, all without delivery of any instrument or performance of any

act by any Person.

Section 13.19. Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

- (a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and
- (b) the effects of any Bail-In Action on any such liability, including, if applicable:
 - (i) a reduction in full or in part or cancellation of any such liability;
 - (ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or
 - (iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of the Applicable Resolution Authority.

[Remainder of the Page Intentionally Left Blank; Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered as of the day and year first above written.

BORROWER:

ISOPLEXIS CORPORATION

By: _____

Name:

Title:

[Signature Page to Credit Agreement and Guaranty]

PERCEPTIVE CREDIT HOLDINGS III, LP,
as Administrative Agent and a Lender

By: Perceptive Credit Opportunities GP, LLC,
its general partner

By: _____
Name: Sandeep Dixit
Title: Chief Credit Officer

By: _____
Name: Sam Chawla
Title: Portfolio Manager

[Signature Page to Credit Agreement and Guaranty]

ANNEX B

Conformed Credit Agreement

(Third Amendment)

CREDIT AGREEMENT AND GUARANTY¹

DATED AS OF

DECEMBER 30, 2020

AMONG

ISOPLEXIS CORPORATION,
AS BORROWER,

THE GUARANTORS FROM TIME TO TIME PARTY HERETO,
AS GUARANTORS,

THE LENDERS FROM TIME TO TIME PARTY HERETO,
AS LENDERS,

AND

PERCEPTIVE CREDIT HOLDINGS III, LP,
AS ADMINISTRATIVE AGENT AND AS A LENDER

\$50,000,000

¹ Conformed to reflect changes from the First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021, the Second Amendment to Credit Agreement and Guaranty, dated as of October 29, 2021 and the Third Amendment to Credit Agreement and Guaranty, dated as of March 30, 2022.

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EXHIBIT E	—	Form of Compliance Certificate
EXHIBIT F	—	Form of Assignment Agreement
EXHIBIT G	—	Form of Security Agreement
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EXHIBIT I	—	Form of Collateral Questionnaire

CREDIT AGREEMENT AND GUARANTY, dated as of December 30, 2020 (this “*Agreement*”), among ISOPLEXIS CORPORATION, a Delaware corporation (“*Borrower*”), certain Guarantors from time to time parties hereto, the lenders from time to time party hereto (each, as a “*Lender*” and collectively, the “*Lenders*”), and PERCEPTIVE CREDIT HOLDINGS III, LP, a Delaware limited partnership (“*Perceptive*”), as administrative agent for the Lenders (in such capacity, together with its successors and assigns, the “*Administrative Agent*”).

WITNESSETH:

Borrower has requested the Lenders to make term loans to Borrower, and the Lenders are prepared to make such loans on and subject to the terms and conditions hereof. Accordingly, the parties agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Certain Defined Terms. As used herein, the following terms have the following respective meanings:

“*Accounting Change*” has the meaning set forth in Section 1.02.

“*Accounting Change Notice*” has the meaning set forth in Section 1.02.

“*Acquisition*” means 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 similar transaction having the same effect as any of the foregoing, (a) acquires all or substantially all of the assets of any Person engaged in any business, (b) acquires all or substantially all of a business line or unit or division of any other Person, (c) acquires control of securities of a Person engaged in a business representing more than 50% of the ordinary voting power for the election of directors or other governing body if the business affairs of such Person are managed by a Board or other governing body, or (d) acquires control of more than 50% of the ownership interest in any Person engaged in any business that is not managed by a Board or other governing body.

“*Act*” has the meaning set forth in Section 13.16.

“*Administrative Agent*” has the meaning set forth in the introduction hereto.

“*Affected Financial Institution*” means (a) any EEA Financial Institution or (b) any UK Financial Institution.

“*Affiliate*” means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

“*Agreement*” has the meaning set forth in the introduction hereto.

“*Amended and Restated Warrant Certificate*” means the amended and restated warrant, delivered to the Administrative Agent on the Third Amendment Effective Date that, among other things, grants the holder thereof the right to purchase the number of shares of common stock of Borrower as indicated on the Warrant Shares table on Schedule 1, as the Amended and Restated Warrant Certificate may be further amended, replaced or otherwise modified pursuant to the terms thereof.

“*Anti-Corruption Laws*” means all laws, rules and regulations of any jurisdiction applicable to the Obligor and their Affiliates concerning or relating to bribery or corruption, including, without limitation, the Foreign Corrupt Practices Act of 1977, as amended.

“*Anti-Terrorism Laws*” means any laws or regulations relating to terrorism or money laundering, including, without limitation the *Bank Secrecy Act* (31 U.S.C. §§ 5311 *et seq.*), the *Money Laundering Control Act of 1986* (18 U.S.C. §§ 1956 *et seq.*), the USA Patriot Act and any similar law enacted in the United States after the date of this Agreement.

“*Applicable Margin*” means 9.50% per annum, as such percentage may be increased by Section 3.02(d).

“*Approved Fund*” means any Person (other than a natural person) that is engaged in making, purchasing, holding or investing in bank loans and similar extensions of credit in the ordinary course of its business and that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“*Asset Sale*” has the meaning set forth in Section 9.09.

“*Assignment Agreement*” means an assignment and assumption entered into by a Lender and an assignee of such Lender in substantially the form of Exhibit F.

“*Bail-In Action*” means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

“*Bail-In Legislation*” means (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation, rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

“Bankruptcy Code” means Title 11 of the United States Code entitled “Bankruptcy.”

“Beneficial Ownership Regulation” has the meaning set forth in Section 13.16.

“Benefit Plan” means any employee benefit plan as defined in Section 3(3) of ERISA to which any Obligor or Subsidiary thereof incurs or otherwise has any obligation or liability, contingent or otherwise.

“Board” means, with respect to any Person, the board of directors (or equivalent governing body) of such Person or any Committee thereof.

“Borrower” has the meaning set forth in the introduction hereto.

“Borrowing” means a borrowing consisting of a Tranche A Loan made by the Lenders on the Closing Date, a Tranche B Loan made by the Lenders on the Tranche B Loan Borrowing Date, a Tranche C Loan made by the Lenders on the Tranche C Loan Borrowing Date or a Tranche D Loan made by the Lenders on the Tranche D Loan Borrowing Date, as applicable.

“Borrowing Notice” means a notice substantially in the form attached hereto as Exhibit B.

“Business Day” means a day (other than a Saturday or Sunday) on which commercial banks are not authorized or required to close in New York City and, when determined in connection with notices and determinations in respect of LIBOR or any Loan or any funding, Interest Period or any payments in respect of the Loans, that is also a day on which dealings in dollar deposits are carried on in the London interbank market.

“Capital Lease Obligations” means, as to any Person, the obligations of such Person to pay rent or other amounts under a lease of (or other agreement conveying the right to use) real and/or personal Property which obligations are required to be classified and accounted for as a capital lease on a balance sheet of such Person under GAAP and, for purposes of this Agreement, the amount of such obligations shall be the capitalized amount thereof, determined substantially in accordance with GAAP; *provided* that any obligations that were not required to be included on the balance sheet of such Person as capital lease obligations when incurred (whether now outstanding or at any time incurred or entered into) but are subsequently re-characterized as capital lease obligations due to a change in accounting rules under GAAP after the Closing Date shall for all purposes hereunder not be treated as a Capital Lease Obligation.

“Casualty Event” means any actual or constructive loss, condemnation, destruction, confiscation, requisition, seizure or forfeiture of all or any material portion of the assets of Borrower or any other Obligor, excluding only those assets, individually or in the aggregate, subject to any such event during any calendar year with a fair market value as of the date thereof equal to or less than \$1,000,000.

“Change of Control” means (a) any “person” or “group” (within the meaning of Rule 13d-5 of the Exchange Act as in effect on the date hereof) shall own, directly or indirectly, beneficially or of record, shares representing 40% or more of the aggregate ordinary voting power represented

by the issued and outstanding Equity Interests of Borrower, (b) Borrower ceases to directly own, beneficially and of record, 100% of the issued and outstanding Equity Interests of each of its Subsidiaries, or (c) during any period of twelve (12) consecutive calendar months, the occupation of a majority of the seats (other than vacant seats) on the Board of Borrower by Persons who were neither (i) nominated by the Board of Borrower, nor (ii) appointed by directors on the Board of Borrower on the Closing Date.

“*Chinese Subsidiary*” means IsoPlexis Trading Co., Ltd.

“*Claims*” includes claims, litigation, demands, complaints, grievances, actions, applications, suits, causes of action, orders, charges, indictments, prosecutions, information (brought by a public prosecutor without grand jury indictment) or other similar processes, assessments or reassessments.

“*CLIA*” means the Clinical Laboratory Improvement Amendments (CLIA) of 1988, as amended from time to time, and the rules, regulations, guidelines, guidance documents and compliance policy guides issued or promulgated thereunder.

“*Closing Date*” means the Business Day on which all of the conditions set forth in Section 6.01 have been satisfied or waived by the Lenders and the Tranche A Loan is made.

“*Closing Fee*” has the meaning set forth in Section 2.03.

“*Code*” means the Internal Revenue Code of 1986, as amended from time to time.

“*Collateral*” means any Property in which a Lien is purported to be granted under any of the Security Documents (or all such Property, as the context may require).

“*Collateral Questionnaire*” means that certain Collateral Questionnaire and certification by a Responsible Officer of Borrower substantially in the form of attached hereto as Exhibit I and otherwise in form and substance satisfactory to the Administrative Agent.

“*Commitment*” means, with respect to each Lender, such Lender’s (a) Tranche A Loan Commitment, (b) Tranche B Loan Commitment, (c) Tranche C Loan Commitment and (d) Tranche D Loan Commitment, and “*Commitments*” means all such commitments of all Lenders. The aggregate Commitments of all Lenders as of the Third Amendment Effective Date after giving effect to the Tranche A Loan made on the Closing Date, the Tranche B Term Loan made on the Tranche B Borrowing Date and the Tranche C Term Loan made on the Tranche C Borrowing Date is \$7,500,000.

“*Committee*” means, with respect to any board of directors (or other governing body), any committee thereof duly authorized to act on behalf of such board of directors (or other governing body).

“*Commodity Account*” has the meaning set forth in the Security Agreement.

“*Compliance Certificate*” has the meaning set forth in Section 8.01(d).

“*Connection Income Taxes*” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“*Contracts*” means any contract, license, lease, agreement, obligation, promise, undertaking, understanding, arrangement, document, commitment, entitlement or engagement under which a Person has, or will have, any liability or contingent liability (in each case, whether written or oral, express or implied, and whether in respect of monetary or payment obligations, performance obligations or otherwise), excluding the Loan Documents.

“*Control*” means, in respect of a particular Person, the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ability to exercise voting power, by contract or otherwise. “*Controlling*” and “*Controlled*” have meanings correlative thereto.

“*Controlled Account*” has the meaning set forth in Section 8.17(a)(i).

“*Copyrights*” has the meaning set forth in the Security Agreement.

“*Default*” means any Event of Default and any event that, upon the giving of notice, the lapse of time or both, would constitute an Event of Default.

“*Default Rate*” has the meaning set forth in Section 3.02(d).

“*Deposit Account*” has the meaning set forth in the Security Agreement and relates to such accounts located and/or maintained in the United States of America.

“*Designated Person*” means a person or entity:

(a) listed in the annex to, or otherwise targeted by the provisions of, the Executive Order (as disclosed by World-Check or another reputable commercially available database);

(b) named as a “Specially Designated National and Blocked Person” on the most current list published by OFAC at its official website or any replacement website or other replacement official publication of such list (as disclosed by World-Check or another reputable commercially available database); or

(c) with which the Lenders are prohibited from dealing or otherwise engaging in any transaction by any Economic Sanctions Laws.

“*Device*” means any instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar or related item, including any component, part or accessory, developed by the Obligor.

“*Disqualified Equity Interests*” means, with respect to any Person, any Equity Interest of such Person that, by its terms (or by the terms of any security or other Equity Interest into which it is convertible or for which it is exchangeable upon exercise or otherwise), or upon the happening of any event or condition (i) matures or is mandatorily redeemable (other than solely for Qualified Equity Interests), including pursuant to a sinking fund obligation or otherwise, (ii) is redeemable at the option of the holder thereof (other than solely for Qualified Equity Interests), in whole or in part, (iii) provides for the scheduled payments of dividends or other distributions in cash or other securities that would constitute Disqualified Equity Interests, or (iv) is or becomes convertible into or exchangeable for Indebtedness or any other Equity Interests that would constitute Disqualified Equity Interests, in each case, prior to the date that is one hundred and eighty (180) days after the Stated Maturity Date; *provided* that, if such Equity Interests are issued pursuant to any plan for the benefit of directors, officers, employees or consultants of such Person or by any such plan to such directors, officers, employees or consultants, such Equity Interests shall not constitute Disqualified Equity Interests solely because they may be required to be repurchased by such Person upon the death, disability, retirement or termination of employment or service of such director, officer, employee or consultant.

“*Dollars*” and “\$” means lawful money of the United States of America.

“*Domestic Subsidiary*” means any Subsidiary that is organized under the laws of the United States, any state thereof or the District of Columbia.

“*Economic Sanctions Laws*” means:

(a) the Executive Order, the *International Emergency Economic Powers Act* (50 U.S.C. §§ 1701 *et seq.*), the *Trading with the Enemy Act* (50 U.S.C. App. §§ 1 *et seq.*), any other law or regulation promulgated thereunder from time to time and administered by OFAC and any similar law enacted in the United States after the date of this Agreement; and

(b) any other similar applicable law now or hereafter enacted in any other applicable jurisdiction.

“*EEA Financial Institution*” means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“*EEA Member Country*” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“*EEA Resolution Authority*” means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“*Environmental Law*” means any federal, state, provincial or local governmental law, rule, regulation, order, writ, judgment, injunction or decree relating to pollution or protection of the environment or the treatment, storage, disposal, release, threatened release or handling of hazardous materials, and all local laws and regulations related to environmental matters and any specific agreements entered into with any competent authorities which include commitments related to environmental matters.

“*Equity Interest*” means, with respect to any Person, any and all shares, interests, participations or other equivalents, including membership interests (however designated, whether voting or nonvoting), of equity of such Person, including, if such Person is a partnership, partnership interests (whether general or limited) and any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of property of, such partnership, but excluding debt securities convertible or exchangeable into such equity.

“*ERISA*” means the United States Employee Retirement Income Security Act of 1974, as amended.

“*ERISA Affiliate*” means, collectively, any Obligor, Subsidiary thereof, and any Person under common control, or treated as a single employer, with any Obligor or Subsidiary thereof, within the meaning of Section 414(b), (c), (m) or (o) of the Code.

“*ERISA Event*” means (i) a reportable event as defined in Section 4043 of ERISA with respect to a Title IV Plan, excluding, however, such events as to which the PBGC by regulation has waived the requirement of Section 4043(a) of ERISA that it be notified within thirty (30) days of the occurrence of such event; (ii) the applicability of the requirements of Section 4043(b) of ERISA with respect to a contributing sponsor, as defined in Section 4001(a)(13) of ERISA, to any Title IV Plan where an event described in paragraph (9), (10), (11), (12) or (13) of Section 4043(c) of ERISA is reasonably expected to occur with respect to such plan within the following thirty (30) days; (iii) a withdrawal by any Obligor or any ERISA Affiliate thereof from a Title IV Plan or the termination of any Title IV Plan resulting in liability under Sections 4063 or 4064 of ERISA; (iv) the withdrawal of any Obligor or any ERISA Affiliate thereof in a complete or partial withdrawal (within the meaning of Section 4203 and 4205 of ERISA) from any Multiemployer Plan if there is any potential liability therefore, or the receipt by any Obligor or any ERISA Affiliate thereof of notice from any Multiemployer Plan that it is in reorganization or insolvency pursuant to Section 4241 or 4245 of ERISA; (v) the filing of a notice of intent to terminate, the treatment of a plan amendment as a termination under Section 4041 or 4041A of ERISA, or the commencement of proceedings by the PBGC to terminate a Title IV Plan or Multiemployer Plan; (vi) the imposition of liability on any Obligor or any ERISA Affiliate thereof pursuant to Sections 4062(e) or 4069 of ERISA or by reason of the application of Section 4212(c) of ERISA; (vii) the failure by any Obligor or any ERISA Affiliate thereof to make any required contribution to a Plan, or the failure to meet the minimum funding standard of Section 412 of the Code with respect to any Title IV Plan (whether or not waived in accordance with Section 412(c) of the Code) or the failure to make by its due date a required installment under Section 430 of the Code with respect to any Title IV Plan or the failure to make any required contribution to a Multiemployer Plan; (viii) the determination that any Title IV Plan is considered an at-risk plan or a plan in endangered to critical status within the meaning of Sections 430, 431 and 432 of the Code or

Sections 303, 304 and 305 of ERISA; (ix) an event or condition which might reasonably be expected to constitute grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Title IV Plan or Multiemployer Plan; (x) the imposition of any liability under Title I or Title IV of ERISA, other than PBGC premiums due but not delinquent under Section 4007 of ERISA, upon any Obligor or any ERISA Affiliate thereof; (xi) an application for a funding waiver under Section 303 of ERISA or an extension of any amortization period pursuant to Section 412 of the Code with respect to any Title IV Plan; (xii) the occurrence of a non-exempt prohibited transaction under Sections 406 or 407 of ERISA for which any Obligor or any Subsidiary thereof may be directly or indirectly liable; (xiii) a violation of the applicable requirements of Section 404 or 405 of ERISA or the exclusive benefit rule under Section 401(a) of the Code by any fiduciary or disqualified person for which any Obligor or any ERISA Affiliate thereof may be directly or indirectly liable; (xiv) the occurrence of an act or omission which could give rise to the imposition on any Obligor or any ERISA Affiliate thereof of fines, penalties, Taxes or related charges under Chapter 43 of the Code or under Sections 409, 502(c), (i) or (1) or 4071 of ERISA; (xv) the assertion of a material claim (other than routine claims for benefits) against any Plan or the assets thereof, or against any Obligor or any Subsidiary thereof in connection with any such plan; (xvi) receipt from the IRS of notice of the failure of any Qualified Plan to qualify under Section 401(a) of the Code, or the failure of any trust forming part of any Qualified Plan to fail to qualify for exemption from taxation under Section 501(a) of the Code; (xvii) the imposition of any lien (or the fulfillment of the conditions for the imposition of any lien) on any of the rights, properties or assets of any Obligor or any ERISA Affiliate thereof, in either case pursuant to Title I or IV, including Section 302(f) or 303(k) of ERISA or to Section 401(a)(29) or 430(k) of the Code; or (xviii) the establishment or amendment by any Obligor or any Subsidiary thereof of any “welfare plan,” as such term is defined in Section 3(1) of ERISA, that provides post-employment welfare benefits in a manner that would increase the liability of any Obligor, other than those benefits required under the Consolidated Omnibus Budget Reconciliation Act.

“*ERISA Funding Rules*” means the rules regarding minimum required contributions (including any installment payment thereof) to Title IV Plans, as set forth in Sections 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

“*EU Bail-In Legislation Schedule*” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“*Event of Default*” has the meaning set forth in Section 10.01.

“*Excess Funding Guarantor*” has the meaning set forth in Section 11.08.

“*Excess Payment*” has the meaning set forth in Section 11.08.

“*Exchange Act*” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“*Excluded Accounts*” means deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of the employees of Borrower and its Subsidiaries.

“*Excluded Taxes*” means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (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 such Recipient being organized under the laws of, or having its principal office or, in the case of a Lender, its applicable lending office located in, the jurisdiction imposing such Tax or (ii) that are Other Connection Taxes, (b) any U.S. federal withholding Taxes that are imposed on amounts payable to Lender to the extent that the obligation to withhold amounts existed on the date that (i) Lender became a “Lender” under this Agreement or (ii) Lender changes its lending office, except in each case to the extent Lender is a direct or indirect assignee of any other Lender that was entitled, at the time the assignment of such other Lender became effective, to receive additional amounts under Section 5.03 or Lender was entitled to receive additional amounts under Section 5.03 immediately before it changed its lending office, (c) any Taxes imposed in connection with FATCA, and (d) Taxes attributable to such Recipient’s failure to comply with Section 5.03(e).

“*Executive Order*” means the US Executive Order No. 13224 on Blocking Property and Prohibiting Transactions with Persons who commit, Threaten to Commit, or Support Terrorism.

“*Expense Deposit*” means a cash deposit in the amount of \$50,000 made by Borrower to an Affiliate of Perceptive Advisors LLC pursuant to the Proposal Letter for the prepayment of the Lenders’ costs and expenses (payable pursuant to Section 13.03(a) and/or the Proposal Letter) incurred prior to the Closing Date.

“*FATCA*” means Sections 1471 through 1474 of the Code, 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 Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities entered into in connection with the implementation of the foregoing.

“*First Amendment*” means the First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021, among Borrower, the Lenders and the Administrative Agent.

“*First Amendment Effective Date*” means May 27, 2021.

“*Foreign Lender*” means a Lender that is not a U.S. Person.

“*Foreign Subsidiary*” means any Subsidiary that is not a Domestic Subsidiary.

“*GAAP*” means generally accepted accounting principles in the United States of America, as in effect from time to time, set forth in the opinions and pronouncements of the Accounting

Principles Board and the American Institute of Certified Public Accountants, in the statements and pronouncements of the Financial Accounting Standards Board and in such other statements by such other entity as may be in general use by significant segments of the accounting profession that are applicable to the circumstances as of the date of determination. Subject to Section 1.02, all references to “GAAP” shall be to GAAP applied consistently with the principles used in the preparation of the financial statements described in Section 7.04(a).

“*Governmental Approval*” means any consent, authorization, approval, order, license, franchise, permit, certification, accreditation, registration, clearance, exemption, filing or notice that is issued or granted by or from (or pursuant to any act of) any Governmental Authority, including any application or submission related to any of the foregoing.

“*Governmental Authority*” means any nation, government, branch of power (whether executive, legislative or judicial), state, municipality or other political subdivision thereof and any entity exercising executive, legislative, judicial, monetary, regulatory or administrative functions of or pertaining to government, including without limitation regulatory authorities, governmental departments, agencies, commissions, bureaus, officials, ministers, courts, bodies, boards, tribunals and dispute settlement panels, and other law-, rule- or regulation-making organizations or entities of any State, territory, county, city or other political subdivision of the United States.

“*Guarantee*” of or by any Person (the “*guarantor*”) means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the “*primary obligor*”) in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; *provided*, that the term Guarantee shall not include endorsements for collection or deposit in the Ordinary Course of Business.

“*Guarantee Assumption Agreement*” means a Guarantee Assumption Agreement substantially in the form of Exhibit A by an entity that, pursuant to Section 8.11(a), is required to become a “Guarantor”.

“*Guaranteed Obligations*” has the meaning set forth in Section 11.01.

“*Guarantor*” means, collectively, each Subsidiary of Borrower on the Closing Date or joined as a Guarantor from time to time pursuant to Section 8.11(a).

“*Hazardous Material*” means any substance, element, chemical, compound, product, solid, gas, liquid, waste, by-product, pollutant, contaminant or material which is hazardous or toxic, and includes, without limitation, (a) asbestos, polychlorinated biphenyls and petroleum

(including crude oil or any fraction thereof) and (b) any material classified or regulated as “hazardous” or “toxic” or words of like import pursuant to an Environmental Law.

“*Hedging Agreement*” means any interest rate exchange agreement, foreign currency exchange agreement, commodity price protection agreement or other interest or currency exchange rate or commodity price hedging arrangement.

“*Immaterial Foreign Subsidiary*” means, as of any date, any Foreign Subsidiary for which (a) the consolidated total assets of such Foreign Subsidiary and its Subsidiaries, when taken together with the consolidated total assets of all other Immaterial Foreign Subsidiaries their subsidiaries, is not in excess of 5.0% of the consolidated total assets of the Borrower and its Subsidiaries and (b) the aggregate amount of the Total Revenue of such Foreign Subsidiary and its subsidiaries on a consolidated basis, when taken together with the contribution to Total Revenue of all other Immaterial Foreign Subsidiaries and their Subsidiaries on a consolidated basis, is not in excess of 5.0% of Total Revenue of the Borrower and its Subsidiaries, in each case as of the last day of any four quarter period; *provided* that notwithstanding the foregoing, at no time shall any Guarantor existing on the Closing Date or joined hereto pursuant to Section 8.11 subsequently be deemed an Immaterial Foreign Subsidiary.

“*Indebtedness*” of any Person means, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes, loan agreements or similar instruments, (c) all obligations of such Person upon which interest charges are customarily paid, (d) all obligations of such Person under conditional sale or other title retention agreements relating to Property acquired by such Person, (e) all obligations of such Person in respect of the deferred purchase price of Property or services (excluding current accounts payable incurred in the Ordinary Course of Business not overdue by more than one hundred twenty (120) days), (f) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on Property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed, (g) all Guarantees by such Person of Indebtedness of others, (h) all Capital Lease Obligations of such Person, (i) all obligations, contingent or otherwise, of such Person as an account party in respect of letters of credit and letters of guaranty, (j) obligations under any Hedging Agreement, currency swaps, forwards, futures or derivatives transactions, (k) all obligations, contingent or otherwise, of such Person in respect of bankers’ acceptances, (l) all obligations of such Person under license or other agreements containing a guaranteed minimum payment or purchase by such Person, (m) any Disqualified Equity Interests of such Person, (n) any earnout obligation at the time such obligation is both required to be reflected as a liability on the balance sheet of such Person in accordance with GAAP and not paid after becoming due and payable and (o) all other obligations required to be classified as indebtedness of such Person under GAAP. The Indebtedness of any Person shall, without duplication, include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person’s ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor.

“*Indemnified Party*” has the meaning set forth in Section 13.03(b).

“Indemnified Taxes” means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any Obligation and (b) to the extent not otherwise described in clause (a), Other Taxes.

“Ineligible Assignee” means (a) a natural person or (b) the Obligor or any of their respective Affiliates.

“Information” has the meaning set forth in Section 13.17.

“Insolvency Proceeding” means (a) any case, action or proceeding before any court or other Governmental Authority relating to bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors, or (b) any general assignment for the benefit of creditors, composition, marshaling of assets for creditors, or other, similar arrangement in respect of any Person’s creditors generally or any substantial portion of such Person’s creditors, in each case undertaken under U.S. Federal, state or foreign law, including the Bankruptcy Code.

“Intellectual Property” means all Patents, Trademarks, Copyrights, industrial designs, Technical Information, whether registered or not, whether domestic or foreign, including all of the following:

- (a) applications, registrations, amendments and extensions relating to any Intellectual Property;
- (b) rights and privileges arising under any applicable Laws with respect to any Intellectual Property;
- (c) rights to sue for or collect any damages from any past, present or future infringements of any Intellectual Property; and
- (d) rights of the same or similar effect or nature as described above in any jurisdiction corresponding to any Intellectual Property throughout the world.

“Interest Period” means, (a) initially, the period beginning on (and including) the Closing Date and ending on (and including) the last day of the calendar month in which the Closing Date occurs, and (b) thereafter, the period beginning on (and including) the first day of each succeeding calendar month and ending on the earlier of (and including) (x) the last day of such calendar month and (y) the Maturity Date.

“Invention” means any novel, inventive or useful art, apparatus, method, process, machine (including any article or Device), manufacture or composition of matter, or any novel, inventive and useful improvement in any art, method, process, machine (including any article or Device), manufacture or composition of matter.

“Investment” means, for any Person: (a) the acquisition (whether for cash, Property, services or securities or otherwise) of Equity Interests, bonds, notes, debentures, partnership or other ownership interests or other securities of any other Person or any agreement to make any

such acquisition (including any “short sale” or any sale of any securities at a time when such securities are not owned by the Person entering into such sale); (b) the making of any deposit with, or advance, loan, assumption of debt or other extension of credit to, any other Person (including the purchase of Property from another Person subject to an understanding or agreement, contingent or otherwise, to resell such Property to such Person), but excluding any such advance, loan or extension of credit in the nature of an ordinary course trade receivable having a term not exceeding ninety (90) days arising in connection with the sale of services, inventory or supplies by such Person in the Ordinary Course of Business; (c) the entering into of any Guarantee of, or other contingent obligation with respect to, Indebtedness or other liability of any other Person and (without duplication) any amount committed to be advanced, lent or extended to such Person; (d) entering into any joint venture; or (e) the entering into of any Hedging Agreement. The amount of an Investment will be determined at the time the Investment is made without giving effect to any subsequent changes in value.

“*IRS*” means the U.S. Internal Revenue Service or any successor agency, and to the extent relevant, the U.S. Department of the Treasury.

“*Laws*” means, collectively, all international, foreign, federal, state, provincial, territorial, municipal and local statutes, treaties, rules, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

“*Lenders*” has the meaning set forth in the introduction hereto.

“*LIBOR*” means, for any Interest Period, the rate per annum (rounded upwards if necessary, to the next 1/100%) equal to the London interbank offered rate for one-month deposits in Dollars appearing on the appropriate Bloomberg screen or the Dow Jones Markets Telerate Page 3750 as of 11:00 a.m. (London time) two (2) Business Days prior to the commencement of any Interest Period; *provided*, that in the event that such rate does not appear on the appropriate Bloomberg screen or the Dow Jones Markets Telerate Page 3750 (or otherwise on the Dow Jones Markets screen) at such time, “*LIBOR*” shall be determined by reference to such other comparable publicly available service for displaying the offered rate for deposit in Dollars in the London interbank market as may be selected by the Administrative Agent; *provided, further*, that in no event shall *LIBOR* be less than 1.75%.

“*Lien*” means any mortgage, lien, pledge, charge or other security interest, or any lease, title retention agreement, mortgage, restriction, easement, right-of-way, option or adverse claim (of ownership or possession) or other encumbrance of any kind or character whatsoever or any preferential arrangement that has the practical effect of creating a security interest.

“*Loan Documents*” means, collectively, this Agreement, the Notes, the Security Documents, any Guarantee Assumption Agreement, the Warrant Certificate and any subordination agreement, intercreditor agreement or other present or future document, instrument, agreement or

certificate delivered to any Lender in connection with this Agreement or any of the other Loan Documents, in each case, as amended, restated, supplemented or otherwise modified.

“*Loan Exposure*” means, with respect to any Lender, as of any date of determination, the outstanding principal amount of the Loans of such Lender; *provided*, at any time prior to the making of the Loans, the Loan Exposure of any Lender shall be equal to such Lender’s Commitment.

“*Loans*” means the Tranche A Loan, Tranche B Loan, Tranche C Loan and Tranche D Loan.

“*Loss*” means judgments, debts, liabilities, expenses, costs, damages or losses, contingent or otherwise, whether liquidated or unliquidated, matured or unmatured, disputed or undisputed, contractual, legal or equitable, including loss of value, professional fees, including fees and disbursements of legal counsel on a full indemnity basis, and all costs incurred in investigating or pursuing any Claim or any proceeding relating to any Claim.

“*Majority Lenders*” means, at any time, one or more Lenders having or holding Loan Exposure and representing more than 50% of the aggregate Loan Exposure of all Lenders.

“*Margin Stock*” means “margin stock” within the meaning of Regulations U and X.

“*Material Adverse Change*” and “*Material Adverse Effect*” mean a material adverse change in or effect on (a) the business, financial condition, operations and performance of the Obligors taken as a whole, (b) the ability of any Obligor to perform its obligations under any Loan Document, (c) the value of the Property comprising Collateral (taken as a whole), or (d) the legality, validity, binding effect or enforceability of the Loan Documents or the rights and remedies of any Lender under any of the Loan Documents.

“*Material Agreement*” means (a) any Contract which is listed in Schedule 7.14, (b) any other Contract to which any Obligor is a party or a beneficiary from time to time, or to which any assets or properties of any Obligor is bound, the loss or termination of which would reasonably be expected to result in a Material Adverse Effect, (c) any other Contract to which any Obligor is a party or a guarantor (or equivalent) whether existing as of the date hereof or in the future that during any period of twelve (12) consecutive months is reasonably expected to (i) result in payments or receipts (including royalty, licensing or similar payments) made to any Obligor in an aggregate amount in excess of \$1,000,000 or (ii) require payments or expenditures (including royalty, licensing or similar payments) made by any Obligor in an aggregate amount in excess of \$1,000,000, (d) the Patent Purchase Agreement, (e) the Supply Agreement and (f) the QIAGEN Assumption Agreement.

“*Material Indebtedness*” means, at any time, any Indebtedness of any Obligor, the outstanding principal amount of which, individually or in the aggregate, exceeds \$250,000.

“*Material Intellectual Property*” means all Obligor Intellectual Property, including those described in Schedule 7.05(b), whether currently owned or licensed, or acquired, developed or

otherwise licensed or obtained after the date hereof (a) necessary for the operation of the business of any Obligor as currently conducted or as currently contemplated to be conducted, (b) the loss of which would reasonably be expected to have or result in a Material Adverse Effect or (c) that has a fair market value in excess of \$1,000,000.

“*Maturity Date*” means the earlier to occur of (a) the Stated Maturity Date, and (b) the date on which the Loans are accelerated pursuant to Section 10.02.

“*Multiemployer Plan*” means any multiemployer plan, as defined in Section 4001(a)(3) of ERISA, to which any ERISA Affiliate incurs or otherwise has any obligation or liability, contingent or otherwise.

“*Net Cash Proceeds*” means,

(a) with respect to the incurrence or issuance of any Indebtedness incurred by an Obligor not permitted under Section 9.01, the excess, if any, of (i) the sum of the cash received in connection with such incurrence or issuance over (ii) the investment banking fees, underwriting discounts, commissions, costs and other reasonable expenses and other customary expenses (including reasonable attorney’s, accountant’s and other similar professional advisor’s fees), incurred by such Obligor in connection with such incurrence or issuance to third parties (other than any other Obligor or any of their respective Affiliates),

(b) with respect to any Casualty Event, the amount of cash proceeds actually received from time to time by or on behalf of an Obligor after deducting therefrom only (i) actual costs and expenses related thereto incurred by such Obligor in connection therewith and (ii) Taxes paid or payable in connection therewith, and

(c) with respect to any Asset Sale, the excess, if any, of (i) cash proceeds received in respect of such Asset Sale (including cash proceeds subsequently received (as and when received)) over (ii) the sum of (A) the direct costs of such Asset Sale then payable by the recipient of such proceeds excluding amounts payable to any Obligor, (B) sales and use taxes paid or payable by such recipient as a result thereof, (C) amounts required to be applied to repay principal, interest and prepayment premiums and penalties on Indebtedness secured by a Permitted Lien on the properties subject to such Asset Sale and (D) amounts reserved or deposited in escrow with respect to indemnity payments or price adjustments until such amounts are released to the Obligors.

“*Note*” means a promissory note executed and delivered by Borrower to any Lender in the form attached hereto as Exhibit C.

“*Obligations*” means, with respect to any Obligor, all amounts, obligations (including, without limitation, all Warrant Obligations), liabilities, covenants and duties of every type and description owing by such Obligor to any Lender or any other Indemnified Party hereunder, arising out of, under, or in connection with, any Loan 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 for the payment of money, including, without duplication, (a) all Loans, (b) all

interest on the Loans (including interest at the Default Rate), 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, (c) any Prepayment Premium, and (d) all other fees, expenses (including 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 Loan Document.

“*Obligor Intellectual Property*” means Intellectual Property owned by or licensed to any of the Obligors.

“*Obligors*” means, collectively, Borrower, each Guarantor and each of their respective successors and permitted assigns.

“*OFAC*” means the Office of Foreign Assets Control of the U.S. Department of the Treasury (or any successor thereto).

“*Ordinary Course of Business*” means, with respect to the Obligors, the ordinary course of business generally consistent with past custom and practice (including with respect to nature, scope, magnitude, quantity and frequency).

“*Organizational Documents*” means (a) with respect to any corporation, its certificate or articles of incorporation or organization, as amended, and its by-laws, as amended, (b) with respect to any limited partnership, its certificate of limited partnership, as amended, and its partnership agreement, as amended, (c) with respect to any general partnership, its partnership agreement, as amended, and (d) with respect to any limited liability company, its articles of organization, as amended, and its operating agreement, as amended. In the event any term or condition of this Agreement or any other Loan Document requires any Organizational Document to be certified by a secretary of state or similar government official, the reference to any such “Organizational Document” shall only be to a document of a type customarily certified by such government official.

“*Other Connection Taxes*” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising solely from such Recipient 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 any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

“*Other Taxes*” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 5.03(g)).

“*Participant*” has the meaning set forth in Section 13.05(e).

“*Participant Register*” has the meaning set forth in Section 13.05(f).

“*Patent Purchase Agreement*” means that certain asset purchase agreement, as in effect on the First Amendment Effective Date, by and among Borrower, as QIAGEN Sciences, LLC, a Delaware limited liability company, and QIAGEN GmbH, a German corporation, collectively as sellers, dated as of May 12, 2021, whereby Borrower purchased all rights, privileges, title and interest in and to certain patents, along with the inventions described and claimed in the patents, and all rights to income, royalties and damages for infringement of the patents (the “*QIAGEN Patents*”).

“*Patents*” has the meaning set forth in the Security Documents.

“*Payment Date*” means the last day of each Interest Period; *provided* that if such last day of such Interest Period is not a Business Day, then the Payment Date for such Interest Period will be the next succeeding Business Day.

“*PBGC*” means the United States Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

“*Perceptive*” has the meaning set forth in the introduction hereto.

“*Permits*” means all permits, licenses, registrations, certificates, orders, approvals, authorizations, consents, waivers, franchises, variances and similar rights issued by or obtained from any Governmental Authority or any other Person, including, without limitation, those relating to Environmental Laws.

“*Permitted Acquisition*” means any Acquisition by any Obligor or any of its wholly-owned Subsidiaries, by (a) purchase, merger, amalgamation, license or otherwise, of all or substantially all of the assets of, all of the Equity Interests of, or a business line or unit or a division of, any Person or (b) license arrangement for the rights to use, develop, market or otherwise commercialize any Patents, Trademarks, Copyrights or other Intellectual Property (other than ordinary course, over the counter software license arrangements); *provided* that:

(i) immediately prior to, and immediately after giving effect thereto, no Default shall have occurred and be continuing or would result therefrom;

(ii) all transactions in connection therewith shall be consummated, in all material respects, in accordance with all applicable Laws and in conformity in all material respects with all applicable Governmental Approvals;

(iii) in the case of the Acquisition of all of the Equity Interests of such Person, all of the Equity Interests (except for any such securities in the nature of directors’ qualifying shares required pursuant to applicable Law) acquired, or otherwise issued by such Person or any newly formed Subsidiary of such Obligor in connection with such Acquisition, shall be owned 100% by an Obligor or any other Subsidiary of Borrower, and

Borrower shall have taken, or caused to be taken, as of the date such Person becomes a Subsidiary of an Obligor, each of the actions set forth in Section 8.11, if applicable;

(iv) such Person (in the case of an Acquisition of Equity Interests) or assets (in the case of an Acquisition of assets or a division) (i) shall be engaged or used, as the case may be, in the same business or lines of business in which Borrower and/or its Subsidiaries are engaged or a business reasonably and substantially related thereto or (ii) shall have a similar customer base as Borrower and/or its Subsidiaries;

(v) Borrower shall have provided the Administrative Agent with at least ten (10) Business Days' prior written notice of any such Acquisition, together with summaries, prepared in reasonable detail, of all due diligence conducted by or on behalf of Borrower or the applicable Subsidiary prior to such Acquisition;

(vi) all of the assets or Equity Interests acquired in connection with such Acquisition shall be of a U.S. Person;

(vii) the Acquisition shall have been approved by the Board or other governing body or controlling Person of the Person acquired or the Person from whom such assets or division is acquired; and

(viii) on a *pro forma* basis after giving effect to such Acquisition, Borrower and its Subsidiaries shall be in compliance with Section 8.15.

"Permitted Cash Equivalent Investments" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than two (2) years from the date of acquisition, (b) commercial paper with an average maturity of no more than one (1) year and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc., (c) any money market funds or other investment vehicles whose principal investments are in investments described in clauses (a) or (b) above, and (d) certificates of deposit maturing no more than one (1) year after issue.

"Permitted Indebtedness" means any Indebtedness permitted under Section 9.01.

"Permitted Licenses" means (a) licenses of over-the-counter software that is commercially available to the public, (b) licenses for the use of Obligor Intellectual Property, in each case, entered into in the Ordinary Course of Business or as otherwise may be approved by the applicable Obligor's Board and so long as (i) no Event of Default has occurred and is continuing at the time such license is entered into and (ii) such license does not materially impair the Lenders from exercising their rights under any of the Loan Documents and (c) licenses pursuant to the Supply Agreement.

"Permitted Liens" means any Liens permitted under Section 9.02.

“Permitted Priority Liens” means (a) Liens permitted under Section 9.02(d), (e), (f) or (g) and (b) Liens permitted under Section 9.02(b); *provided* that such Liens are also of the type described in Section 9.02(d), (e), (f) or (g).

“Permitted Refinancing” means, with respect to any Indebtedness permitted to be refinanced, extended, renewed or replaced hereunder, any refinancings, extensions, renewals and replacements of such Indebtedness; *provided* that such refinancing, extension, renewal or replacement shall not (a) increase the outstanding principal amount of the Indebtedness being refinanced, extended, renewed or replaced, (b) contain terms relating to outstanding principal amount, amortization, interest rate or equivalent yield, maturity, collateral security (if any) or subordination (if any), or other material terms that, taken as a whole, are less favorable in any material respect to any Obligor or the Lenders than the terms of any agreement or instrument governing the Indebtedness being refinanced, (c) contain any new requirement to grant any Lien or to give any Guarantee that was not an existing requirement of the Indebtedness being refinanced and (d) after giving effect to such refinancing, extension, renewal or replacement, no Default shall have occurred (or could reasonably be expected to occur) as a result thereof.

“Person” means any individual, corporation, company, voluntary association, partnership, limited liability company, joint venture, trust, unincorporated organization or Governmental Authority or other entity of whatever nature.

“PFIC” has the meaning set forth in Section 8.01(j).

“Plan” means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which Borrower or any ERISA Affiliate is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an “employer” as defined in Section 3(5) of ERISA.

“Prepayment Premium” has the meaning set forth in Section 3.03(a)(i).

“Pro Rata Share” has the meaning set forth in Section 11.08.

“Prohibited Payment” means any bribe, rebate, payoff, influence payment, kickback or other payment or gift of money or anything of value (including meals or entertainment) to any officer, employee or ceremonial office holder of any government or instrumentality thereof, political party or supra-national organization (such as the United Nations), any political candidate, any royal family member or any other person who is connected or associated personally with any of the foregoing that is prohibited under any Requirement of Law.

“Projections” has the meaning set forth in Section 7.04(b).

“Property” of any Person means any property or assets, or interest therein, of such Person.

“*Proportionate Share*” means, with respect to any Lender, the percentage obtained by dividing (a) the Loan Exposure of such Lender then in effect by (b) the aggregate Loan Exposure of all Lenders then in effect.

“*Proposal Letter*” means the letter agreement, dated November 27, 2020, among Borrower and Perceptive Advisors LLC, regarding the transactions contemplated hereby and the outline of proposed terms and conditions attached thereto.

“*Publicly Reporting Company*” means an issuer generally subject to the public reporting requirements of the Exchange Act.

“*QIAGEN Assumption Agreement*” means that certain assumption agreement dated as of May 12, 2021 by and among Borrower, QIAGEN Sciences, LLC, a Delaware limited liability company and QIAGEN GmbH.

“*Qualified Equity Interest*” means, with respect to any Person, any Equity Interest of such Person that is not a Disqualified Equity Interest.

“*Qualified Plan*” means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (i) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was ever obligated to make, contributions, and (ii) that is intended to be tax qualified under Section 401(a) of the Code.

“*Qualified Public Offering*” means the initial firm-commitment underwritten public offering of common Equity Interests of the Borrower pursuant to an effective registration statement filed with the SEC in accordance with the Securities Act of 1933, raising net cash proceeds of at least \$50,000,000, and in connection with such offering the common Equity Interests of the Borrower is listed for trading on the Nasdaq Stock Market’s National Market, the New York Stock Exchange, or another exchange or marketplace acceptable to the Administrative Agent in its sole discretion.

“*Recipient*” means any Lender or the Administrative Agent.

“*Redemption Date*” has the meaning set forth in Section 3.03(a).

“*Redemption Price*” has the meaning set forth in Section 3.03(a).

“*Register*” has the meaning set forth in Section 13.05(d).

“*Regulation T*” means Regulation T of the Board of Governors of the Federal Reserve System, as amended.

“*Regulation U*” means Regulation U of the Board of Governors of the Federal Reserve System, as amended.

“*Regulation X*” means Regulation X of the Board of Governors of the Federal Reserve System, as amended.

“*Representatives*” has the meaning set forth in Section 13.17.

“*Requirement of Law*” means, as to any Person, any Law applicable to or binding upon such Person or any of its Properties or revenues.

“*Resignation Effective Date*” has the meaning set forth in Section 12.06(a).

“*Responsible Officer*” of any Person means each of the president, chief executive officer and chief financial officer of such Person.

“*Restricted Payment*” means any dividend or other distribution (whether in cash, securities or other Property) with respect to any Equity Interest of Borrower or any of its Subsidiaries, or any payment (whether in cash, securities or other Property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such shares of capital stock of Borrower or any of its Subsidiaries or any option, warrant or other right to acquire any such shares of capital stock of Borrower or any of its Subsidiaries.

“*Restrictive Agreement*” means any indenture, agreement, instrument or other binding arrangement that prohibits, restricts or imposes any condition upon (a) the ability of any Obligor to create, incur or permit to exist any Lien upon any of its Property (other than (i) customary provisions in contracts (including without limitation leases and in-bound licenses of Intellectual Property) restricting the assignment thereof, (ii) restrictions or conditions imposed by any agreement governing secured Permitted Indebtedness permitted under Section 9.01(g), to the extent that such restrictions or conditions apply only to the Property securing such Indebtedness and (iii) software and other Intellectual Property licenses pursuant to which an Obligor is the licensee of the relevant software or Intellectual Property, as the case may be (in which case, any prohibition or limitation shall relate only to the assets or rights subject to the applicable license and/or the license itself)), or (b) the ability of any Obligor to pay dividends or other distributions with respect to any shares of its Equity Interests or to make or repay loans or advances to any Obligor or to Guarantee Indebtedness of any Obligor.

“*Resolution Authority*” means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

“*Sanctions*” means economic or financial sanctions, requirements or trade embargoes imposed, administered or enforced from time to time by Governmental Authorities (including, but not limited to, OFAC, the U.S. Department of State and the U.S. Department of Commerce).

“*Sanctions Laws*” means all laws, rules, regulations and requirements of any jurisdiction applicable to the Obligors or any party to the Loan Documents concerning or relating to Sanctions, terrorism or money laundering.

“*SEC*” means United States Securities and Exchange Commission.

“*Second Amendment*” means the Second Amendment to Credit Agreement and Guaranty, dated as of October 29, 2021, among Borrower, the Lenders and the Administrative Agent.

“*Securities Account*” has the meaning set forth in the Security Agreement.

“*Security Agreement*” means the Security Agreement, dated as of the date hereof, in substantially the form of Exhibit G, among the Obligors, the Lenders and the Administrative Agent, granting a security interest in the personal Property constituting Collateral thereunder in favor of the Administrative Agent for the benefit of the Lenders.

“*Security Documents*” means, collectively, the Security Agreement, each Short-Form IP Security Agreement, and each other security document, control agreement or financing statement executed to perfect Liens in favor of the Administrative Agent for the benefit of the Lenders.

“*Short-Form IP Security Agreements*” means short-form copyright, patent or trademark (as the case may be) security agreements, dated as of the date hereof, in substantially the form of Exhibits H-1 and H-2, entered into by one or more Obligors in favor of the Administrative Agent for the benefit of the Lenders, each in form and substance satisfactory to the Administrative Agent.

“*Solvent*” means, with respect to any Person at any time, that (a) the present fair saleable value of the Property of such Person is greater than the total amount of liabilities (including contingent liabilities) of such Person, (b) the present fair saleable value of the Property of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, and (c) such Person has not incurred and does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person’s ability to pay as such debts and liabilities mature.

“*Stated Maturity Date*” means the fifth (5th) anniversary of the Closing Date; *provided* that if such date shall occur on a day that is not a Business Day, then the Stated Maturity Date shall be the immediately succeeding Business Day.

“*Subsidiary*” means, with respect to any Person (the “*parent*”) at any time of determination, any other Person of which more than 50% of the outstanding capital stock of such other Person having ordinary voting powers, determined on a fully diluted basis, is at the time directly or indirectly owned or controlled by the parent. Unless the context otherwise specifically requires, the term “Subsidiary” shall be a reference to a Subsidiary of Borrower.

“*Supply Agreement*” means that certain supply agreement, as in effect on the First Amendment Effective Date, by and between QIAGEN GmbH, dated as of May 12, 2021, whereby Borrower (a) licenses certain rights in the QIAGEN Patents to QIAGEN GmbH and (b) purchases certain reagents incorporating the QIAGEN Patents.

“*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.

“*Technical Information*” means all trade secrets and other proprietary or confidential information, which may include any information of a scientific, technical, or business nature in any form or medium, standards and specifications, conceptions, ideas, innovations, discoveries, Invention disclosures, all documented research, developmental, demonstration or engineering work, data, plans, specifications, reports, summaries, experimental data, manuals, models, samples, know-how, technical information, systems, methodologies, computer programs or information technology.

“*Third Amendment*” means the Third Amendment to Credit Agreement and Guaranty, dated as of March 30, 2022, among Borrower, the Lenders and the Administrative Agent.

“*Third Amendment Effective Date*” means March 30, 2022.

“*Title IV Plan*” means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (a) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was obligated to make, contributions, and (b) that is or was subject to Section 412 of the Code, Section 302 of ERISA or Title IV of ERISA.

“*Total Revenue*” means, with respect to the Obligors, all amounts paid to and received by such Person in the ordinary course of business that, in accordance with GAAP, would be classified as net revenue.

“*Trademarks*” has the meaning set forth in the Security Documents.

“*Tranche A Loan*” means each loan advanced by a Lender pursuant to Section 2.01(a). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche A Loan on any date of determination shall mean the aggregate principal amount of the Tranche A Loan made pursuant to Section 2.01(a) that has not yet been repaid as of such date.

“*Tranche A Loan Commitment*” means the commitment of a Lender to make or otherwise fund a Tranche A Loan and “*Tranche A Loan Commitments*” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche A Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche A Loan Commitments as of the Closing Date is \$25,000,000.

“*Tranche B Loan*” means each loan advanced by a Lender pursuant to Section 2.01(b). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche B Loan on any date of determination shall mean the aggregate principal amount of the Tranche B Loan made pursuant to Section 2.01(b) that has not yet been repaid as of such date.

“Tranche B Loan Borrowing Date” means with respect to the Tranche B Loan, the Business Day on which all conditions set forth in Section 6.02 have been satisfied or waived by the Lenders and the Tranche B Loan is made hereunder.

“Tranche B Loan Commitment” means the commitment of a Lender to make or otherwise fund a Tranche B Loan and *“Tranche B Loan Commitments”* means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche B Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche B Loan Commitments as of the First Amendment Effective Date is \$10,000,000.

“Tranche B Loan Commitment Termination Date” means May 28, 2021.

“Tranche C Loan” means each loan advanced by a Lender pursuant to Section 2.01(c). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche C Loan on any date of determination shall mean the aggregate principal amount of the Tranche C Loan made pursuant to Section 2.01(c) that has not yet been repaid as of such date.

“Tranche C Loan Borrowing Date” means with respect to the Tranche C Loan, the Third Amendment Effective Date.

“Tranche C Loan Commitment” means the commitment of a Lender to make or otherwise fund a Tranche C Loan and *“Tranche C Loan Commitments”* means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche C Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche C Loan Commitments after giving effect to the Tranche C Term Loan made on the Tranche C Loan Borrowing Date is \$0.

“Tranche D Loan” means each loan advanced by a Lender pursuant to Section 2.01(d). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche D Loan on any date of determination shall mean the aggregate principal amount of the Tranche D Loan made pursuant to Section 2.01(d) that has not yet been repaid as of such date.

“Tranche D Loan Borrowing Date” means with respect to the Tranche D Loan, the Business Day on which all conditions set forth in Section 6.04 have been satisfied or waived by the Lenders and the Tranche D Loan is made hereunder.

“Tranche D Loan Commitment” means the commitment of a Lender to make or otherwise fund a Tranche D Loan and *“Tranche D Loan Commitments”* means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche D Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche D Loan Commitments as of the Third Amendment Effective Date is \$7,500,000.

“Tranche D Loan Commitment Termination Date” means June 30, 2022.

“Transactions” means the execution, delivery and performance by each Obligor of this Agreement and the other Loan Documents to which such Obligor is a party and the other

transactions contemplated hereby and thereby, including disbursement and application of the proceeds of the Loans.

“*UK Financial Institution*” means any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

“*UK Resolution Authority*” means the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

“*Unrestricted Cash*” means the balance of unencumbered cash (other than cash encumbered by the Liens granted to the Lenders pursuant to the Loan Documents) and Permitted Cash Equivalent Investments (which for greater certainty shall not include any undrawn credit lines), in each case, to the extent held in a Controlled Account.

“*U.S. Person*” means a “United States person” within the meaning of Section 7701(a)(30) of the Code.

“*U.S. Tax Compliance Certificate*” has the meaning set forth in Section 5.03(f)(ii)(B)(3).

“*Warrant Certificate*” means the Amended and Restated Warrant Certificate.

“*Warrant Obligations*” means, with respect to Borrower, all of its Obligations arising out of, under or in connection with, any Warrant Certificate.

“*Withdrawal Liability*” means, at any time, any liability incurred (whether or not assessed) by any ERISA Affiliate and not yet satisfied or paid in full at such time with respect to any Multiemployer Plan pursuant to Section 4201 of ERISA.

“*Write-Down and Conversion Powers*” means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

Section 1.02. Accounting Terms and Principles. All accounting determinations required to be made pursuant hereto shall, unless expressly otherwise provided herein, be made substantially

in accordance with GAAP. If, after the date hereof, any change occurs in GAAP or in the application thereof (an “*Accounting Change*”) and such change would cause any amount required to be determined for the purposes of the covenants to be maintained or calculated pursuant to Article 8 or 9 to be materially different than the amount that would be determined prior to such change, then Borrower will provide a detailed notice of such change (an “*Accounting Change Notice*”) to the Administrative Agent in conjunction with the next required delivery of financial statements pursuant to Section 8.01. If Borrower requests an amendment to any provision hereof to eliminate the effect of any Accounting Change occurring after the Closing Date or in the application thereof on the operation of such provision, regardless of whether any Accounting Change Notice is given before or after such Accounting Change or in the application thereof, then the Administrative Agent and Borrower agree that they will negotiate in good faith amendments to the provisions of this Agreement that are directly affected by such Accounting Change with the intent of having the respective positions of the Administrative Agent and Borrower after such Accounting Change conform as nearly as possible to their respective positions as of the date of this Agreement and, until any such amendments have been agreed upon, (a) the provisions in this Agreement shall be calculated as if no such Accounting Change had occurred and (b) Borrower shall provide to the Administrative Agent a written reconciliation in form and substance reasonably satisfactory to the Administrative Agent, between calculations of any baskets and other requirements hereunder before and after giving effect to such Accounting Change.

All components of financial calculations made to determine compliance with this Agreement shall be adjusted to include or exclude, as the case may be, without duplication, such components of such calculations attributable to any Acquisition or disposition of assets consummated after the first day of the applicable period of determination and prior to the end of such period, as determined in good faith by Borrower based on assumptions expressed therein and that were reasonable based on the information available to Borrower at the time of preparation of the Compliance Certificate setting forth such calculations.

Section 1.03. Interpretation. For all purposes of this Agreement, except as otherwise expressly provided herein or unless the context otherwise requires, (a) the terms defined in this Agreement include the plural as well as the singular and vice versa; (b) words importing gender include all genders; (c) any reference to a Section, Article, Annex, Schedule or Exhibit refers to a Section or Article of, or Annex, Schedule or Exhibit to, this Agreement; (d) any reference to “this Agreement” refers to this Agreement, including all Annexes, Schedules and Exhibits hereto, and the words herein, hereof, hereto and hereunder and words of similar import refer to this Agreement and its Annexes, Schedules and Exhibits as a whole and not to any particular Section, Article, Annex, Schedule, Exhibit or any other subdivision; (e) references to days, months and years refer to calendar days, months and years, respectively; (f) all references herein to “include” or “including” shall be deemed to be followed by the words “without limitation”; (g) the word “from” when used in connection with a period of time means “from and including” and the word “until” means “to but not including”; and (h) accounting terms not specifically defined herein shall be construed substantially in accordance with GAAP (except for the term “property,” which shall be interpreted as broadly as possible, including, in any case, cash, securities, other assets, rights under contractual obligations and permits and any right or interest in any property, except where otherwise noted). Unless otherwise expressly provided herein, references to organizational documents, agreements (including the Loan Documents) and other contractual instruments shall

be deemed to include all subsequent amendments, restatements, extensions, supplements and other modifications thereto permitted by the Loan Documents.

Section 1.04. Divisions. For all purposes under the Loan 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.

ARTICLE 2

THE COMMITMENTS

Section 2.01. Loans.

(a) *Tranche A Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche A Loan to Borrower on the Closing Date in Dollars in a principal amount equal to such Lender's Tranche A Loan Commitment. No Lender shall have an obligation to make a Tranche A Loan in excess of such Lender's Tranche A Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.01), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least one (1) Business Day in advance of the Closing Date.

(iii) Borrower may make one borrowing under the Tranche A Loan Commitment which shall be on the Closing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche A Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche A Loan Commitment shall terminate immediately and without further action on the Closing Date after giving effect to the funding of such Lender's Tranche A Loan Commitment on such date.

(b) *Tranche B Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche B Loan to Borrower on the Tranche B Loan

Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche B Loan Commitment. No Lender shall have an obligation to make a Tranche B Loan in excess of such Lender's Tranche B Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.02), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in advance of the proposed Tranche B Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche B Loan Commitment which shall be on the Tranche B Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche B Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche B Loan Commitment shall terminate immediately and without further action on the earlier of (x) the Tranche B Loan Borrowing Date after giving effect to the funding of such Lender's Tranche B Loan Commitment on such date and (y) the Tranche B Loan Commitment Termination Date.

(c) *Tranche C Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche C Loan to Borrower on the Tranche C Loan Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche C Loan Commitment. No Lender shall have an obligation to make a Tranche C Loan in excess of such Lender's Tranche C Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.03), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in advance of the proposed Tranche C Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche C Loan Commitment which shall be on the Tranche C Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche C Loan shall be paid in full no later than the Maturity Date.

(d) *Tranche D Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche D Loan to Borrower on the Tranche D Loan Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche D Loan Commitment. No Lender shall have an obligation to make a Tranche D Loan in excess of such Lender's Tranche D Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.04), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in advance of the proposed Tranche D Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche D Loan Commitment which shall be on the Tranche D Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche D Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche D Loan Commitment shall terminate immediately and without further action on the earlier of (x) the Tranche D Loan Borrowing Date after giving effect to the funding of such Lender's Tranche D Loan Commitment on such date and (y) the Tranche D Loan Commitment Termination Date.

(e) Any principal amount of any Loans borrowed under Section 2.01(a), 2.01(b), 2.01(c) or 2.01(d) hereof and subsequently repaid or prepaid may not be reborrowed.

Section 2.02. Proportionate Shares. All Loans shall be made, and all participations purchased, by the Lenders simultaneously and proportionately to their respective Proportionate Shares, it being understood that no Lender shall be responsible for any default by any other Lender in such other Lender's obligation to make a Loan hereunder or purchase a participation required hereby nor shall the Commitment of any Lender be increased or decreased as a result of a default by any other Lender in such other Lender's obligation to make a Loan requested hereunder or purchase a participation required hereby.

Section 2.03. Fees. On the Closing Date, Borrower shall pay to the Administrative Agent (out of the proceeds of the Tranche A Loan advanced by such Lenders on the Closing Date) for distribution to each Lender in accordance with its pro rata share of Loans, a non-refundable fee (the "Closing Fee") in the amount of \$750,000. Payment of the Closing Fee shall be in addition to such fees, costs and expenses due and payable pursuant to Section 12.03.

Section 2.04. Notes. Upon the request of any Lender, Borrower shall prepare, execute and deliver to such Lender one or more Notes evidencing the Loans payable to such Lender (or if requested by it, to it and its registered assigns).

Section 2.05. Use of Proceeds. Borrower shall use the proceeds of the Loans (a) for general working capital purposes and corporate purposes, (b) to refinance certain existing Indebtedness on the Closing Date and (c) to pay, in accordance with the funds flow attached to the Borrowing Notice, fees, costs and expenses incurred in connection with the Transactions.

ARTICLE 3

PAYMENTS OF PRINCIPAL AND INTEREST

Section 3.01. Repayment. There will be no scheduled repayments of principal on the Loans prior to the Maturity Date. The entire outstanding principal amount of the Loans, together with all accrued and unpaid interest thereon, will be due and payable on the Maturity Date.

Section 3.02. Interest.

(a) *Interest Generally.* Borrower agrees to pay to the Lenders interest in cash on the outstanding principal amount of the Loans for each Interest Period at a rate per annum equal to the sum of (i) LIBOR plus (ii) the Applicable Margin.

(b) *LIBOR Not Determinable.* If on or before the day on which LIBOR is to be determined, the Majority Lenders reasonably determine that (i) LIBOR cannot be determined for any reason, (ii) LIBOR will not adequately and fairly reflect the cost of maintaining the Loans or (iii) Dollar deposits in the principal amount of the Loans are not available in the London interbank market, the Majority Lenders shall, as soon as practicable thereafter, give written notice of such determination to Borrower and the Administrative Agent. Upon any such determination, LIBOR shall be LIBOR as of the end of the immediately preceding Interest Period and shall at all times thereafter bear interest at LIBOR as of the end of the immediately preceding Interest Period. Each determination by the Majority Lenders hereunder shall be conclusive and binding absent manifest error.

(c) *Replacement to LIBOR.* If at any time the Administrative Agent reasonably determines (which determination shall be conclusive absent manifest error) that (i) the circumstances set forth in clause (b)(i) of this Section have arisen and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in clause (b)(i) of this Section have not arisen but the supervisor for the administrator of LIBOR has made a public statement identifying a specific date after which LIBOR shall no longer be used for determining interest rates for loans, then the Administrative Agent and Borrower shall endeavor to establish an alternate rate of interest to LIBOR that gives due consideration to the then-prevailing market convention for determining a rate of interest for syndicated loans in the United States at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable; *provided* that, if such alternate rate of interest shall be less than 1.75%, such rate shall be deemed to be 1.75% for the purposes of this Agreement. Notwithstanding anything to the contrary in Section 13.04, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within five (5) Business Days of the date notice of such alternate rate of interest is provided to the Lenders, a written notice from the Majority Lenders stating that such Lenders object to such amendment.

(d) *Default Interest.* Notwithstanding the foregoing, upon the occurrence and during the continuance of any Event of Default, the Applicable Margin shall increase automatically by 4.00% per annum (the interest rate, as increased pursuant to this Section 3.02(d), being the “*Default Rate*”). Notwithstanding any other provision herein, if interest is required to be paid at the Default Rate, it shall also be paid entirely in cash. If any Obligation is not paid when due under any applicable Loan Document, the amount thereof shall accrue interest at the Default Rate. Payment or acceptance of the increased rates of interest provided for in this Section 3.02(d) is not a permitted alternative to timely payment and shall not constitute a waiver of any Default or otherwise prejudice or limit any rights or remedies of the Administrative Agent or any Lender.

(e) *Payment Dates.* Accrued interest on the Loans shall be payable in arrears on each Payment Date with respect to the most recently completed Interest Period in cash, and upon the payment or prepayment of the Loans (on the principal amount being so paid or prepaid); *provided* that interest payable at the Default Rate shall be payable from time to time on demand by the Majority Lenders.

(f) *Maximum Rate.* Notwithstanding any other provision of this Agreement, in no event will any interest or rates referred to herein exceed the maximum interest rate permitted by applicable Law. If such maximum interest rate would be exceeded by the terms hereof, the rates of interest payable hereunder will be reduced to the extent necessary so that such rates (together with any fees or other amounts which are construed by a court of competent jurisdiction to be interest or in the nature of interest) equal the maximum interest rate permitted by applicable Law and any overpayment of interest received by the Lenders before such rates are so construed will be applied, forthwith after determination of such overpayment, to pay all then outstanding interest, and thereafter to pay outstanding principal.

Section 3.03. Prepayments.

(a) *Optional Prepayments.* (i) Borrower shall have the right to optionally prepay in whole or in part (in a minimum amount of \$500,000 and integral multiples of \$100,000 in excess of that amount for each partial prepayment, or, if less, the entire outstanding principal amount of the Loans) the outstanding principal amount of the Loans on any Business Day (a "*Redemption Date*") for an amount equal to the sum of (x) the aggregate principal amount of the Loans being prepaid, (y) the prepayment premium set forth in clause (ii) below (the "*Prepayment Premium*") and (z) any accrued but unpaid interest in respect of the aggregate principal amount of the Loans being prepaid (such aggregate amount, the "*Redemption Price*"). The applicable Prepayment Premium shall be an amount calculated pursuant to Section 3.03(a)(ii).

(ii) If the Redemption Date occurs:

(A) on or prior to the first anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to seven percent (7%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(B) after the first anniversary of the Closing Date and on or prior to the second anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to six percent (6%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(C) after the second anniversary of the Closing Date and on or prior to the third anniversary of the Closing Date, the Prepayment Premium shall be an

amount equal to four percent (4%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(D) after the third anniversary of the Closing Date and on or prior to the fourth anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to three percent (3%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date; and

(E) after the fourth anniversary of the Closing Date and prior to the Stated Maturity Date, the Prepayment Premium shall be an amount equal to two percent (2%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date.

No Prepayment Premium shall be due with respect to repayment of the Loans on the Stated Maturity Date.

(iii) Payment of any Prepayment Premium under this Section 3.03 constitutes liquidated damages, not unmatured interest or a penalty, as the actual amount of damages to the Lenders as a result of the relevant triggering event, prepayment or repayment would be impracticable and extremely difficult to ascertain. Accordingly, any Prepayment Premium hereunder is provided by mutual agreement of the Obligors and the Lenders as a reasonable estimation and calculation of such actual lost profits and other actual damages of the Lenders. Without limiting the generality of the foregoing, it is understood and agreed that upon the occurrence of any prepayment event, any Prepayment Premium shall be automatically and immediately due and payable as though any prepaid or repaid portion of the Loans were voluntarily prepaid as of such date and shall constitute part of the Obligations secured by the Collateral. Any Prepayment Premium shall also be automatically and immediately due and payable if the Loans are satisfied or released by foreclosure (whether by power of judicial proceeding or otherwise), deed in lieu of foreclosure or by any other means. EACH OBLIGOR HEREBY EXPRESSLY WAIVES (TO THE FULLEST EXTENT IT MAY LAWFULLY DO SO) THE PROVISIONS OF ANY PRESENT OR FUTURE STATUTE OR OTHER LAW THAT PROHIBITS OR MAY PROHIBIT THE COLLECTION OF THE FOREGOING PREPAYMENT PREMIUM IN CONNECTION WITH ANY SUCH EVENTS. Borrower and the other Obligors expressly agree (to the fullest extent it and they may lawfully do so) that with respect to any Prepayment Premium payable under the terms of this Agreement: (A) such Prepayment Premium is reasonable and is the product of an arm's length transaction between sophisticated business parties, ably represented by counsel; (B) such Prepayment Premium shall be payable notwithstanding the then-prevailing market rates at the time payment is made; (C) there has been a course of conduct between the Lenders and the Obligors giving specific consideration in this transaction for such agreement to pay such Prepayment Premium; and (D) the Obligors shall be estopped hereafter from claiming differently than as agreed to in this paragraph. The Obligors expressly acknowledge that their agreement to pay such Prepayment Premium as herein described is a material inducement to the Lenders to provide the Commitments and to make the Loans.

(b) *Mandatory Prepayments.* Borrower shall prepay the Loans in amounts as provided below, plus the Prepayment Premium on the principal amount of the Loans being prepaid (calculated in accordance with Section 3.03(a)(ii), it being agreed that the relevant payment date shall be deemed to be the “Redemption Date” for purposes of such calculation), plus any accrued but unpaid interest and fees then due and owing, as follows:

(i) In the event of any Casualty Event, an amount equal to 100% of the Net Cash Proceeds received by any Obligor with respect thereto; *provided, however*, so long as no Default has occurred and is continuing, within one hundred eighty (180) days after receipt of such Net Cash Proceeds, the Obligors may apply the Net Cash Proceeds of any casualty policy up to \$1,000,000 with respect to any loss, but not exceeding \$2,000,000 in the aggregate for all losses under all casualty policies during the term of this Agreement, toward the replacement or repair of destroyed or damaged property; *provided, further*, that any such replaced or repaired property shall be Collateral in which the Administrative Agent for the benefit of the Lenders has been granted a security interest under the Security Documents.

(ii) In the event any Obligor incurs Indebtedness other than Indebtedness that is permitted by Section 9.01 hereof, 100% of the Net Cash Proceeds thereof received by such Obligor. For the avoidance of doubt, any partial prepayment made pursuant to this Section 3.03(b)(ii) shall not be deemed to be a consent to any such incurrence of Indebtedness or a cure or waiver of any Event of Default which occurs in connection therewith, it being understood that any such Event of Default may only be waived with the express consent of the Majority Lenders.

(iii) In the event any Obligor consummates an Asset Sale other than an Asset Sale that is permitted by Section 9.09 hereof (other than Section 9.09(i)), 100% of the Net Cash Proceeds received by such Obligor in connection with such Asset Sale; *provided, however*, so long as no Default has occurred and is continuing, within one hundred eighty (180) days after receipt of such Net Cash Proceeds, the Obligors may use such Net Cash Proceeds not exceeding \$500,000 in the aggregate for all Asset Sales during the term of this Agreement, to purchase, replace, repair or restore properties or assets used in the Obligors’ businesses; *provided, further*, that any such purchased, replaced, repaired or restored property shall be Collateral in which the Administrative Agent for the benefit of the Lenders has been granted a security interest under the Security Documents. For the avoidance of doubt, any partial prepayment made pursuant to this Section 3.03(b)(iii) shall not be deemed to be a consent to any Asset Sale or a cure or waiver of any Event of Default which occurs in connection therewith, it being understood that any such Event of Default may only be waived with the express consent of the Majority Lenders.

ARTICLE 4

PAYMENTS

Section 4.01. Payments.

(a) *Payments Generally.* Each payment of principal, interest and other amounts to be made by the Obligors under this Agreement or any other Loan Document shall be made in Dollars, in immediately available funds, without deduction, set off or counterclaim, to the deposit account of the Administrative Agent specified to Borrower from time to time, not later than 2:00 p.m. (Eastern time) on the date on which such payment shall become due (each such payment made after such time on such due date to be deemed to have been made on the next succeeding Business Day).

(b) *Application of Payments.* Each payment under this Agreement or any other Loan Document shall be applied in the following order of priority, with proceeds being applied to a succeeding level of priority only if amounts owing pursuant to the immediately preceding level of priority have been paid in full in cash:

(i) *first*, to the payment of any unpaid costs and expenses referred to in Section 13.03(a) then due and owing;

(ii) *second*, in reduction of Borrower's obligation to pay any unpaid interest and any fees then due and owing including, without limitation, (x) interest payable pursuant to Section 3.02(d) and (y) any Prepayment Premium, if applicable;

(iii) *third*, in reduction of Borrower's obligation to pay any Claims or Losses referred to in Section 13.03(b) then due and owing;

(iv) *fourth*, to the payment of unpaid principal of the Loans on a pro rata basis;

(v) *fifth*, in reduction of any other Obligation then due and owing; and

(vi) *sixth*, to Borrower or such other Persons as may lawfully be entitled to or directed by Borrower to receive the remainder.

Unless otherwise directed by the Majority Lenders, all payments of principal, interest and fees under this Agreement and the other Loan Documents shall be made by the Obligors to the Lenders pro rata in accordance with the Lenders' respective Proportionate Shares of such payments.

(c) *Non-Business Days.* If the due date of any payment under this Agreement (whether in respect of principal, interest, fees, costs or otherwise) would otherwise fall on a day that is not a Business Day, such date shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension.

Section 4.02. Computations. All computations of interest and fees hereunder shall be computed on the basis of a year of 360 days and actual days elapsed during the period for which payable.

Section 4.03. Notices. Each notice of optional prepayment shall be effective only if received by the Lenders not later than 2:00 p.m. (Eastern time) on the date three (3) Business Days prior to the date of prepayment. Each notice of optional prepayment shall specify the amount to be prepaid and the date of prepayment.

Section 4.04. Set-Off.

(a) *Set-Off Generally.* Upon the occurrence and during the continuance of any Event of Default, the Administrative Agent, the Lenders and each of their respective Affiliates are hereby authorized at any time and from time to time, to the fullest extent permitted by Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other indebtedness at any time owing by the Lenders or such Affiliates to or for the credit or the account of any Obligor against any and all of the Obligations, whether or not the Lenders shall have made any demand and although such Obligations may be unmatured. Any Person exercising rights of set-off hereunder agrees to promptly notify Borrower after any such set-off and application, *provided* that the failure to give such notice shall not affect the validity of such set-off and application. The rights of the Lenders and their respective Affiliates under this Section 4.04 are in addition to other rights and remedies (including other rights of set-off) that the Lenders and their respective Affiliates may have.

(b) *Exercise of Rights Not Required.* Nothing contained herein shall require the Administrative Agent, the Lenders or any of their respective Affiliates to exercise any such right or shall affect the right of such Persons to exercise, and retain the benefits of exercising, any such right with respect to any other indebtedness or obligation of any Obligor.

ARTICLE 5

YIELD PROTECTION

Section 5.01. Additional Costs.

(a) *Change in Requirements of Law Generally.* If, on or after the date hereof, the adoption of any Requirement of Law, or any change in any Requirement of Law, or any change in the interpretation or administration thereof by any court or other Governmental Authority charged with the interpretation or administration thereof, or compliance by any Lender (or its lending office) with any request or directive (whether or not having the force of law) of any such Governmental Authority, shall impose, modify or deem applicable any reserve (including any such requirement imposed by the Board of Governors of the Federal Reserve System), special deposit, contribution, insurance assessment or similar requirement, in each case that becomes effective after the date hereof, against assets of, deposits with or for the account of, or credit extended by, a Lender (or its lending office) or shall impose on a Lender (or its lending office) any other condition affecting the Loans or the Commitment, not as a result of any action or inaction on the part of such

Lender, and the result of any of the foregoing is to increase the cost to any Lender of making or maintaining its portion of the Loans, or to reduce the amount of any sum received or receivable by any Lender under this Agreement or any other Loan Document, by an amount reasonably deemed by such Lender in good faith to be material (other than (i) Indemnified Taxes, (ii) Taxes described in clauses (b) through (d) of the definition of “*Excluded Taxes*” and (iii) Connection Income Taxes), then Borrower shall, without duplication, pay to such Lender on demand therefor such additional amount or amounts as will compensate such Lender for such increased cost or reduction. Notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to constitute a change in Requirements of Law for all purposes of this Section 5.01, regardless of the date enacted, adopted or issued.

(b) *Change in Capital Requirements.* If a Lender shall have determined that, on or after the date hereof, the adoption of any Requirement of Law regarding capital adequacy, or any change therein, or any change in the interpretation or administration thereof by any Governmental Authority charged with the interpretation or administration thereof, or any request or directive regarding capital adequacy (whether or not having the force of law) of any such Governmental Authority, in each case that becomes effective after the date hereof, has or would have the effect of reducing the rate of return on capital of a Lender (or its parent) as a consequence of a Lender’s obligations hereunder or the Loans to a level below that which a Lender (or its parent) could have achieved but for such adoption, change, request or directive by an amount reasonably deemed by it to be material, then Borrower shall pay to such Lender on demand therefor such additional amount or amounts as will compensate such Lender (or its parent) for such reduction.

(c) *Notification by Lender.* The Lenders will promptly notify Borrower of any event of which it has knowledge, occurring after the date hereof, which will entitle a Lender to compensation pursuant to this Section 5.01. Before giving any such notice pursuant to this Section 5.01(c) such Lender shall designate a different lending office if such designation (x) will, in the reasonable judgment of such Lender, avoid the need for, or reduce the amount of, such compensation and (y) will not, in the reasonable judgment of such Lender, be materially disadvantageous to such Lender. A certificate of the Lender claiming compensation under this Section 5.01, setting forth the amount or amounts to be paid to it hereunder, shall be conclusive and binding on Borrower in the absence of manifest error.

Section 5.02. Illegality. Notwithstanding any other provision of this Agreement, in the event that on or after the date hereof the adoption of or any change in any Requirement of Law or in the interpretation or application thereof by any competent Governmental Authority shall make it unlawful for a Lender or its lending office to make or maintain the Loans (and, in the opinion of such Lender, the designation of a different lending office would either not avoid such unlawfulness or would be disadvantageous to such Lender), then such Lender shall promptly notify Borrower thereof following which (a) the Lender’s Commitment shall be suspended until such time as such Lender may again make and maintain the Loans hereunder and (b) if such Requirement of Law shall so mandate, the Loans shall be prepaid by Borrower on or before such date as shall be

mandated by such Requirement of Law in an amount equal to the Redemption Price applicable on the date of such prepayment in accordance with Section 3.03(a); *provided* that no Prepayment Premium pursuant to Section 3.03(a)(ii) shall be due with respect thereto.

Section 5.03. Taxes.

(a) *Payments Free of Taxes.* Any and all payments by or on account of any Obligation shall be made without deduction or withholding for any Taxes, except as required by applicable Law. If any applicable Law (as determined in the good faith discretion of the Administrative Agent) requires the deduction or withholding of any Tax from any such payment by an Obligor, then such Obligor shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable Law and, if such Tax is an Indemnified Tax, then the sum payable by such Obligor shall be increased as necessary so that after such deduction or withholding for Indemnified Taxes has been made (including such deductions and withholdings for Indemnified Taxes applicable to additional sums payable under this Section 5.03) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding for Indemnified Taxes been made. For purposes of this Section, the term “applicable Law” includes FATCA.

(b) *Payment of Other Taxes by Borrower.* Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable Law, or at the option of the Administrative Agent, timely reimburse it for, Other Taxes.

(c) *Evidence of Payments.* As soon as practicable after any payment of Taxes by Borrower to a Governmental Authority, as a withholding Tax pursuant to this Section 5.03, Borrower shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, or a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(d) *Indemnification.* Borrower shall reimburse and indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 5.03) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) *Indemnification by the Lender.* Each Lender shall severally indemnify the Administrative Agent, within ten (10) days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that Borrower has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of Borrower to do so), and (ii) any Taxes attributable to such Lender, in each case, that are payable or paid by

the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to such Lender from any other source against any amount due to the Administrative Agent under this paragraph (e).

(f) *Status of Lenders.* (i) Any Lender that is entitled to an exemption from, or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower and the Administrative Agent at the time or times reasonably requested by Borrower or the Administrative Agent such properly completed and executed documentation reasonably requested by Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable Law or as reasonably requested by Borrower or the Administrative Agent as will enable Borrower or the Administrative Agent to determine whether or not such Lender 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 (other than such documentation set forth in Section 5.03(f)(ii)(A), (B) or (D)) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing:

(A) any Lender that is a U.S. Person shall deliver to Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), duly completed, valid, executed copies of IRS Form W-9 (or successor form) certifying that such Lender is exempt from U.S. Federal backup withholding Tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income Tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, duly completed, valid executed copies of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "interest" article of such Tax treaty and (y) with respect to any other

applicable payments under any Loan Document, duly completed, valid, executed originals of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the “business profits” or “other income” article of such Tax treaty;

(2) duly completed, valid, executed copies of IRS Form W-8ECI (or successor form);

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit D to the effect that such Foreign Lender is not a “bank” within the meaning of Section 881(c)(3)(A) of the Code, a “10 percent shareholder” of Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a “controlled foreign corporation” described in Section 881(c)(3)(C) of the Code (a “*U.S. Tax Compliance Certificate*”) and (y) executed copies of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form); or

(4) to the extent a Foreign Lender is not the beneficial owner, duly completed, valid, executed copies of IRS Form W-8IMY (or successor form), accompanied by IRS Form W-8ECI (or successor form), IRS Form W-8BEN (or successor form), IRS Form W-8BEN-E (or successor form), a U.S. Tax Compliance Certificate, IRS Form W-9 (or successor form), and/or other certification documents from each beneficial owner, as applicable; *provided* that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), executed copies of any other form prescribed by applicable Law as a basis for claiming exemption from or a reduction in U.S. Federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable Law to permit Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower and the Administrative Agent at the time or times prescribed by Law and at such time or times reasonably requested by Borrower or the Administrative Agent such documentation prescribed by applicable Law (including as prescribed by

Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by Borrower or the Administrative Agent as may be necessary for Borrower or the Administrative Agent to comply with its obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Recipient agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall promptly update such form or certification or promptly notify Borrower and the Administrative Agent in writing of its legal inability to do so.

(g) *Treatment of Certain Refunds.* If any party to this Agreement determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 5.03 (including by the payment of additional amounts pursuant to this Section 5.03), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the written request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this Section 5.03(g), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this Section 5.03(g) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts giving rise to such refund had never been paid. This Section 5.03(g) shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(h) *Mitigation Obligations.* If Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or to any Governmental Authority for the account of any Lender pursuant to Section 5.01 or this Section 5.03, then such Lender shall (at the request of Borrower) use commercially reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign and delegate its rights and obligations hereunder to another of its offices, branches or Affiliates if, in the sole reasonable judgment of such Lender, such designation or assignment and delegation would (i) eliminate or reduce amounts payable pursuant to Section 5.01 or this Section 5.03, as the case may be, in the future, (ii) not subject such Lender to any unreimbursed cost or expense and (iii) not otherwise be disadvantageous to such Lender.

(i) *Survival.* Each party's obligations under this Article 5 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of,

a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all Obligations under any Loan Document.

Section 5.04. Delay in Requests. Failure or delay on the part of any Lender to demand compensation pursuant to this Article 5 shall not constitute a waiver of such Lender's right to demand such compensation; *provided* that Borrower shall not be required to compensate a Lender pursuant to this Article for any increased costs incurred or reductions suffered more than six (6) months prior to the date that such Lender notifies Borrower of the change in Law giving rise to such increased costs or reductions, and of such Lender's intention to claim compensation therefor (except that, if the change in Law giving rise to such increased costs or reductions is retroactive, then the six (6) month period referred to above shall be extended to include the period of retroactive effect thereof).

ARTICLE 6

CONDITIONS PRECEDENT

Section 6.01. Conditions to Tranche A Loan; Closing Date. The obligation of each Lender to make the Tranche A Loan on the Closing Date shall not become effective until the following conditions precedent shall have been reasonably satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche A Loan hereunder):

(a) *Organization and Capitalization.* The organizational structure and pro-forma capitalization of the Obligor, after giving effect to the Transactions, as set forth on Schedule 7.19 shall be satisfactory to the Administrative Agent.

(b) *Terms of Material Agreements.* The Administrative Agent shall be satisfied in its sole discretion with the terms and conditions of all of the Obligor's Material Agreements.

(c) *No Law Restraining Transactions.* No applicable Law or regulation shall restrain, prevent or, in the reasonable judgment of the Administrative Agent, impose materially adverse conditions upon the Transactions.

(d) *Lien Searches.* The Administrative Agent shall be satisfied with Lien searches regarding the Obligor made prior to the Closing Date.

(e) *Documentary Deliveries.* The Administrative Agent shall have received the following documents, each of which shall be in form and substance satisfactory to the Administrative Agent:

(i) *Agreement.* This Agreement duly executed and delivered by Borrower and each of the other parties hereto.

(ii) *Security Documents.*

(A) The Security Documents, including, without limitation, the Security Agreement, each Short-Form IP Security Agreement and financing statements, each in form and substance satisfactory to the Administrative Agent and duly executed and delivered by each of the Obligor and the other parties thereto.

(B) The Collateral Questionnaire, duly executed and delivered by a Responsible Officer of Borrower, substantially in the form of Exhibit I hereto and otherwise in form and substance satisfactory to the Administrative Agent.

(C) Without limitation, all other documents and instruments reasonably required to perfect the Administrative Agent's Lien on, and security interest in, the Collateral required to be delivered on or prior to the Closing Date shall have been duly executed and delivered and be in proper form for filing, and shall create in favor of the Administrative Agent, a perfected Lien on, and security interest in, the Collateral, subject to no Liens other than Permitted Liens.

(iii) *Note.* Any Notes requested in accordance with Section 2.04.

(iv) *Approvals.* Borrower shall certify to the Administrative Agent that all material licenses, consents, authorizations and approvals of, and notices to and filings and registrations with, any Governmental Authority (including all foreign exchange approvals) in connection with the Transactions have been made or obtained, and all material third-party consents and approvals, necessary in connection with the execution, delivery and performance by the Obligor of the Loan Documents and the Transactions have been obtained.

(v) *Organizational Documents.* (A) Certified copies of the Organizational Documents of each Obligor and of resolutions of the Board (or similar governing body) of each Obligor approving and authorizing the execution, delivery and performance of this Agreement and each of the other Loan Documents to which it is a party, certified as of the Closing Date by a Responsible Officer of such Obligor as being in full force and effect without modification or amendment; (B) a good standing certificate and/or compliance certificate from the applicable Governmental Authority of each Obligor's (x) jurisdiction of incorporation and (y) jurisdiction(s) in which it is qualified as a foreign corporation or other entity to do business (except where failure to be in good standing would not, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect), each dated a recent date prior to the Closing Date; and (C) such other documents as the Administrative Agent may reasonably request.

(vi) *Incumbency Certificate.* A certificate of each Obligor as to the authority, incumbency and specimen signatures of the persons who have executed

the Loan Documents and any other documents in connection herewith on behalf of the Obligors.

(vii) *Opinion of Counsel.* A favorable opinion, dated as of the Closing Date, of Wiggin and Dana LLP, counsel to each Obligor in form reasonably acceptable to the Administrative Agent and its counsel.

(viii) *Evidence of Insurance.* Certificates from Borrower's insurance broker or other evidence satisfactory to the Administrative Agent that all insurance required to be maintained pursuant to Section 8.05 is in full force and effect.

(ix) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(a)(ii) duly executed and delivered by a Responsible Officer of Borrower, in form and substance satisfactory to the Administrative Agent.

(f) *Due Diligence.* The Administrative Agent shall have received and be satisfied with all due diligence regarding the Obligors (including without limitation historical financial statements, Projections, technical, operational, legal, intellectual property, commercial market forecasts, clinical and regulatory assessments, supply chain, securities, labor, Tax, litigation, environmental, reimbursement and regulatory authority matters) in its sole discretion.

(g) *Indebtedness.* As of the Closing Date, after giving effect to the Transactions, no Obligor shall have Indebtedness other than the Obligations and any Indebtedness specified on Schedule 7.13A. All amounts due or outstanding in respect of any Indebtedness other than the Obligations and any Indebtedness specified on Schedule 7.13A shall have been repaid in full, all commitments (if any) in respect thereof terminated, all guarantees (if any) thereof discharged and released and all security therefor (if any) released, together with all fees and other amounts owing thereon, or documentation in form and substance satisfactory to the Administrative Agent to effect such release upon such repayment and termination shall have been delivered to the Administrative Agent.

(h) *Closing Fees, Expenses, Etc.* The Lenders and their Affiliates shall have received for their own account, the Closing Fee and all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03, after deducting therefrom the Expense Deposit.

(i) *Warrant Certificate.* The Administrative Agent shall have received the executed Warrant Certificate, dated as of the Closing Date.

(j) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Closing Date; provided that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and

correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(k) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(l) *Miscellaneous.* The Administrative Agent and each Lender shall have received such other opinions, instruments, certificates and documents as the Administrative Agent or such Lender shall have reasonably requested with prior notice to Borrower.

(m) *Equity Raise.* Borrower shall have completed the Series D preferred equity raise on terms and provisions reasonably satisfactory to the Administrative Agent, which results in minimum gross cash proceeds to Borrower of at least \$75,000,000.

Section 6.02. Conditions to Tranche B Loan; Tranche B Loan Borrowing Date. The obligation of each Lender to make the Tranche B Loan on the Tranche B Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche B Loan hereunder):

(a) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(b)(ii) requesting the Borrowing of the Tranche B Loan duly executed by a Responsible Officer of Borrower and Borrower’s updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.

(b) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche B Loan Borrowing Date; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(c) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

Section 6.03. Conditions to Tranche C Loan; Tranche C Loan Borrowing Date. The obligation of each Lender to make the Tranche C Loan on the Tranche C Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or

waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche C Loan hereunder):

(a) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(c)(ii) requesting the Borrowing of the Tranche C Loan duly executed by a Responsible Officer of Borrower and Borrower's updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.

(b) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche C Loan Borrowing Date; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(c) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(d) *Expenses, Etc.* The Lenders and their Affiliates shall have received for their own account, all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03.

Section 6.04. Conditions to Tranche D Loan; Tranche D Loan Borrowing Date. The obligation of each Lender to make the Tranche D Loan on the Tranche D Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche D Loan hereunder):

(a) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(d)(ii) requesting the Borrowing of the Tranche D Loan duly executed by a Responsible Officer of Borrower and Borrower's updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.

(b) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche D Loan Borrowing Date; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(c) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(d) *Officer's Certificate.* A certificate, dated as of the Tranche D Borrowing Date and signed by a Responsible Officer of Borrower, confirming compliance with the conditions set forth in this Section 6.04.

(e) *Milestone.* The Administrative Agent shall have received evidence satisfactory to the Administrative Agent that Borrower is in pro-forma compliance with the revenue covenant in Section 8.15(b) for the fiscal quarter ending March 31, 2022.

(f) *Expenses, Etc.* The Lenders and their Affiliates shall have received for their own account, all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03.

The borrowing of the Loans shall constitute a certification by Borrower to the effect that the conditions set forth in Section 6.01, Section 6.02, Section 6.03 and Section 6.04, as applicable, have been fulfilled as of the Closing Date, the Tranche B Loan Borrowing Date, the Tranche C Loan Borrowing Date or the Tranche D Loan Borrowing Date, or waived by the Administrative Agent on behalf of the Lenders, as applicable.

ARTICLE 7

REPRESENTATIONS AND WARRANTIES

In order to induce the Lenders to enter into this Agreement and to extend the Loans hereunder, each Obligor represents and warrants to the Administrative Agent and the Lenders, on the Closing Date, on the Tranche B Loan Borrowing Date, on the Tranche C Loan Borrowing Date and on the Tranche D Loan Borrowing Date, as applicable, that the following statements are true and correct:

Section 7.01. Power and Authority. Each Obligor and each of its Subsidiaries (a) is duly organized, validly existing and in good standing under the Laws of its jurisdiction of organization, (b) has all requisite corporate (or equivalent) power, and has all material governmental licenses, authorizations, consents and approvals necessary to own its assets and carry on its business as now being or as proposed to be conducted except to the extent that failure to have the same would not reasonably be expected to have a Material Adverse Effect, (c) is qualified to do business and is in good standing in all jurisdictions in which the nature of the business conducted by it makes such qualification necessary except where failure to so qualify would not (either individually or in the aggregate) reasonably be expected to have a Material Adverse Effect, and (d) has full power, authority and legal right to make and perform each of the Loan Documents and, in the case of Borrower, to borrow the Loans hereunder.

Section 7.02. Authorization; Enforceability. The Transactions are within each Obligor's corporate (or equivalent) powers and have been duly authorized by all necessary corporate (or

equivalent) action and, if required, by all necessary shareholder or other equity holder action. The Loan Documents have been duly executed and delivered by each Obligor party thereto and constitutes, and each of the other Loan Documents to which it is a party when executed and delivered by such Obligor will constitute, a legal, valid and binding obligation of such Obligor, enforceable against each Obligor in accordance with its terms, except as such enforceability may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or similar Laws of general applicability affecting the enforcement of creditors' rights and (b) the application of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

Section 7.03. Governmental and Other Approvals; No Conflicts. The Transactions (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any other Person, except for (i) such as have been obtained or made and are in full force and effect, (ii) filings and recordings in respect of perfecting or recording the Liens created pursuant to the Security Documents and (iii) those consents listed on Schedule 7.03, (b) will not violate any Requirement of Law or the Organizational Documents of any Obligor or any order of any Governmental Authority, other than any such violations that, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect, (c) will not violate or result in a default under any Material Agreement, or give rise to a right thereunder to require any payment to be made by any such Person, and (d) will not result in the creation or imposition of any Lien (other than Permitted Liens) on any asset of any Obligor or any of its Subsidiaries.

Section 7.04. Financial Statements; Projections; Material Adverse Change.

(a) *Financial Statements.* Borrower has heretofore furnished to the Administrative Agent certain financial statements as provided for in Section 8.01. Such financial statements present fairly, in all material respects, the financial position and results of operations and cash flows of the Obligors as of such dates and for such periods substantially in accordance with GAAP, subject to quarterly or year-end adjustments and the absence of footnotes. No Obligor has any material contingent liabilities or liabilities for taxes, long-term lease or unusual forward or long-term commitments not disclosed in the aforementioned financial statements.

(b) *Projections.* On and as of the Closing Date, the projections of the Obligors (collectively, the "*Projections*") are based on good faith estimates and assumptions made by the management of Borrower; *provided*, the Projections are not to be viewed as facts and that actual results during the period or periods covered by the Projections may differ from such Projections and that the differences may be material; *provided, further*, as of the Closing Date, the management of Borrower believes that the Projections are reasonable and attainable.

(c) *No Material Adverse Change.* Since December 31, 2019, no event, circumstance or change has occurred that has caused or evidences, either in individually or in the aggregate, a Material Adverse Change.

Section 7.05. Properties.

(a) *Property Generally.* Each Obligor has good and marketable fee simple title to, or valid leasehold or license interests in, all its real and personal Property material to its business, subject only to Permitted Liens and except as would not reasonably be expected to interfere with its ability to conduct its business as currently conducted or to utilize such properties for their intended purposes.

(b) *Intellectual Property.* (i) Schedule 7.05(b) lists, with respect to each Obligor, all United States and foreign registrations of and applications for Patents, Trademarks, Copyrights, and industrial designs that are Obligor Intellectual Property, including the applicable jurisdiction, registration or application number and date, as applicable thereto, a designation as to whether it is Material Intellectual Property, and a designation as to whether it is licensed or owned by Obligor.

(ii) Each Obligor (A) owns or possesses all legal and beneficial rights, title and interest in and to Material Intellectual Property designated on Schedule 7.05(b) as being owned by such Obligor and (B) has the right to use the Material Intellectual Property licensed to such Obligor, in each case free and clear of any Liens or Claims of any kind, other than Permitted Liens.

(iii) To Obligors' knowledge, the Material Intellectual Property does not violate any license or infringe any valid and enforceable Intellectual Property right of another.

(iv) Other than with respect to the Material Agreements, or as permitted by this Agreement, the Obligors have not assigned or otherwise transferred ownership of, or agreed to assign or otherwise transfer ownership of, any Material Intellectual Property, in whole or in part, to any Person who is not an Obligor.

(v) Other than as set forth on Schedule 7.05(b), the Obligors have not received any written communications, nor is there any pending or, to each Obligor's knowledge, threatened action in writing, suit, proceeding or claim in writing by another, alleging that any of the Obligors has violated, infringed, diluted or misappropriated any Intellectual Property of another.

(vi) There is no pending or, to any Obligor's knowledge, threatened action in writing, suit, proceeding or claim in writing by another: (a) challenging an Obligor's rights in or to any Material Intellectual Property owned by such Obligor; or (b) challenging the validity, enforceability or scope of any Material Intellectual Property owned by an Obligor.

(vii) Each Obligor has taken commercially reasonable precautions to protect the secrecy, confidentiality and value of the Material Intellectual Property (including without limitation, by requiring that all relevant current and former employees, contractors and consultants of the Obligors execute written confidentiality and invention assignment Contracts).

(viii) Each Obligor has complied with the material terms of each Material Agreement pursuant to which Intellectual Property has been licensed to the Obligors (which material terms shall include, but not be limited to, pricing and duration of the agreement).

(ix) All maintenance fees, annuities, and the like due or payable on the Patents within Material Intellectual Property have been timely paid or the failure to so pay was the result of an intentional decision by the applicable Obligor, which would not reasonably be expected to result in a Material Adverse Change. All documents and instruments necessary to register or apply for or renew registration of all Patents, Trademarks and Copyrights within the Material Intellectual Property have been validly executed, delivered and filed in a timely manner with the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

(x) To each Obligor's knowledge, there are no material defects in any of the Patents within Material Intellectual Property and no such Patents within Material Intellectual Property have ever been finally adjudicated to be invalid, unpatentable or unenforceable for any reason in any administrative, arbitration, judicial or other proceeding.

(xi) To each Obligor's knowledge, no Obligor has received any written notice asserting that the Patents within the Material Intellectual Property are invalid, unpatentable or unenforceable and, to each Obligor's knowledge, no Obligor has engaged in any conduct, or omitted to perform any necessary act, the result of which would invalidate or render unpatentable or unenforceable any such Patent within the Material Intellectual Property.

(xii) Each employee and consultant has signed a written agreement assigning to the applicable Obligor all intellectual property rights that are related to such Obligor's business as now conducted and as presently proposed to be conducted and confidentiality provisions protecting trade secrets and confidentiality information of the Obligors.

(xiii) To the knowledge of each Obligor, no third party is infringing upon or misappropriating, or violating any material license or agreement with such Obligor relating to any Material Intellectual Property.

Section 7.06. No Actions or Proceedings.

(a) *Litigation.* There is no litigation, investigation or enforcement proceeding pending or threatened in writing with respect to any Obligor by or before any Governmental Authority or arbitrator (i) that either individually or in the aggregate would reasonably be expected to have a Material Adverse Effect or (ii) that involves this Agreement or the Transactions.

(b) *Environmental Matters.* The operations and the real Property of the Obligors comply with all applicable Environmental Laws, except to the extent the failure to so comply, either individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. To each Obligor's knowledge, there have been no conditions, occurrences or release of Hazardous Materials which would reasonably be expected to have a Material Adverse Effect.

(c) *Labor Matters.* No Obligor has engaged in unfair labor practices and there are no pending or, to any Obligor's knowledge, threatened in writing labor actions, disputes, grievance or arbitration proceedings involving the employees of any Obligor, in each case that would reasonably be expected to have a Material Adverse Effect. There is no material strike or work stoppage in existence or threatened in writing against any Obligor.

Section 7.07. Compliance with Laws and Agreements. Each Obligor is in compliance with all Requirements of Law (including CLIA and Environmental Laws) and all Contracts binding upon it or its Property, except (other than with respect to Material Intellectual Property) where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

Section 7.08. Taxes. Each Obligor has timely filed or caused to be filed all federal income and other material Tax returns and reports required to have been filed and has paid or caused to be paid all federal income and other material Taxes required to have been paid by it, except Taxes that are being contested in good faith by appropriate proceedings and for which such Obligor has set aside on its books adequate reserves with respect thereto substantially in accordance with GAAP.

Section 7.09. Full Disclosure. Borrower has disclosed to the Lenders all Material Agreements to which any Obligor is party, and all other matters to its knowledge, that, individually or in the aggregate, would reasonably be expected to result in a Material Adverse Effect. None of the reports, financial statements, certificates or other information furnished by or on behalf of the Obligors to the Lenders in connection with the negotiation of this Agreement and the other Loan Documents or delivered hereunder or thereunder (as modified or supplemented by other information so furnished) contains any material misstatement of material fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that, with respect to projected financial information, Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

Section 7.10. Regulation.

(a) *Investment Company Act.* No Obligor is an “investment company” as defined in, or subject to regulation under, the Investment Company Act of 1940.

(b) *Margin Stock.* No Obligor is engaged principally, or as one of its important activities, in the business of extending credit for the purpose, whether immediate, incidental or ultimate, of buying or carrying Margin Stock, and no part of the proceeds of the Loans will be used to buy or carry any Margin Stock in violation of Regulation T, U or X.

Section 7.11. Solvency. The Obligors, on a consolidated basis, are and, immediately after giving effect to the Borrowings, the use of proceeds thereof, and the consummation of the Transactions, will be, Solvent.

Section 7.12. Subsidiaries. Except as set forth on Schedule 7.12 (as such Schedule may be updated by Borrower from time to time), Borrower has no direct or indirect Subsidiaries.

Section 7.13. Indebtedness and Liens. Set forth on Schedule 7.13A is a complete and correct list of all Permitted Indebtedness of each Obligor described in Section 9.01(b) as of the date hereof. Set forth on Schedule 7.13B is a complete and correct list of all Permitted Liens

described in Section 9.02(b) granted by an Obligor with respect to its respective Property and outstanding as of the date hereof.

Section 7.14. Material Agreements. Set forth on Schedule 7.14 (as such Schedule may be updated by Borrower from time to time) is a complete and correct list of (i) each Material Agreement and (ii) each Contract creating or evidencing any Material Indebtedness, together with a summary reference to the product or purpose of each such Material Agreement and such Contract, to which an Obligor is a party. Accurate and complete copies of each such Contract listed on such schedule have been made available to the Lenders. No Obligor is in default in any material respect under any such Material Agreement or such Contract creating or evidencing any Material Indebtedness listed on such schedule, and no Obligor has knowledge of any default in any material respect by any counterparty to such Material Agreement or such Contract. Except as otherwise disclosed on Schedule 7.14 (as such Schedule may be updated by Borrower from time to time), all material vendor purchase agreements and provider Contracts of the Obligors, and all Material Agreements including a grant of rights under any Intellectual Property to an Obligor, are in full force and effect without material modification from the form in which the same were disclosed to the Lenders.

Section 7.15. Restrictive Agreements. None of the Obligors is party to any Restrictive Agreement, except (i) those listed on Schedule 7.15 or otherwise permitted under Section 9.11, (ii) restrictions and conditions imposed by Law or by the Loan Documents, (iii) any stockholder agreement or investor rights agreement, charter, by laws or other organizational documents of an Obligor and (iv) limitations associated with Permitted Liens.

Section 7.16. Real Property. No Obligor or any of its Subsidiaries owns or leases (as tenant thereof) any real Property on the date hereof, except as described on Schedule 7.16.

Section 7.17. Pension and Other Plans. Schedule 7.17 sets forth, as of the date hereof, a complete and correct list of, and that separately identifies, (a) all Title IV Plans, (b) all Multiemployer Plans and (c) all material Benefit Plans. Each Benefit Plan, and each trust thereunder, intended to qualify for Tax exempt status under Section 401 or 501 of the Code or other Requirements of Law so qualifies. Except for those that would not, in the aggregate, have a Material Adverse Effect, (x) each Benefit Plan is in compliance with applicable provisions of ERISA, the Code and other Requirements of Law, (y) there are no existing or pending (or to the knowledge of any Obligor or Subsidiary thereof, threatened) claims (other than routine claims for benefits in the normal course), sanctions, actions, lawsuits or other proceedings or investigation involving any Benefit Plan to which any Obligor or Subsidiary thereof incurs or otherwise has or would have an obligation or any liability or Claim and (z) no ERISA Event is reasonably expected to occur. Borrower and each of its ERISA Affiliates has met all applicable requirements under the ERISA Funding Rules with respect to each Title IV Plan, and no waiver of the minimum funding standards under the ERISA Funding Rules has been applied for or obtained. As of the most recent valuation date for any Title IV Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Code) is at least 60%, and neither Borrower nor any of its ERISA Affiliates knows of any facts or circumstances that would reasonably be expected to cause the funding target attainment percentage to fall below 60% as of the most recent valuation date. As of the date hereof, no ERISA Event has occurred in connection with which obligations and

liabilities (contingent or otherwise) remain outstanding. No ERISA Affiliate would have any Withdrawal Liability as a result of a complete withdrawal from any Multiemployer Plan on the date this representation is made.

Section 7.18. Collateral; Security Interest. Each Security Document is effective to create in favor of the Administrative Agent for the benefit of the Lenders a legal, valid and enforceable security interest in the Collateral subject thereto and each such security interest is perfected to the extent required by (and has the priority required by) the applicable Security Document, subject to Permitted Liens. The Security Documents collectively are effective to create in favor of the Administrative Agent for the benefit of the Lenders a legal, valid and enforceable security interest in the Collateral, which upon the filing of financing statements and other similar statements filed in the appropriate offices, such security interests are perfected security interests (subject only to Permitted Liens) to the extent that such perfection may be obtained by such filing.

Section 7.19. Capitalization. All of the issued and outstanding securities of each Obligor have been duly authorized, are validly issued, fully paid, and non-assessable. As of the Closing Date and except as set forth on Schedule 7.19, there are no outstanding or authorized options, warrants, purchase rights, subscription rights, conversion rights, exchange rights, or other contracts or commitments that could require the Obligors to issue, sell, or otherwise cause to become outstanding any of their ownership interests. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, or similar rights with respect to the Obligors. None of the Equity Interests in any Obligor has been mortgaged, assigned or pledged in favor of any Person, other than pursuant to the Security Agreement.

Section 7.20. Insurance. Each Obligor has obtained (and is maintaining), insurance for its assets (including the Collateral) and business as required under the Loan Documents.

Section 7.21. Certain Fees. Except as described on Schedule 7.21, no broker's or finder's fee will be payable in connection with the execution and delivery of this Agreement.

Section 7.22. Sanctions Laws. Obligors and, to the knowledge of the Obligors, any director, officer or employee of an Obligor acting on behalf of the Obligors, are in compliance with the Sanctions Laws.

Section 7.23. Anti-Corruption Laws. No Obligor nor any of its Subsidiaries has, nor, to the knowledge of any Responsible Officer of any Obligor, has any director, officer, agent or employee of any Obligor acting on behalf of such Obligor (i) taken any action, directly or indirectly, that would result in a violation by such Persons of the Anti-Corruption Laws, (ii) made, offered to make, promised to make or authorized the payment or giving of, directly or indirectly, any Prohibited Payment or (iii) been subject to any investigation by any Governmental Authority with regard to any actual or alleged Prohibited Payment.

Section 7.24. Anti-Terrorism Laws. The Obligors (i) have taken reasonable measures to ensure compliance with applicable Economic Sanctions Laws and Anti-Terrorism Laws, (ii) are not Designated Persons and (iii) have not used any part of the proceeds from any advance on behalf of any Designated Person or has not used, directly by it or indirectly through any Subsidiary, such

proceeds in connection with any investment in, or any transactions or dealings with, any Designated Person.

ARTICLE 8

AFFIRMATIVE COVENANTS AND FINANCIAL COVENANTS

Each Obligor covenants and agrees with the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than the Warrant Obligations and inchoate indemnity obligations) have been paid in full in cash:

Section 8.01. Financial Statements and Other Information. It will furnish to the Administrative Agent for distribution to the Lenders:

(a) as soon as available and in any event within thirty-five (35) days after the end of each month prior to a Qualified Public Offering, the consolidated balance sheet of the Obligors as of the end of each such month, and the related consolidated statements of income and cash flows of the Obligors for such month and the portion of the fiscal year through the end of such month, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with a certificate of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of the Obligors as at such date and the results of operations of the Obligors for the period ended on such date and have been prepared substantially in accordance with GAAP consistently applied, subject to changes resulting from normal, quarterly or year-end adjustments and except for the absence of notes;

(b) as soon as available and in any event within forty-five (45) days after the end of the first three fiscal quarters of each fiscal year, the consolidated balance sheet of the Obligors as of the end of such quarter, and the related consolidated statements of income and cash flows of the Obligors for such quarter and the portion of the fiscal year through the end of such quarter, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with (i) a certificate of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of the Obligors as at such date and the results of operations of the Obligors for the period ended on such date and have been prepared substantially in accordance with GAAP consistently applied, subject to changes resulting from normal quarterly or year-end adjustments and except for the absence of footnotes and (ii) a management's discussion and analysis of the financial condition and results of operations, including the Obligors' liquidity and capital resources; *provided* that, if the Borrower is a Publicly Reporting Company, the Borrower's filing of a Quarterly Report on Form 10-Q with the SEC shall be deemed to satisfy the requirements of this Section 8.01(b) on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(c) as soon as available and in any event within one hundred fifty (150) days after the end of each fiscal year, the consolidated balance sheet of the Obligors as of the end of such fiscal year, and the related consolidated statements of income, shareholders' equity and cash flows of the Obligors for such fiscal year, prepared substantially in accordance with GAAP consistently applied, all in reasonable detail and setting forth in comparative form the figures for the previous fiscal year, accompanied by (i) a report and opinion thereon of Cohn Reznick LLP or another independent certified public accountant acceptable to the Administrative Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any "going concern" or like qualification or exception (other than solely with respect to, or expressly resulting solely from, the repayment of the Loans on the Stated Maturity Date) or any qualification or exception as to the scope of such audit and (ii) a management's discussion and analysis of the financial condition and results of operations, including the Obligors' liquidity and capital resources; *provided* that, if the Borrower is a Publicly Reporting Company, the Borrower's filing of a Yearly Report on Form 10-K with the SEC shall be deemed to satisfy the requirements of this Section 8.01(c) on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(d) within thirty-five (35) days after the end of each month, a compliance certificate of a Responsible Officer of Borrower as of the end of the applicable accounting period (which delivery may, unless a Lender requests executed originals, be by electronic communication including email and shall be deemed to be an original authentic counterpart thereof for all purposes) in the form of Exhibit E (a "*Compliance Certificate*") which, for purposes of clarification, shall (i) demonstrate the Obligors' compliance with Section 8.15(a) in respect of such month, (ii) for each month end that coincides with the end of a fiscal quarter of Borrower, state that the representations and warranties made by the Obligors in Article 7 are true in all material respects on and as of the date thereof; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects, (iii) for each month end that coincides with the end of a fiscal quarter of Borrower, demonstrate Borrower's compliance with Section 8.15(b) in respect of such fiscal quarter and (iv) for each month end that coincides with the end of a fiscal year of Borrower, provide Obligors' updated Schedules to this Agreement (if any);

(e) promptly, and in any event within five (5) Business Days after receipt thereof by an Obligor, copies of each notice or other correspondence received from any securities regulator or exchange to the authority of which an Obligor is subject concerning any investigation or possible investigation or other inquiry by such agency regarding financial or other operational results of such Obligor;

(f) the information regarding insurance maintained by the Obligors as and when required under Section 8.05;

(g) promptly following the Lenders' written request at any time, proof of the Obligors' compliance with Section 8.15(a);

(h) within ten (10) days of delivery, copies of all periodic reports distributed by Borrower to its shareholders generally; *provided* that (i) any such material may be redacted by Borrower to exclude information relating to the Loan Documents or the Lenders and (ii) the Lenders shall not be entitled to receive statements, reports and notices relating to topics that (x) are subject to attorney-client privilege or (y) present a conflict of interest for the Lenders;

(i) a financial forecast for the Obligors for each fiscal year, including forecasted balance sheets, statements of income and cash flows of the Obligors, all of which shall be prepared on a consolidated basis and delivered not later than February 28 of such fiscal year;

(j) promptly following any Lender's written request, certification that such Obligor is not a passive foreign investment company ("*PFIC*") within the meaning of Sections 1291 through 1297 of the Code, or, if such Obligor determines that it is a PFIC, such information as would allow the Lender to make a qualified electing fund election with respect to the stock of the Obligor;

(k) after Borrower becomes a Publicly Reporting Company, within five (5) Business Days of filing, provide access (via posting and/or links on Borrower's web site) to all reports on Form 10-K and Form 10-Q filed with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange; and within five (5) Business Days of filing, provide notice and access (via posting and/or links on Borrower's web site) to all reports on Form 8-K filed with the SEC, and copies of (or access to, via posting and/or links on Borrower's web site) all other reports, proxy statements and other materials filed by Borrower with the SEC, any Governmental Authority succeeding to any of the functions of the SEC or with any national securities exchange;

(l) promptly after the receipt thereof, a copy of any "management letter" received from its certified public accounts and the management's response thereto; and

(m) such other information respecting the operations, properties, business or condition (financial or otherwise) of the Obligors (including with respect to the Collateral) as the Lenders may from time to time reasonably request.

Section 8.02. Notices of Material Events. It will furnish to the Administrative Agent for distribution to the Lenders written notice of the following promptly after a Responsible Officer of an Obligor first learns of the existence of:

(a) the occurrence of any Default or Event of Default;

(b) the occurrence of any event with respect to any Obligor's Property resulting in a Loss, to the extent not covered by insurance, aggregating \$250,000 or more;

(c) (i) any proposed Acquisition by any Obligor that would reasonably be expected to result in environmental liability under Environmental Laws in excess of \$250,000, and (ii) in each case, to the extent that any of the following would reasonably be expected to result in liability in excess of \$250,000: (A) spillage, leakage, discharge, disposal, leaching, migration or release of any Hazardous Material required to be reported to any Governmental Authority under applicable Environmental Laws, and (B) all actions, suits, claims, notices of violation, hearings, investigations or proceedings pending, or threatened in writing against or affecting any Obligor or any of its Subsidiaries or with respect to the ownership, use, maintenance and operation of their respective businesses, operations or properties, relating to Environmental Laws or Hazardous Material;

(d) the assertion of any environmental matter by any Person in writing against, or with respect to the activities of, any Obligor or any of its Subsidiaries and any alleged violation of or non-compliance with any Environmental Laws or any permits, licenses or authorizations, in each case, which would reasonably be expected to involve damages in excess of \$250,000 other than any environmental matter or alleged violation that, if adversely determined, would not (either individually or in the aggregate) have a Material Adverse Effect;

(e) the filing or commencement of any action, suit or proceeding by or before any arbitrator or Governmental Authority against or directly affecting any Obligor or any of its Subsidiaries, in each case, that would reasonably be expected to result in a Material Adverse Effect;

(f) (i) on or prior to any filing by any ERISA Affiliate of any notice of intent to terminate any Title IV Plan, a copy of such notice and (ii) promptly, and in any event within ten (10) days, after any Responsible Officer of any ERISA Affiliate knows or has reason to know that a request for a minimum funding waiver under Section 412 of the Code has been filed with respect to any Title IV Plan or Multiemployer Plan, a notice (which may be made by telephone if promptly confirmed in writing) describing such waiver request and any action that any ERISA Affiliate proposes to take with respect thereto, together with a copy of any notice filed with the PBGC or the IRS pertaining thereto;

(g) within five (5) Business Days of obtaining written notice or knowledge thereof, (i) the termination of any Material Agreement; (ii) the receipt by any Obligor or any of its Subsidiaries of a written notice under any Material Agreement (and a copy thereof) asserting a default by such Obligor or any of its Subsidiaries where such alleged default would permit such counterparty to terminate such Material Agreement; (iii) the entering into any new Material Agreement by an Obligor (and a copy thereof); or (iv) any amendment to a Material Agreement that would be materially adverse to the Lenders (and a copy thereof) (which includes, but is not limited to, any amendments to provisions relating to pricing and term), *provided* that notices required under this subsection (g) may

be delivered with Borrower's monthly Compliance Certificate unless any of the foregoing events would reasonably be expected to have a Material Adverse Effect;

(h) any product recalls, safety alerts, corrections, withdrawals, marketing suspensions, removals or the like conducted, to be undertaken or issued by any Obligor or any of its Subsidiaries, whether or not at the request, demand or order of any Governmental Authority;

(i) within five (5) Business Days of obtaining written notice or knowledge thereof, any infringement or other violation by any Person of any Obligor Intellectual Property that would reasonably be expected to result in a Material Adverse Effect;

(j) within five (5) Business Days of obtaining written notice or knowledge thereof, a material licensing agreement or arrangement entered into by any Obligor or any of its Subsidiaries in connection with any material infringement or alleged infringement of the Intellectual Property of another Person;

(k) within five (5) Business Days of obtaining written notice or knowledge thereof, any written claim by any Person that the conduct of any Obligor's (or any Subsidiary thereof) business, including the development, manufacture, use, sale or other commercialization of any product, infringes any Intellectual Property of such Person, except to the extent any such claim would not reasonably be expected to result in a Material Adverse Effect;

(l) the reports and notices as and when required by the Security Documents;

(m) within thirty (30) days of the date thereof, or, if earlier, on the date of delivery of any financial statements pursuant to Section 8.01, notice of any material change in accounting policies or financial reporting practices by the Obligors;

(n) promptly after the occurrence thereof, notice of any labor controversy resulting in or threatening to result in any strike, work stoppage, boycott, shutdown or other material labor disruption against or involving an Obligor (or any Subsidiary thereof);

(o) any other development that results in, or would reasonably be expected to result in, a Material Adverse Effect;

(p) concurrently with the delivery of financial statements under Section 8.01(a), (b) or (c), the creation or other acquisition of any Intellectual Property by any Obligor or any Subsidiary after the date hereof and during such prior fiscal year which is registered or becomes registered or the subject of an application for registration with the United States Copyright Office or the United States Patent and Trademark Office, as applicable, or with any other equivalent foreign Governmental Authority; and

(q) any change to any Obligor's ownership of Deposit Accounts, Securities Accounts and Commodity Accounts, by delivering to the Lenders an updated Schedule 7

to the Security Agreement setting forth a complete and correct list of all such accounts as of the date of such change.

Each notice delivered under this Section 8.02 shall be accompanied by a statement of a Responsible Officer of Borrower setting forth in reasonable detail the event or development requiring such notice and any action taken or proposed to be taken with respect thereto.

Notwithstanding any contrary provision of this Agreement or any other Loan Document (including, without limitation, Sections 8.01 and 8.02), until such time as the Administrative Agent provides written notice to Borrower that it no longer desires to receive information that constitutes material non-public information, Borrower shall provide any information required pursuant to the terms hereof, including any information that may be material non-public information, to the Administrative Agent; *provided*, that notwithstanding the foregoing, Borrower shall at all times comply with Section 8.01(d)(i)-(iii), 8.01(k) and 8.02(a).

Section 8.03. Existence; Maintenance of Properties, Etc. (a) It will, and will cause each of its Subsidiaries to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence; *provided* that the foregoing shall not prohibit any merger, amalgamation, consolidation, liquidation or dissolution permitted under Section 9.03.

(b) It shall, and shall cause each of its Subsidiaries to, maintain and preserve all rights, licenses, permits, privileges and franchises material to the conduct of its business, and maintain and preserve all of its assets and properties necessary to the conduct of its business in good working order and condition, ordinary wear and tear and damage from casualty or condemnation excepted.

(c) It shall, and shall cause each of its Subsidiaries to, use commercially reasonable efforts to cause each new employee and contractor to execute and deliver a customary confidentiality, non-disclosure and Intellectual Property assignment agreement that includes a waiver of moral rights.

Section 8.04. Payment of Obligations. It will, and will cause each of its Subsidiaries to, pay and discharge (i) all federal income and other material Taxes, fees, assessments and governmental charges or levies imposed upon it or upon its properties or assets prior to the date on which penalties attach thereto, and all lawful claims for labor, materials and supplies which, if unpaid, might become a Lien (other than a Permitted Lien) upon any properties or assets of any Obligor, except to the extent such Taxes, fees, assessments or governmental charges or levies, or such claims, are being contested in good faith by appropriate proceedings and are adequately reserved against substantially in accordance with GAAP, (ii) all lawful claims which, if unpaid, would by Law become a Lien upon its Property not constituting a Permitted Lien and (iii) all other obligations if the failure to discharge such obligation would reasonably be expected to result in a Material Adverse Effect.

Section 8.05. Insurance. At its own cost and expense, it will, and will cause each of its Subsidiaries, to obtain and maintain, with financially sound and reputable insurers, insurance of the kinds, and in the amounts, as are consistent with customary practices and standards of its industry in the same or similar locations, it being understood and agreed that the insurance held by

the Obligors on the Closing Date is deemed to fulfill this requirement on the date hereof. All of the insurance policies required pursuant to this Section 8.05 will name the Administrative Agent as a “loss payee,” “additional insured” or “mortgagee,” as applicable and as its interests may appear. Borrower will use its commercially reasonable efforts to ensure, or to cause others to ensure, that all insurance policies required pursuant to this Section 8.05 shall provide that they shall not be terminated or cancelled nor shall any policy be materially changed in a manner adverse to the insured Person without at least thirty (30) days’ written notice to insured Person and the Administrative Agent. Receipt of notice of termination or cancellation of any such insurance policies shall entitle the Administrative Agent to renew any such policies, all in accordance with the first sentence of this Section 8.05 or otherwise to obtain similar insurance in place of such policies, in each case at the expense of Borrower (payable within three (3) Business Days of Borrower’s receipt of written demand therefor) and, unless an Event of Default has occurred and is continuing, with the prior written consent of Borrower (such consent not to be unreasonably withheld). The amount of any such expenses shall accrue interest at the Default Rate if not paid when due and shall constitute “Obligations.” All of the insurance policies required hereby will be evidenced by one or more certificates of insurance, together with appropriate loss payee or additional insured clauses or endorsements in favor of the Administrative Agent as required by this Section, delivered to the Administrative Agent on or before the Closing Date (or, with respect to such endorsements, within the time period set forth in Section 8.19) and at such other times as the Administrative Agent may request from time to time.

Section 8.06. Books and Records; Inspection Rights. It will, and will cause each of its Subsidiaries to, keep proper books of record and account in which full, true and correct entries are made of all dealings and transactions in relation to its business and activities. It will, and will cause each of its Subsidiaries to, permit any representatives designated by the Administrative Agent, upon reasonable prior notice and at reasonable times, to visit and inspect its properties, to examine and make extracts from its books and records, and to discuss its affairs, finances and condition with its officers and independent accountants, all at such reasonable times during normal business hours and with reasonable advance notice as the Administrative Agent may request. It will, and will cause each of its Subsidiaries to, pay all reasonable and documented out-of-pocket expenses incurred by the Administrative Agent (a) so long as no Default has occurred and is continuing, for no more than two (2) such inspections each calendar year and (b) during a continuing Default, all such inspections.

Section 8.07. Compliance with Laws. (a) It will, and will cause each of its Subsidiaries to, (i) comply in all material respects with all Requirements of Law (including Environmental Laws) and (ii) comply in all material respects with all terms of outstanding Indebtedness and all Material Agreements, except (other than with respect to Material Intellectual Property) where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

(b) Each Obligor will maintain, and will cause each of its Subsidiaries to maintain, all records required to be maintained by a Governmental Authority, except where failure to do so, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect.

Section 8.08. Licenses. It will, and will cause each of its Subsidiaries to, obtain and maintain all licenses, authorizations, consents, filings, exemptions, registrations and other Governmental Approvals necessary in connection with the execution, delivery and performance of the Loan Documents, the consummation of the Transactions or the operation and conduct of its business and ownership of its properties, except where failure to do so would not reasonably be expected to have a Material Adverse Effect.

Section 8.09. Action under Environmental Laws. It will, and will cause each of its Subsidiaries to, upon a Responsible Officer becoming aware of the release of any Hazardous Materials or the existence of any environmental liability under applicable Environmental Laws with respect to their respective businesses, operations or properties, take all actions, at their cost and expense, as shall be required by applicable Law to investigate and clean up the condition of their respective businesses, operations or properties, including all required removal, containment and remedial actions, and restore their respective businesses, operations or properties to a condition, in each case in material compliance with applicable Environmental Laws.

Section 8.10. Use of Proceeds. The proceeds of the Loans will be used only as provided in Section 2.05. No part of the proceeds of the Loans will be used, whether directly or indirectly, for any purpose that violates any of the Regulations of the Board of Governors of the Federal Reserve System, including Regulations T, U and X.

Section 8.11. Certain Obligations Respecting Subsidiaries; Further Assurances; Intellectual Property.

(a) *Subsidiaries.* It will take such action, and will cause each of its Subsidiaries to take such action, from time to time as shall be necessary to ensure that all Subsidiaries are “Guarantors” hereunder. Without limiting the generality of the foregoing, in the event that any Obligor shall form or acquire any new Subsidiary, it and its Subsidiaries will promptly and in any event within fifteen (15) days (or such longer time as consented to by the Administrative Agent in writing) of the formation or Acquisition of such Subsidiary:

(i) cause such new Subsidiary to become a “Guarantor” hereunder, and a “Grantor” under the Security Documents, pursuant to a Guarantee Assumption Agreement;

(ii) take such action or cause such Subsidiary to take such action (including delivering such Equity Interests together with undated transfer powers executed in blank) as shall be necessary to create and perfect valid and enforceable first priority (subject to Permitted Priority Liens) Liens on substantially all of the personal Property of such new Subsidiary as collateral security for the obligations of such new Subsidiary hereunder;

(iii) to the extent that the parent of such Subsidiary is not a party to the Security Documents or has not otherwise pledged Equity Interests in its Subsidiaries in accordance with the terms of the Security Documents and this Agreement, cause the parent of such Subsidiary to execute and deliver a pledge agreement in favor of the Lenders, in respect of all outstanding issued shares of such Subsidiary; and

(iv) deliver such proof of corporate action, incumbency of officers, opinions of counsel and other documents as is consistent with those delivered by each Obligor pursuant to Section 6.01 or as the Majority Lenders shall have requested;

provided, that solely with respect to any Subsidiary that is an Immaterial Foreign Subsidiary, no such actions shall be required other than a pledge by owner of such Immaterial Foreign Subsidiary of 100% of the Equity Interests of such Immaterial Foreign Subsidiary, which pledge shall, at the Administrative Agent's discretion be perfected under the Law of such Immaterial Foreign Subsidiary's jurisdiction of formation. For the avoidance of doubt, in the event that any Subsidiary ceases to qualify as an Immaterial Foreign Subsidiary, it shall be required to comply with clauses (a)(i)-(iii) hereof as if it was formed or Acquired on the date it ceased to qualify as an Immaterial Foreign Subsidiary.

(b) *Further Assurances*. It will, and will cause each of its Subsidiaries to, take such action from time to time as shall reasonably be requested in writing by the Majority Lenders to effectuate the purposes and objectives of this Agreement. Without limiting the generality of the foregoing, it will, and will cause each Person that is required to be a Guarantor to, take such action from time to time (including executing and delivering such assignments, security agreements, control agreements and other instruments) as shall be reasonably requested in writing by the Majority Lenders to create, in favor of the Lenders, perfected security interests and Liens (subject to Permitted Liens) in substantially all of the personal Property of such Obligor as collateral security for the Obligations; *provided* that any such security interest or Lien shall be subject to the relevant requirements of the Security Documents.

(c) *Intellectual Property*. In the event that any Obligor creates, develops or acquires Obligor Intellectual Property during the term of this Agreement, then the provisions of this Agreement shall automatically apply thereto and any such Obligor Intellectual Property shall automatically constitute part of the Collateral under the Security Documents, without further action by any party, in each case from and after the date of such creation, development or acquisition (except that any representations or warranties of any Obligor shall apply to any such Obligor Intellectual Property only from and after the date, if any, subsequent to such acquisition that such representations and warranties are brought down or made anew as provided herein). In the event that any Obligor holds or acquires Obligor Intellectual Property during the term of this Agreement, then, upon the request of the Administrative Agent, such Obligor shall take any action as shall be reasonably necessary and reasonably requested by the Administrative Agent to ensure that the provisions of this Agreement and the Security Agreement shall apply thereto and any such Obligor Intellectual Property shall constitute part of the Collateral under the Security Documents

Section 8.12. Termination of Non-Permitted Liens. In the event that any Responsible Officer of Borrower shall become aware or be notified by the Lenders of the existence of any outstanding Lien against any Property of any Obligor, which Lien is not a Permitted Lien, such Obligor shall use its best efforts to promptly terminate or cause the termination of such Lien.

Section 8.13. Non-Consolidation. It will, and will cause each of its Subsidiaries to, (i) maintain entity records and books of account separate from those of any other entity which is

an Affiliate of such entity; and (ii) not commingle its funds or assets with those of any other entity which is an Affiliate of such entity.

Section 8.14. Anti-Terrorism and Anti-Corruption Laws. No Obligor shall engage in any transaction that violates any of the applicable prohibitions set forth in any Economic Sanctions Law, Anti-Terrorism Law, or the *US Foreign Corrupt Practices Act of 1977* (15 USC. §§ 78dd-1 *et seq.*). None of the funds or assets of such Obligor or any Subsidiary that are used to repay the Loans shall constitute property of, or shall be beneficially owned by, any Designated Person or, to such Obligor's knowledge, be the direct proceeds derived from any transactions that violate the prohibitions set forth in any applicable Economic Sanctions Law, and no Designated Person shall have any direct or indirect interest in such Obligor insofar as such interest would violate any Economic Sanctions Laws applicable to such Obligor.

Section 8.15. Financial Covenants.

(a) *Minimum Liquidity.* Borrower shall ensure that the Obligors shall have aggregate Unrestricted Cash of not less than \$3,000,000 at all times.

(b) *Minimum Total Revenue.* As of the end of the fiscal quarter ended March 31, 2022 and each fiscal quarter thereafter, the Obligors shall maintain, on a consolidated basis, Total Revenue for the twelve (12) month period most recently ended on such date of not less than the amount set forth in the table below:

<i>Twelve-Month Period Ended</i>	<i>Minimum Total Revenue</i>
March 31, 2022	\$16,797,000
June 30, 2022	\$18,256,000
September 30, 2022	\$21,722,000
December 31, 2022	\$26,545,000
March 31, 2023	\$30,179,000
June 30, 2023	\$35,221,000
September 30, 2023	\$40,649,000
December 31, 2023	\$46,660,000
March 31, 2024	\$51,615,000
June 30, 2024	\$57,102,000
September 30, 2024	\$63,486,000
December 31, 2024	\$71,575,000

<i>Twelve-Month Period Ended</i>	<i>Minimum Total Revenue</i>
March 31, 2025	\$85,526,000
June 30, 2025	\$92,295,000
September 30, 2025	\$99,058,000
December 31, 2025	\$106,016,000

Section 8.16. Maintenance of Material Agreements, Intellectual Property, Etc. Such Obligor will, and will cause each of its Subsidiaries (to the extent applicable) to: (i) maintain in full force and effect for the term thereof all Material Agreements, or other rights necessary for the current operations of such Obligor's or such Subsidiary's business, as the case may be and (ii) maintain in full force and effect all Material Intellectual Property owned or controlled by such Obligor or any such Subsidiary that is used in and necessary for the current operations of such Obligor's or such Subsidiary's business, as the case may be; *provided* that Borrower may terminate the Supply Agreement in accordance with its terms if such termination would not be reasonably expected to adversely affect the Lenders in any material respect.

Section 8.17. Cash Management. It will:

(a) subject to Section 8.19, maintain all Deposit Accounts, Securities Accounts, Commodity Accounts and lockboxes (other than Excluded Accounts) with a bank or financial institution that has executed and delivered to the Administrative Agent an account control agreement, in form and substance reasonably acceptable to the Administrative Agent (each such Deposit Account, Securities Account, Commodity Account and lockbox, a "*Controlled Account*"); and

(b) deposit promptly, and in any event no later than five (5) Business Days after the date of receipt thereof, all cash, checks, drafts or other similar items of payment relating to or constituting payments made in respect of any and all accounts and other rights and interests into Controlled Accounts.

Section 8.18. Board Observer Rights Until the Obligations have been paid in full in cash, Borrower shall permit the Administrative Agent on behalf of all of the Lenders (the "*Observer*") to attend and observe (but not vote) at all meetings of Borrower's (or any Subsidiary's, as applicable) Board or any Committee, whether in person, by telephone or otherwise as requested by the Observer. Borrower and such Subsidiaries shall notify the Observer in writing at the same time as furnished to members of the applicable Board or Committee of (i) the date and time for each general or special meeting of any such Board or Committee and (ii) the adoption of any resolutions or actions by any such Board or any such Committee by written consent (describing, in reasonable detail, the nature and substance of such action). Borrower and each of its

Subsidiaries shall concurrently deliver to the Observer all notices and any materials delivered to the official members of such Board or Committee in connection with a meeting or action to be taken by written consent, including a draft of any material resolutions or actions proposed to be adopted by written consent. The Observer shall be free prior to such meeting or adoption by written consent to contact members of any applicable Board or Committee and discuss the pending actions to be taken. Notwithstanding the foregoing, the Observer shall not be entitled to receive materials relating to, or be in attendance for, any discussions relating to topics which (x) are subject to attorney client privilege or (y) present a conflict of interest for the Observer. All such discussions and materials shall be subject to the confidentiality provisions set forth in Section 13.17.

Section 8.19. Post-Closing Obligations. Within the time periods specified on Schedule 8.19 (as each may be extended by the Administrative Agent in its sole discretion), complete such undertakings as are set forth on Schedule 8.19.

ARTICLE 9

NEGATIVE COVENANTS

Each Obligor covenants and agrees with the Administrative Agent and the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than the Warrant Obligations and inchoate indemnity obligations) have been paid in full in cash:

Section 9.01. Indebtedness. It will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Indebtedness, whether directly or indirectly, except:

- (a) the Obligations;
- (b) Indebtedness existing on the date hereof and set forth in Schedule 7.13A and Permitted Refinancings thereof;
- (c) accounts payable to trade creditors for goods and services and current operating liabilities (not the result of the borrowing of money) incurred in the Ordinary Course of Business;
- (d) Indebtedness consisting of guarantees resulting from endorsement of negotiable instruments for collection by it or any of its Subsidiaries in the Ordinary Course of Business;
- (e) unsecured Indebtedness of an Obligor to any other Obligor; *provided* such Indebtedness is pledged to the Administrative Agent for the benefit of the Lenders under the Security Agreement and otherwise subordinate in right of payment to the Obligations;
- (f) Guarantees by any Obligor of Indebtedness of any other Obligor;

(g) purchase money Indebtedness and Capital Lease Obligations; *provided* that (i) if secured, the collateral therefor consists solely of the assets being financed, the products and proceeds thereof and books and records related thereto, (ii) in the case of purchase money Indebtedness, such Indebtedness shall not constitute less than 75% of the aggregate consideration paid with respect to such asset, and (iii) the aggregate outstanding principal amount of such Indebtedness does not exceed \$7,000,000 at any time;

(h) unsecured workers' compensation claims, payment obligations in connection with health, disability or other types of social security benefits, unemployment or other insurance obligations, reclamation and statutory obligations, in each case incurred in the Ordinary Course of Business;

(i) Indebtedness under Hedging Agreements permitted pursuant to Section 9.05(f);

(j) Indebtedness approved in advance in writing by the Majority Lenders;

(k) Indebtedness of Borrower and its Subsidiaries with respect to corporate credit cards not to exceed \$250,000 at any time outstanding;

(l) Indebtedness of Borrower pursuant to the minimum purchase and termination fee provisions of the Supply Agreement; and

(m) so long as no Default shall have occurred and is continuing at the time of such Indebtedness is incurred, or after giving effect thereto, other unsecured Indebtedness in an aggregate principal amount not to exceed \$500,000 at any time outstanding.

Section 9.02. Liens. It will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Lien on any Property now owned by it, except:

(a) Liens securing the Obligations;

(b) any Lien on any Property of any Obligor existing on the date hereof and set forth in Schedule 7.13B; *provided* that (i) no such Lien shall extend to any other Property of such Obligor and (ii) any such Lien shall secure only those obligations which it secures on the date hereof and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof;

(c) Liens securing Indebtedness permitted under Section 9.01(g); *provided* that such Liens are restricted solely to the collateral described in Section 9.01(g);

(d) Liens imposed by Law which were incurred in the Ordinary Course of Business, including (but not limited to) carriers', warehousemen's, landlords' and mechanics' liens, liens relating to leasehold improvements and other similar liens arising in the Ordinary Course of Business and which (i) do not in the aggregate materially detract from the value of the Property subject thereto or materially impair the use thereof in the

operations of the business of such Person or (ii) are being contested in good faith by appropriate proceedings, which proceedings have the effect of preventing the forfeiture or sale of the Property subject to such liens and for which adequate reserves have been made if required substantially in accordance with GAAP;

(e) Liens, pledges or deposits made in the Ordinary Course of Business in connection with bids, contracts, leases, appeal bonds, workers' compensation, unemployment insurance or other similar social security legislation;

(f) Liens securing Taxes, assessments and other governmental charges, the payment of which is not yet due or is being contested in good faith by appropriate proceedings promptly initiated and diligently conducted and for which such reserve or other appropriate provisions, if any, as shall be required by GAAP shall have been made;

(g) servitudes, easements, rights of way, restrictions and other similar encumbrances on real Property imposed by applicable Laws and encumbrances consisting of zoning or building restrictions, easements, licenses, restrictions on the use of Property or minor imperfections in title thereto which, in the aggregate, are not material, and which do not in any case materially detract from the value of the Property subject thereto or interfere with the ordinary conduct of the business of any of the Obligors;

(h) bankers' liens, rights of setoff and similar Liens incurred in the Ordinary Course of Business and arising in connection with the Obligors' deposit accounts or securities accounts held at financial institutions solely to secure payment of fees and similar costs and expenses of such financial institutions with respect to such accounts;

(i) Liens in connection with transfers permitted under Section 9.09;

(j) any judgment lien or lien arising from decrees or attachments not constituting an Event of Default;

(k) leases or subleases of real property granted in the Ordinary Course of Business, and leases, subleases, nonexclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the Ordinary Course of Business;

(l) Liens in favor of customs and revenue authorities arising as a matter of law to secure the payment of custom duties in connection with the importation of goods, not securing an amount in the aggregate in excess of \$100,000 at any given time;

(m) Liens on a deposit account of the Obligors and the cash and cash equivalents therein, in each case, securing Indebtedness described in Section 9.01(k); and

(n) Permitted Licenses solely to the extent that such Permitted License would constitute a Lien;

provided that no Lien otherwise permitted under any of the foregoing Sections 9.02 (excluding Sections 9.02(a) and 9.02(n)) shall apply to any Material Intellectual Property.

Section 9.03. Fundamental Changes and Acquisitions. It will not, and will not permit any of its Subsidiaries to, (i) enter into or consummate any transaction of merger, amalgamation or consolidation, including without limitation, a reverse-triangular merger, or other similar transaction or series of related transactions, (ii) liquidate, wind up or dissolve itself (or suffer any liquidation or dissolution) (including in connection with any division or plan of division under Delaware law or any comparable event under a different jurisdiction's laws), (iii) make or consummate any Acquisition, (iv) make any initial public offering that is not a Qualified Public Offering or (v) sell or issue any Disqualified Equity Interests, except:

- (a) Investments permitted under Section 9.05;
- (b) Permitted Acquisitions for (i) aggregate cash consideration not to exceed \$2,000,000 and (ii) total consideration not to exceed \$5,000,000, in each case, for the course of this Agreement;
- (c) the merger, amalgamation or consolidation of any Obligor with or into any other Obligor, *provided* that (i) if Borrower is a party to such merger, amalgamation or consolidation, Borrower shall be the surviving entity and (ii) if a Domestic Subsidiary is a party to such merger, amalgamation or consolidation with a Foreign Subsidiary, the Domestic Subsidiary shall be the surviving entity; and
- (d) the purchase of the QIAGEN Patents pursuant to the Patent Purchase Agreement.

Section 9.04. Lines of Business. It will not, and will not permit any of its Subsidiaries to, engage to any material extent in any business other than the business engaged in on the date hereof by such Obligor, or a business reasonably related, incidental or complementary thereto or reasonable extensions thereof.

Section 9.05. Investments. It will not, and will not permit any of its Subsidiaries to, make, directly or indirectly, or permit to remain outstanding any Investments except:

- (a) Investments outstanding on the date hereof and identified in Schedule 9.05 and any modification, replacement, renewal or extension thereof to the extent not involving new or additional Investments;
- (b) operating deposit accounts with banks;
- (c) extensions of credit in the nature of accounts receivable or notes receivable arising from the sales of goods or services in the Ordinary Course of Business;
- (d) Permitted Cash Equivalent Investments;

(e) (i) Investments consisting of 100% of the ownership of the Equity Interests of its Subsidiaries, (ii) intercompany Investments by Borrower or a Subsidiary in any Guarantor or (iii) Investments by Borrower or any Subsidiary acquired in connection with a Permitted Acquisition;

(f) Hedging Agreements entered into in the ordinary course of any Obligor's financial planning solely to hedge interest rate risks (and not for speculative purposes) in respect of Permitted Indebtedness and in aggregate amount for all such Hedging Agreements not in excess of \$500,000;

(g) Investments consisting of prepaid expenses, negotiable instruments held for collection or deposit, security deposits with utilities, landlords and other like Persons, and deposits in connection with workers' compensation and similar deposits, in each case made in the Ordinary Course of Business;

(h) Investments received in connection with any Insolvency Proceedings in respect of any customers, suppliers or clients and in settlement of delinquent obligations of, and other disputes with, customers, suppliers or clients;

(i) Investments permitted under Section 9.01(e) and Section 9.03;

(j) 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;

(k) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the Ordinary Course of Business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's Board in an aggregate amount not to exceed \$100,000 for subclauses (i) and (ii) in any fiscal year;

(l) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, Investments in Immaterial Foreign Subsidiaries in an aggregate amount not to exceed \$250,000 in any fiscal year; and

(m) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, other Investments in an amount not to exceed \$100,000 in any fiscal year; and

(n) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, Investments in the Chinese Subsidiary in an aggregate amount not to exceed: (i) \$2,000,000 in the fiscal year ending December 31, 2022 and (ii) \$2,500,000 in any fiscal year thereafter.

Section 9.06. Restricted Payments. It will not, and will not permit any of its Subsidiaries to, declare or make, or agree to pay or make, directly or indirectly, any Restricted Payment, other than:

- (a) dividends and stock splits with respect to any Equity Interests of Borrower or any of its Subsidiaries payable solely in additional shares of its Qualified Equity Interests;
- (b) any Restricted Payment by a Subsidiary to Borrower;
- (c) any purchase, redemption, retirement, or other Acquisition by Borrower or any of its Subsidiaries of shares of its capital stock or other Equity Interests with the proceeds received from a substantially concurrent issue of new shares of its capital stock or other Equity Interests;
- (d) dividends paid by any Guarantor to any other Obligor;
- (e) cashless exercises of options and warrants;
- (f) repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements, stockholder rights plans, director or consultant stock option plans, or similar plans in an aggregate amount not to exceed \$100,000 in any fiscal year;
- (g) the making of cash payments in lieu of the issuance of fractional shares upon the conversion of convertible securities (or in connection with the exercise of warrants or similar securities) not to exceed \$25,000 in any fiscal year; and
- (h) the issuance of the Warrant Certificate and cash payments made to redeem, purchase, repurchase or retire the Warrant Obligations in accordance with the terms of the Warrant Certificate.

Section 9.07. Payments of Indebtedness. It will not, and will not permit any of its Subsidiaries to, make any payments in respect of any Material Indebtedness other than (i) payments of the Obligations and (ii) so long as no Default has occurred and is continuing or would result therefrom, scheduled payments of other Permitted Indebtedness and, in the case of repayment of intercompany Indebtedness permitted in reliance upon Section 9.01(e), subject to any subordination agreement entered into in connection therewith.

Section 9.08. Change in Fiscal Year. It will not, and will not permit any of its Subsidiaries to, change the last day of its fiscal year from that in effect on the date hereof, without prior written notice to the Administrative Agent, except to change the fiscal year of a Subsidiary acquired in connection with a Permitted Acquisition to conform its fiscal year to that of Borrower.

Section 9.09. Sales of Assets, Etc. It will not, and will not permit any of its Subsidiaries to, sell, lease, exclusively license (in terms of geography or field of use), as a licensor, transfer

(including in connection with any division or plan of division under Delaware law or any comparable event under a different jurisdiction's laws) or otherwise dispose of any of its Property (including accounts receivable and Equity Interests of Subsidiaries), or forgive, release or compromise any amount owed to any Obligor or any of its Subsidiaries, in each case, in one transaction or series of transactions (any thereof, an "Asset Sale"), except:

- (a) transfers of cash in the Ordinary Course of Business for equivalent value;
- (b) sales or leases of products and services in the Ordinary Course of Business on ordinary business terms;
- (c) the forgiveness, release or compromise of any amount owed to any Obligor in the Ordinary Course of Business;
- (d) entering into, or becoming bound, by a Permitted License to the extent not otherwise prohibited by this Agreement;
- (e) development and other collaborative arrangements where such arrangements provide for the license or disclosure of Patents, Trademarks, Copyrights or other Intellectual Property rights of any Obligor in the Ordinary Course of Business and consistent with general market practices where such license requires periodic payments based on per unit sales of a product over a period of time; *provided* that such licenses must be true licenses that do not result in a legal transfer of title of the licensed Property or otherwise constitute sales transactions in substance,;
- (f) a sale, lease, exclusive license, transfer or other disposition (including by way of abandonment, cancellation or trade-in) of any Property that is obsolete, worn out, surplus or no longer used or useful in connection with the business of the Obligors or with respect to which a newer and improved version is available;
- (g) dispositions resulting from Casualty Events;
- (h) any transaction permitted under Section 9.02, 9.03, 9.05 and 9.20; and
- (i) so long as no Default shall have occurred and is continuing at the time of such Asset Sale, or after giving effect thereto, Asset Sales of other property not to exceed \$250,000 in the aggregate per fiscal year.

Section 9.10. Transactions with Affiliates. It will not, and will not permit any of its Subsidiaries to, sell, lease, license or otherwise transfer any assets to, or purchase, lease, license or otherwise acquire any assets from, or otherwise engage in any other transactions with, any of its Affiliates, except:

- (a) transactions between or among the Obligors;
- (b) any transaction permitted under Section 9.01, 9.05, 9.06 or 9.09;

(c) customary compensation and indemnification of, and other employment arrangements with, directors, officers and employees of any Obligor in the Ordinary Course of Business;

(d) transactions upon fair and reasonable terms that are no less favorable to any Obligor than would be obtained in a comparable arm's-length transaction with a Person not an Affiliate;

(e) the transactions set forth on Schedule 9.10; and

(f) cash equity contributions by Borrower's investors in Borrower or its Subsidiaries (other than Disqualified Equity Interests).

Section 9.11. Restrictive Agreements. It will not, and will not permit any of its Subsidiaries to, directly or indirectly, enter into, incur or permit to exist any Restrictive Agreement other than (i) restrictions and conditions imposed by Law or by the Loan Documents, (ii) Restrictive Agreements listed on Schedule 7.15, (iii) any stockholder agreement or investor rights agreement, charter, by laws or other organizational documents of an Obligor or (iv) limitations associated with Permitted Liens or with any transaction permitted under Section 9.01, 9.03, 9.05, 9.06 or 9.09.

Section 9.12. Organizational Documents, Material Agreements. (a) It will not, and will not permit any of its Subsidiaries to, enter into any amendment to or modification of any Organizational Document that would be reasonably expected to adversely affect the Lenders in any material respect, without the prior written consent of the Administrative Agent.

(b) It will not, and will not permit any of its Subsidiaries to (i) enter into any material waiver, amendment or modification of any Material Agreement (including, but not limited to, any amendments to provisions relating to pricing and term) that would be reasonably expected to adversely affect the Lenders in any material respect or (ii) take or omit to take any action that results in the termination of, or permits any other Person to terminate, any Material Agreement or Material Intellectual Property that would be reasonably expected to adversely affect the Lenders in any material respect, without, in each case, the prior written consent of the Administrative Agent; *provided* that Borrower may terminate the Supply Agreement in accordance with its terms if such termination would not be reasonably expected to adversely affect the Lenders in any material respect.

Section 9.13. Operating Leases. It will not, and will not permit any of its Subsidiaries to, make any expenditures in respect of operating leases, except for:

(a) real estate operating leases entered into in the Ordinary Course of Business;
and

(b) operating leases that would not cause the Obligors, on a consolidated basis, to make payments exceeding \$500,000 in any fiscal year.

Section 9.14. Sales and Leasebacks. Except as permitted by Section 9.01(g), it will not, and will not permit any of its Subsidiaries to, become liable, directly or indirectly, with respect to any lease, whether an operating lease or a Capital Lease Obligation, of any Property (whether real, personal, or mixed), whether now owned or hereafter acquired, which (i) any Obligor has sold or transferred or is to sell or transfer to any other Person and (ii) any Obligor intends to use for substantially the same purposes as Property which has been or is to be sold or transferred.

Section 9.15. Hazardous Material. It will not, and will not permit any of its Subsidiaries to, use, generate, manufacture, install, treat, release, store or dispose of any Hazardous Material, except in compliance with all applicable Environmental Laws or where the failure to comply would not reasonably be expected to result in a Material Adverse Change.

Section 9.16. Accounting Changes. It will not, and will not permit any of its Subsidiaries to, make any significant change in accounting treatment, except as required or permitted by GAAP.

Section 9.17. Compliance with ERISA. No ERISA Affiliate shall cause or suffer to exist (a) any event that would result in the imposition of a Lien with respect to any Title IV Plan or Multiemployer Plan or (b) any other ERISA Event that would, in the aggregate, have a Material Adverse Effect. No Obligor or any Subsidiary thereof shall cause or suffer to exist any event that could result in the imposition of a Lien with respect to any Benefit Plan that would have a Material Adverse Effect.

Section 9.18. Deposit Accounts. It will not, and will not permit any of its Subsidiaries to, establish or maintain any bank account that is not a Controlled Account (other than an Excluded Account) and will not, and will not permit any of its Subsidiaries to, deposit proceeds in a bank account that is not a Controlled Account; *provided*, up to two (2) months of payroll expenses may be on deposit in Excluded Accounts in the aggregate at any time.

Section 9.19. Outbound Licenses. It will not, and will not permit any of its Subsidiaries to, enter into or become bound by any outbound license or agreement unless such outbound license or agreement is a Permitted License.

Section 9.20. Inbound Licenses. It will not, and will not permit any of its Subsidiaries to, enter into or become bound by any inbound license or agreement (other than Permitted Licenses) unless (i) no Default has occurred and is continuing, (ii) such Obligor has provided written notice to the Administrative Agent of the material terms of such license or agreement with a description of its anticipated and projected impact on such Obligor's business or financial condition, and (iii) such Obligor has taken such commercially reasonable actions as the Administrative Agent may reasonably request to obtain the consent of, or waiver by, any Person whose consent or waiver is necessary for the Administrative Agent to be granted a valid and perfected security interest in such license or agreement allowing the Administrative Agent to fully exercise its rights under any of the Loan Documents in the event of a disposition or liquidation of the rights, assets or property that is the subject of such license or agreement; *provided* that the aggregate amounts to be paid under all such inbound licenses pursuant to this Section 9.20 shall not exceed an amount equal to \$1,000,000 per fiscal year.

ARTICLE 10

EVENTS OF DEFAULT

Section 10.01. Events of Default. Each of the following events shall constitute an “*Event of Default*”:

(a) Borrower shall fail to pay any principal on the Loan when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise; or

(b) any Obligor shall fail to pay any Obligation (other than an amount referred to in Section 10.01(a)) when and as the same shall become due and payable, and such failure shall continue unremedied for a period of three (3) Business Days; or

(c) any representation or warranty made by or on behalf of an Obligor or any of its Subsidiaries in or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, or in any report, certificate, financial statement or other document furnished pursuant to or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, shall: (i) prove to have been incorrect when made or deemed made to the extent that such representation or warranty contains any materiality or Material Adverse Effect qualifier; or (ii) prove to have been incorrect in any material respect when made or deemed made to the extent that such representation or warranty does not otherwise contain any materiality or Material Adverse Effect qualifier; or

(d) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in Sections 8.01, 8.02, 8.03(a) (with respect to such Obligor’s existence), 8.10, 8.11, 8.13, 8.15, 8.17, 8.18, 8.19 or Article 9; or

(e) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in this Agreement (other than those specified in Section 10.01(a), (b) or (d)) or any other Loan Document, and, in the case of any failure that is capable of cure, such failure shall continue unremedied for a period of thirty (30) or more days; or

(f) any Obligor shall fail to make any payment in respect of any Material Indebtedness, when and as the same shall become due and payable after giving effect to any applicable grace or cure period as originally provided by the terms of such Indebtedness; or

(g) (i) any material breach of, or “event of default” or similar event under, the Contract governing any Material Indebtedness shall occur and such breach or “event of default” or similar event shall continue unremedied, uncured or unwaived after a period of five (5) Business Days after the expiration of any cure period thereunder, or (ii) any event or condition occurs (A) that results in any Material Indebtedness becoming due prior to its scheduled maturity or (B) that enables or permits (with or without the giving of notice, the

lapse of time or both) the holder or holders of such Material Indebtedness or any trustee or agent on its or their behalf to cause such Material Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity; *provided* that this Section 10.01(h) shall not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the Property securing such Material Indebtedness; or

(h) any Obligor or any of its Subsidiaries:

(i) ceases to be Solvent, or generally does not or becomes unable to pay its debts or meet its liabilities as the same become due, or admits in writing its inability to pay its debts generally, or declares any general moratorium on its indebtedness, or proposes a compromise or arrangement or deed of company arrangement between it and any class of its creditors; or

(ii) shall (A) voluntarily commence any proceeding or file any petition seeking liquidation, reorganization or other relief under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, (B) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in Section 10.01(i), (C) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for an Obligor or for a substantial part of its assets, (D) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (E) make a general assignment for the benefit of creditors or (F) take any action for the purpose of effecting any of the foregoing; or

(i) an involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of an Obligor or any Subsidiary of an Obligor or its debts, or of a substantial part of its assets, under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for an Obligor or any Subsidiary of an Obligor or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for sixty (60) days or an order or decree approving or ordering any of the foregoing shall be entered; or

(j) one or more judgments for the payment of money in an aggregate amount in excess of \$250,000 (excluding any amounts covered by insurance as to which the applicable carrier has accepted coverage) shall be rendered against any Obligor or any combination thereof and the same shall remain undischarged for a period of forty-five (45) consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to attach or levy upon any assets of any Obligor to enforce any such judgment; or

(k) an ERISA Event shall have occurred that, when taken together with all other ERISA Events that have occurred, would reasonably be expected to result in liability of

the Obligors and their Subsidiaries in an aggregate amount exceeding (i) \$250,000 in any year or (ii) \$500,000 for all periods until repayment of all Obligations (other than the Warrant Obligations); or

(l) a Change of Control shall have occurred; or

(m) a Material Adverse Change shall have occurred; or

(n) (i) any Lien created by any of the Security Documents shall at any time not constitute a valid and perfected Lien in favor of the Administrative Agent on Collateral with an aggregate value in excess of \$250,000, free and clear of all other Liens (other than Permitted Liens) except due to the action or inaction of the Administrative Agent or any Lender(s), (ii) except as permitted herein the Security Documents or any Guarantee of any of the Obligations shall for whatever reason cease to be in full force and effect, or (iii) any of the Security Documents or any Guarantee of any of the Obligations, or the enforceability thereof, shall be repudiated or contested by any Obligor.

Section 10.02. Remedies. (a) Upon the occurrence of any Event of Default, then, and in every such event (other than an Event of Default described in Section 10.01(h) or (i)), and at any time thereafter during the continuance of such event, the Majority Lenders may, by notice to Borrower, take either or both of the following actions, at the same or different times: (i) terminate the Commitments, and thereupon the Commitments shall terminate immediately, and (ii) declare the Loans then outstanding to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and all fees and other Obligations, shall become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(b) Upon the occurrence of any Event of Default described in Section 10.01(h) or (i), the Commitments shall automatically terminate and the principal amount of the Loans then outstanding, together with accrued interest thereon and all fees and other Obligations, shall automatically become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(c) If any Lender collects any money or property pursuant to this Article 10, they shall pay out the money or property in the order set forth in Section 4.01(b).

Section 10.03. Prepayment Premium and Redemption Price. For the avoidance of doubt, any Prepayment Premium (as a component of the Redemption Price) shall be due and payable at any time the Loans become due and payable prior to the Stated Maturity Date 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 Borrower in accordance with Section 10.02(a), or automatically, in accordance with Section 10.02(b)), by operation of law or otherwise (including, without limitation, on account of any bankruptcy filing), except as otherwise specified herein. In

view of the impracticability and extreme difficulty of ascertaining the actual amount of damages to the Lenders or profits lost by the Lenders as a result of such acceleration, and by mutual agreement of the parties as to a reasonable estimation and calculation of the lost profits or damages of the Lenders, any Prepayment Premium shall be due and payable upon such date. Each Obligor hereby waives any defense to payment, whether such defense may be based in public policy, ambiguity, or otherwise. The Obligors and the Lenders acknowledge and agree that any Prepayment Premium due and payable in accordance with this Agreement shall not constitute unmatured interest, whether under Section 502(b)(3) of the Bankruptcy Code or otherwise. Each Obligor further acknowledges and agrees, and waives any argument to the contrary, that payment of such amount does not constitute a penalty or an otherwise unenforceable or invalid obligation.

ARTICLE 11

GUARANTEE

Section 11.01. The Guarantee. The Guarantors hereby jointly and severally guarantee to the Administrative Agent and each Lender, and its successors and assigns, the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of the principal of and interest on the Loans, all fees and other amounts and Obligations from time to time owing to the Administrative Agent and any Lender by Borrower under this Agreement or under any other Loan Document and by any other Obligor under any of the Loan Documents, in each case strictly in accordance with the terms thereof (such obligations being herein collectively called the “*Guaranteed Obligations*”). The Guarantors hereby further jointly and severally agree that if Borrower shall fail to pay in full when due (whether at stated maturity, by acceleration or otherwise) any of the Guaranteed Obligations, the Guarantors 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.

Section 11.02. Obligations Unconditional. The obligations of the Guarantors under Section 11.01 are absolute and unconditional, joint and several, irrespective of the value, genuineness, validity, regularity or enforceability of the obligations of Borrower under 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 applicable 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 11.02 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 time for any performance of or compliance with any of the Guaranteed Obligations shall be extended, or such performance or compliance shall be 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;

(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, any Lender as security for any of the Guaranteed Obligations shall fail to be perfected.

The Guarantors hereby expressly waive diligence, presentment, demand of payment, protest and all notices whatsoever, and any requirement that the Administrative Agent or any Lender exhaust any right, power or remedy or proceed against Borrower under this Agreement or any other agreement or instrument referred to herein, or against any other Person under any other guarantee of, or security for, any of the Guaranteed Obligations.

Section 11.03. Reinstatement. The obligations of the Guarantors under this Article 11 shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of Borrower 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 the Administrative Agent and each Lender on demand for all reasonable out-of-pocket costs and expenses (including reasonable fees of counsel) incurred by such Persons in connection with such rescission or restoration, including any such reasonable out-of-pocket 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.

Section 11.04. Subrogation. The Guarantors hereby jointly and severally agree that, until the payment and satisfaction in full of all Guaranteed Obligations (other than the Warrant Obligations) and the expiration and termination of the Commitments, they shall not exercise any right or remedy arising by reason of any performance by them of their guarantee in Section 11.01, whether by subrogation or otherwise, against Borrower or any other guarantor of any of the Guaranteed Obligations or any security for any of the Guaranteed Obligations.

Section 11.05. Remedies. The Guarantors jointly and severally agree that, as between the Guarantors, on one hand, and the Lenders, on the other hand, the obligations of Borrower under this Agreement and under the other Loan Documents may be declared to be forthwith due and payable as provided in Article 10 (and shall be deemed to have become automatically due and payable in the circumstances provided in Article 10) for purposes of Section 11.01 notwithstanding any stay, injunction or other prohibition preventing such declaration (or such obligations from becoming automatically due and payable) as against Borrower 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 Borrower) shall forthwith become due and payable by the Guarantors for purposes of Section 11.01.

Section 11.06. Instrument for the Payment of Money. Each Guarantor hereby acknowledges that the guarantee in this Article 11 constitutes an instrument for the payment of money, and consents and agrees that each Lender, at its 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.

Section 11.07. Continuing Guarantee. The guarantee in this Article 11 is a continuing guarantee, and shall apply to all Guaranteed Obligations whenever arising.

Section 11.08. 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 Pro Rata 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 11.08 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 11 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 11.08, (i) "*Excess Funding Guarantor*" means, in respect of any Guaranteed Obligations, a Guarantor that has paid an amount in excess of its Pro Rata 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 Pro Rata Share of such Guaranteed Obligations and (iii) "*Pro Rata Share*" means, as of the date of determination, 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 Borrower and the Guarantors hereunder and under the other Loan Documents) of all of the Guarantors, determined (A) with respect to any Guarantor that is a party hereto on the Closing Date, as of such date, and (B) with respect to any other Guarantor, as of the date such Guarantor becomes a Guarantor hereunder.

Section 11.09. 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 11.01 would otherwise, taking into account the provisions of Section 11.08, 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 11.01, then, notwithstanding any other provision hereof to the contrary, the amount of such liability shall, without any further action by such Guarantor, the Administrative Agent, the Lenders 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.

ARTICLE 12

ADMINISTRATIVE AGENT

Section 12.01. Appointment. Each of the Lenders hereby irrevocably appoints Perceptive to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article 12 are solely for the benefit of the Administrative Agent and the Lenders, and neither Borrower nor any other Obligor will have rights as a third-party beneficiary of any of such provisions. It is understood and agreed that the use of the term “agent” herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable Law. Instead, such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

Section 12.02. Rights as a Lender. The Person serving as the Administrative Agent hereunder will have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent, and the term “Lender” or “Lenders” will, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity to the extent such Person is a Lender. The Lenders acknowledge and agree that such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for, and generally engage in any kind of business with, Borrower, the other Obligors or any other Subsidiaries or Affiliates of the Obligors as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

Section 12.03. Exculpatory Provisions. (a) The Administrative Agent will not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder are administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent:

- (i) will not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing;

(ii) will not 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 Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Majority Lenders (or such other number or percentage of the Lenders as will be expressly provided for herein or in the other Loan Documents); *provided* that the Administrative Agent will not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable Law, including any action that may be in violation of the automatic stay under any Insolvency Proceeding; and

(iii) will not, except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and will not be liable for the failure to disclose, any information relating to the Obligors or any of its Subsidiaries or Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity.

(b) The Administrative Agent will not be liable for any action taken or not taken by it (i) with the consent or at the request of the Majority Lenders (or such other number or percentage of the Lenders as will be necessary, or as the Administrative Agent believes in good faith will be necessary, under the circumstances), or (ii) in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and non-appealable judgment. The Administrative Agent will be deemed not to have knowledge of any Default unless and until notice describing such Default is given to the Administrative Agent in writing by Borrower or a Lender.

(c) The Administrative Agent will 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 Loan 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, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Article 6 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

Section 12.04. Reliance by Administrative Agent. The Administrative Agent will be entitled to rely upon, and will not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and will not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of the Loans that by its terms must be fulfilled to the satisfaction of a Lender, the Administrative Agent may presume that such condition is satisfactory to such Lender unless the Administrative Agent has received notice to the contrary

from such Lender prior to the making of such Loans. The Administrative Agent may consult with legal counsel (who may be counsel for Borrower), independent accountants and other experts selected by it, and will not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

Section 12.05. Delegation of Duties. The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Administrative Agent. The Administrative Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Affiliates. The exculpatory provisions of this Section will apply to any such sub-agent and to the Affiliates of the Administrative Agent and any such sub-agent, and will apply to their respective activities in connection with the syndication of the facility as well as activities as Administrative Agent. The Administrative Agent will not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and non-appealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agents.

Section 12.06. Resignation of Agent. (a) The Administrative Agent may at any time give notice of its resignation to the Lenders and Borrower, which notice shall set forth the effective date of such resignation (the "*Resignation Effective Date*"), such date not to be earlier than the thirtieth (30th) day following the date of such notice. The Majority Lenders and Borrower shall mutually agree upon a successor to the Administrative Agent. If the Majority Lenders and Borrower are unable to so mutually agree and no successor shall have been appointed within twenty-five (25) days after the retiring Administrative Agent gives notice of its resignation, then the retiring Administrative Agent may (but will not be obligated to), on behalf of the Lenders, appoint a successor Administrative Agent it shall designate (in its reasonable discretion after consultation with Borrower and the Majority Lenders). Whether or not a successor has been appointed, such resignation will become effective in accordance with such notice on the Resignation Effective Date.

(b) With effect from the Resignation Effective Date (i) the retiring Administrative Agent will be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any Collateral held by the Administrative Agent on behalf of the Lenders under any of the Loan Documents, the retiring Administrative Agent will continue to hold such Collateral until such time as a successor Administrative Agent is appointed) and (ii) except for any indemnity payments owed to the retiring Administrative Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent will instead be made by or to each Lender directly, until such time, if any, as the Majority Lenders appoint a successor Administrative Agent as provided for above. Upon the acceptance of a successor's appointment as Administrative Agent hereunder, such successor will succeed to and become vested with all of the rights, powers, privileges and duties of the retiring Administrative Agent (other than any rights to indemnity payments owed to the retiring Administrative Agent), and the retiring Administrative Agent will be discharged from all of its duties and obligations hereunder or under the other Loan Documents. The fees payable by Borrower to a successor Administrative Agent will be the same as those payable to its predecessor unless otherwise agreed between Borrower and such successor. After the retiring Administrative Agent's resignation hereunder and

under the other Loan Documents, the provisions of this Article 12 and Sections 13.03 and 13.06 will continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Affiliates in respect of any actions taken or omitted to be taken by any of them while the retiring Administrative Agent was acting as Administrative Agent.

Section 12.07. Non-Reliance on Administrative Agent and Other Lenders. Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender or any of their Affiliates and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender or any of their Affiliates and based on such documents and information as it will from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

Section 12.08. Administrative Agent May File Proofs of Claim. In case of the pendency of any Insolvency Proceeding or any other judicial proceeding relative to Borrower, the Administrative Agent (irrespective of whether the principal of the Loans will then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent has made any demand on Borrower) will be entitled and empowered (but not obligated), by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans and all other Obligations that are owing and unpaid hereunder or under any other Loan Document and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and the Administrative Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and the Administrative Agent and their respective agents and counsel and all other amounts due the Lenders and the Administrative Agent under this Agreement or any other Loan Document) allowed in such judicial proceeding; and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same.

Any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make any payments of the type described above in this Section 12.08 to the Administrative Agent and, in the event that the Administrative Agent consents to the making of such payments directly to the Lenders, to pay to the Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of the Administrative Agent and its agents and counsel, and any other amounts due the Administrative Agent under this Agreement or any other Loan Document.

Section 12.09. Collateral and Guaranty Matters; Appointment of Administrative Agent.

(a) Without limiting the provisions of Section 12.08, the Lenders irrevocably agree as follows:

(i) the Administrative Agent is authorized, at its option and in its discretion, to release any Lien on any property granted to or held by the Administrative Agent under any Loan Document (A) on the date when all Obligations have been satisfied in full in cash (other than Warrant Obligations and contingent obligations as to which no claims have been asserted), (B) 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 disposition permitted under the Loan Documents, or (C) subject to Sections 13.01 and 13.04, if approved, authorized or ratified in writing by the Majority Lenders; and

(ii) the Administrative Agent is authorized, at its option and discretion, to release any Guarantor from its obligations hereunder if such Person ceases to be a Subsidiary as a result of a transaction permitted under the Loan Documents.

Upon request by the Administrative Agent at any time, each Lender will confirm in writing the Administrative Agent's authority to release or subordinate its interest in particular types or items of Collateral, or to release any Guarantor from its obligations under its guaranty pursuant to this Section 12.09.

(b) The Administrative Agent will not be responsible for or have a duty to ascertain or inquire into any representation or warranty regarding the existence, value or collectability of the Collateral, the existence, priority or perfection of the Administrative Agent's Lien thereon, or any certificate prepared by any Obligor in connection therewith, nor will the Administrative Agent be responsible or liable to the Lenders for any failure to monitor or maintain any portion of the Collateral.

(c) Each Lender hereby appoints the Administrative Agent as its collateral agent under each of the Security Documents and agrees that, in so acting, the Administrative Agent will have all of the rights, protections, exculpations, indemnities and other benefits provided to the Administrative Agent under this Agreement, and hereby authorizes and directs the Administrative Agent, on behalf of such Lender and all Lenders, without the necessity of any notice to or further consent from any of the Lenders, from time to time to (i) take any action with respect to any Collateral or any Security Document which may be necessary to perfect and maintain perfected the Liens on the Collateral granted pursuant to any such Security Document or protect and preserve the Administrative Agent's ability to enforce the Liens or realize upon the Collateral, (ii) act as collateral agent for each Lender for purposes of acquiring, holding, enforcing and perfecting all Liens created by the Loan Documents and all other purposes stated therein, (iii) enter into intercreditor or subordination agreements, as the case may be, in connection with Indebtedness permitted pursuant to Sections 9.01(e) and 9.01(l), as applicable, (iv) enter into non-disturbance or similar agreements in connection with licensing agreements and arrangements permitted by this Agreement and the other Loan Documents and (v) otherwise to take or refrain from taking any and all action that the Administrative Agent shall deem necessary or advisable in fulfilling its role as collateral agent under any of the Security Documents.

ARTICLE 13

MISCELLANEOUS

Section 13.01. No Waiver. No failure on the part of the Administrative Agent or the Lenders to exercise and no delay in exercising, and no course of dealing with respect to, any right, power or privilege under any Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege under any Loan Document preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The remedies provided herein are cumulative and not exclusive of any remedies provided by Law.

Section 13.02. Notices. All notices, requests, instructions, directions and other communications provided for herein (including any modifications of, or waivers, requests or consents under, the Loan Documents) shall be given or made in writing (including by telecopy or electronic mail) delivered, if to Borrower, another Obligor, the Administrative Agent or the Lenders, to its address specified on Schedule 2 hereto or its Guarantee Assumption Agreement, as the case may be, or at such other address as shall be designated by such party in a notice to the other parties. Except as otherwise provided in this Agreement, all such communications shall be deemed to have been duly given upon receipt of a legible copy thereof, in each case given or addressed as aforesaid.

Section 13.03. Expenses, Indemnification.

(a) *Expenses.* Borrower agrees to pay or reimburse (i) the Administrative Agent and the Lenders for all of their reasonable and documented out of pocket costs and expenses (including the reasonable fees and expenses of Chapman and Cutler LLP, counsel to the Administrative Agent) in connection with (x) the negotiation, preparation, execution and delivery of this Agreement and the other Loan Documents and the making of the Loans (exclusive of post-closing costs); *provided that*, so long as the Borrowing of the Tranche A Loan is made, such fees shall be credited against the Expense Deposit paid by Borrower, (y) post-closing costs and (z) the negotiation or preparation of any amendment, modification, supplement or waiver of any of the terms of this Agreement or any of the other Loan Documents (whether or not consummated) and (ii) the Administrative Agent and the Lenders for all of their reasonable and documented out of pocket costs and expenses (including the reasonable fees and expenses of legal counsel) in connection with any enforcement or collection proceedings resulting from the occurrence of an Event of Default.

(b) *Indemnification.* Each Obligor hereby indemnifies the Administrative Agent, the Lenders, their respective Affiliates, and their respective directors, officers, employees, attorneys, agents and advisors (each, an "*Indemnified Party*") from and against, and agrees to hold them harmless against, any and all Claims and Losses of any kind (including reasonable fees and disbursements of counsel), joint or several, that is incurred by or asserted or awarded against any Indemnified Party, in each case arising out of or in connection with or relating to any investigation, litigation or proceeding or the preparation of any defense with respect thereto arising out of or in connection with or relating to this Agreement or any of the other Loan Documents or the Transactions or any use made or proposed to be made with the proceeds of the Loans, whether or

not such investigation, litigation or proceeding is brought by an Obligor, any of its shareholders or creditors, an Indemnified Party or any other Person, or an Indemnified Party is otherwise a party thereto, and whether or not any of the conditions precedent set forth in Article 6 are satisfied or the other Transactions contemplated by this Agreement are consummated, except to the extent such Claim or Loss is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from any Indemnified Party's gross negligence or willful misconduct. No Obligor shall assert any claim against any Indemnified Party, on any theory of liability, for consequential, indirect, special or punitive damages arising out of or otherwise relating to this Agreement or any of the other Loan Documents or any of the Transactions or the actual or proposed use of the proceeds of the Loans. This Section shall not apply to Taxes other than Taxes relating to a non-Tax Claim or Loss governed by this Section 13.03(b).

Section 13.04. Amendments. Except as otherwise expressly provided in this Agreement, any provision of this Agreement or any other Loan Document (except for the Warrant Certificate, which may be amended, modified, waived or supplemented in accordance with the terms thereof) may be amended, modified, waived or supplemented only by an instrument in writing signed by Borrower, the Administrative Agent and the Majority Lenders; *provided that*:

(a) no amendment, waiver or consent shall, unless in writing and signed by all of the Lenders, do any of the following at any time:

(i) change the percentage of (x) the Commitments or (y) the aggregate unpaid principal amount of the Loans that, in each case, shall be required for the Lenders or any of them to take any action hereunder (including pursuant to any change to the definition of "*Majority Lenders*");

(ii) release one or more Guarantors (or otherwise limit such Guarantors' liability with respect to the Obligations owing to the Lenders under the Guarantees) if such release or limitation is in respect of all or substantially all of the value represented by the Guarantees to the Lenders;

(iii) release, or subordinate the Lenders' Liens in, all or substantially all of the Collateral in any transaction or series of related transactions (other than in connection with any sale of Collateral permitted herein); or

(iv) amend any provision of this Section 13.04;

(b) no amendment, waiver or consent shall, unless in writing and signed by each Lender specified below for such amendment, waiver or consent:

(i) increase the Commitments of a Lender without the consent of such Lender;

(ii) reduce the principal of, or stated rate of interest on, or any Prepayment Premium payable on, the Loans owed to a Lender or any fees or other

amounts stated to be payable hereunder or under the other Loan Documents to such Lender without the consent of such Lender;

(iii) postpone any date scheduled for any payment of principal of, or interest on, the Loans, any date scheduled for payment or for any date fixed for any payment of fees hereunder (excluding the due date of any mandatory prepayment of a Loan), in each case payable to a Lender without the consent of such Lender;

(iv) change the order of application of prepayment of the Loans from the application thereof set forth in the applicable provisions of Section 4.01(b)(ii) in any manner that adversely affects the Lenders without the consent of holders of a majority of the Commitments or Loans outstanding or otherwise change any provision requiring the pro rata distributions hereunder among the Lenders without all Lenders' consent; or

(v) modify Section 2.02 without the consent of each Lender directly and adversely affected thereby.

Section 13.05. Successors and Assigns.

(a) *General.* The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that (i) no Obligor may assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of the Administrative Agent and each Lender (and any attempted assignment or transfer by such Obligor without such consent shall be null and void) and (ii) no Lender may assign or otherwise transfer its rights or obligations hereunder except in accordance with this Section. Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants (to the extent provided in paragraph (e) of this Section) and, to the extent expressly contemplated hereby, the Indemnified Parties of the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) *Amendments to Loan Documents; Majority Lender Vote.* Each of the Lenders and the Obligors agrees to enter into such amendments to the Loan Documents, and such additional Security Documents and other instruments and agreements, in each case in form and substance reasonably acceptable to the Lenders and the Obligors, as shall reasonably be necessary to implement and give effect to any assignment made by any Lender (or any direct or indirect assignee thereof) from time to time under this Section 13.05.

(c) *Assignments by Lenders.* (i) Subject to the conditions set forth in paragraph (c)(ii) below, any Lender may assign to one or more Persons (other than an Ineligible Assignee) all or a portion of its rights and obligations under the Loan Documents (including all or a portion of its Commitment and the Loans at the time owing to it) with the prior written consent (such consent not to be unreasonably withheld) of the Administrative Agent, provided that no consent of the Administrative Agent shall be required for an assignment of any Commitment or of all or any portion of a Loan to a Lender, an Affiliate of a Lender or an Approved Fund.

(ii) Assignments shall be subject to the following additional conditions:

(A) except in the case of an assignment to a Lender or an Affiliate of a Lender or an assignment of the entire remaining amount of the assigning Lender's Commitment or Loans, the amount of the Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment Agreement with respect to such assignment is delivered to the Administrative Agent) shall not be less than \$500,000, unless the Administrative Agent otherwise consents;

(B) each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement and the other Loan Documents; and

(C) the parties to each assignment shall execute and deliver to the Administrative Agent (with a copy to the Borrower, *provided* that the failure to give such copy to the Borrower shall not affect the validity of such Assignment Agreement) an Assignment Agreement in form and substance reasonably satisfactory to Administrative Agent.

(iii) Subject to acceptance and recording thereof pursuant to paragraph (d) of this Section, from and after the effective date specified in each Assignment Agreement, the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment Agreement, have the rights and obligations of a Lender under the Loan Documents, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment Agreement, be released from its obligations under the Loan Documents (and, in the case of an Assignment Agreement covering all of the assigning Lender's rights and obligations under the Loan Documents, such Lender shall cease to be a party hereto). Any assignment or transfer by a Lender of rights or obligations under the Loan Documents that does not comply with this Section 13.05 shall be treated for purposes of the Loan Documents as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (e) of this Section.

(d) *Register.* The Administrative Agent, acting for this purpose as a non-fiduciary agent of Borrower, shall maintain at one of its offices a copy of each Assignment Agreement delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitment of, and principal amount (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "*Register*"). The entries in the Register shall be conclusive absent manifest error, and Borrower, the Administrative Agent, and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice. No assignment shall be effective for purposes of this Agreement unless (i) it has been recorded in the Register as provided in this paragraph and (ii) any written consent to such assignment required by paragraph (b) of this Section has been obtained.

(e) *Participations.* Any Lender may at any time, without the consent of, or notice to, Borrower, sell participations to any Person (a "*Participant*"), other than an Ineligible Assignee, in

all or a portion of such Lender's rights and obligations under the Loan Documents (including all or a portion of its Commitment and the Loans owing to it); *provided* that (i) such Lender's obligations under the Loan Documents shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) Borrower shall continue to deal solely and directly with such Lender in connection therewith.

(f) Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; *provided* that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver that would (i) increase or extend the term of such Lender's Commitment, (ii) extend the date fixed for the payment of principal or interest on the Loans or any portion of any fee hereunder payable to the Participant, (iii) reduce the amount of any such payment of principal, or (iv) reduce the rate at which interest is payable thereon to a level below the rate at which the Participant is entitled to receive such interest. Borrower agrees that each Participant shall be entitled to the benefits of Section 5.03 (subject to the requirements and limitations therein, including the requirements under Section 5.03(f) (it being understood that the documentation required under Section 5.03(f) shall be delivered to Borrower and the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to Section 13.05(a), *provided* that such Participant (A) agrees to be subject to the provisions of Section 5.03(h) as if it were an assignee under Section 13.05(a); and (B) shall not be entitled to receive any greater payment under Section 5.03, with respect to any participation, than its participating Lender would have been entitled to receive, unless the sale of the participation to such Participant is made with Borrower's prior written consent. To the extent permitted by Law, each Participant also shall be entitled to the benefits of Section 4.04(a) as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "*Participant Register*"); *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary.

(g) *Certain Pledges.* Subject to Section 13.05(d), the Lenders may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement and any other Loan Document to secure obligations of the Lenders, including any pledge or assignment to secure obligations to a Federal Reserve Bank or another central bank; *provided* that no such pledge or assignment shall release the Lenders from any of their obligations hereunder or substitute any such pledgee or assignee for the Lenders as a party hereto.

Section 13.06. Survival. The obligations of Borrower under Sections 5.01, 5.02, 5.03, 13.03, 13.05, 13.09, 13.10, 13.11, 13.12, 13.13, 13.14 and Article 11 (solely to the extent guaranteeing any of the obligations under the foregoing Sections) shall survive the repayment of the Obligations and the termination of the Commitments and, in the case of any Lender's assignment of any interest in the Commitments or the Loans hereunder, shall survive, in the case of any event or circumstance that occurred prior to the effective date of such assignment, the making of such assignment, notwithstanding that such Lenders may cease to be a "Lender" hereunder. In addition, each representation and warranty made, or deemed to be made by a notice of the Loans, herein or pursuant hereto shall survive the making of such representation and warranty.

Section 13.07. Captions. The table of contents and captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Agreement.

Section 13.08. Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the parties hereto may execute this Agreement by signing any such counterpart. Delivery of an executed signature page of this Agreement by facsimile transmission, electronic transmission (in PDF format) or DocuSign shall be effective as delivery of a manually executed counterpart hereof. The words "execution," "signed," "signature," and words of like import in any Assignment Agreement shall be deemed to include electronic signatures 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 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.

Section 13.09. GOVERNING LAW. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS, THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER AND THEREUNDER, AND ALL CLAIMS, DISPUTES AND MATTERS ARISING HEREUNDER OR THEREUNDER OR RELATED HERETO OR THERETO, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS EXECUTED IN AND TO BE PERFORMED ENTIRELY WITHIN THAT STATE, WITHOUT REFERENCE TO CONFLICTS OF LAWS PROVISIONS (OTHER THAN SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW).

Section 13.10. JURISDICTION, SERVICE OF PROCESS AND VENUE.

(a) *SUBMISSION TO JURISDICTION.* EACH OBLIGOR AGREES THAT ANY SUIT, ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT TO WHICH IT IS A PARTY OR ANY JUDGMENT ENTERED BY ANY COURT IN RESPECT THEREOF SHALL BE BROUGHT IN THE SUPREME COURT OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY OR IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK AND IRREVOCABLY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF EACH

SUCH COURT FOR THE PURPOSE OF ANY SUCH SUIT, ACTION, PROCEEDING OR JUDGMENT.

(b) *Alternative Process.* Nothing herein shall in any way be deemed to limit the ability of the Lenders to serve any such process or summonses in any other manner permitted by applicable Law.

(c) *WAIVER OF VENUE, ETC.* EACH OBLIGOR IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF THE VENUE OF ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AND HEREBY FURTHER IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY CLAIM THAT ANY SUCH SUIT, ACTION OR PROCEEDING BROUGHT IN ANY SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM. A FINAL JUDGMENT (IN RESPECT OF WHICH TIME FOR ALL APPEALS HAS ELAPSED) IN ANY SUCH SUIT, ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN ANY COURT TO THE JURISDICTION OF WHICH SUCH OBLIGOR IS OR MAY BE SUBJECT, BY SUIT UPON JUDGMENT.

Section 13.11. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER LOAN DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY.

Section 13.12. WAIVER OF IMMUNITY. TO THE EXTENT THAT ANY OBLIGOR MAY BE OR BECOME ENTITLED TO CLAIM FOR ITSELF OR ITS PROPERTY OR REVENUES ANY IMMUNITY ON THE GROUND OF SOVEREIGNTY OR THE LIKE FROM SUIT, COURT JURISDICTION, ATTACHMENT PRIOR TO JUDGMENT, ATTACHMENT IN AID OF EXECUTION OF A JUDGMENT OR EXECUTION OF A JUDGMENT, AND TO THE EXTENT THAT IN ANY SUCH JURISDICTION THERE MAY BE ATTRIBUTED SUCH AN IMMUNITY (WHETHER OR NOT CLAIMED), SUCH OBLIGOR HEREBY IRREVOCABLY AGREES NOT TO CLAIM AND HEREBY IRREVOCABLY WAIVES SUCH IMMUNITY WITH RESPECT TO ITS OBLIGATIONS UNDER THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS.

Section 13.13. Entire Agreement. This Agreement and the other Loan Documents constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Each Obligor acknowledges, represents and warrants that in deciding to enter into this Agreement and the other Loan Documents or in taking or not taking any action hereunder or thereunder, it has not relied, and will not rely, on any statement, representation, warranty, covenant, agreement or understanding, whether written or oral, of or with the Lenders other than those expressly set forth in this Agreement and the other Loan Documents.

Section 13.14. Severability. If any provision hereof is found by a court to be invalid or unenforceable, to the fullest extent permitted by applicable Law the parties agree that such invalidity or unenforceability shall not impair the validity or enforceability of any other provision hereof.

Section 13.15. No Fiduciary Relationship. The Administrative Agent, each Lender and their Affiliates (collectively, solely for purposes of this paragraph, the “*Lenders*”), may have economic interests that conflict with those of the Obligors, their stockholders and/or their Affiliates (collectively, solely for purposes of this paragraph, the “*Obligors*”). The Obligors acknowledge that the Lenders have no fiduciary relationship with, or fiduciary duty to, any Obligor arising out of or in connection with this Agreement or the other Loan Documents, and the relationship between each Lender and each Obligor are solely that of creditors and debtors. This Agreement and the other Loan Documents do not create a joint venture among the parties.

Section 13.16. USA Patriot Act. The Administrative Agent and the Lenders hereby notify the Obligors that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the “*Act*”) and 31 C.F.R. § 1010.230 (the “*Beneficial Ownership Regulation*”), they are required to obtain, verify and record information that identifies the Obligors, which information includes the name and address of each Obligor and other information that will allow the Administrative Agent and such Lender to identify each Obligor in accordance with the Act and Beneficial Ownership Regulation, including a beneficial ownership certification in form and substance acceptable to the Administrative Agent.

Section 13.17. Treatment of Certain Information; Confidentiality. The Lenders agree to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed to (a) its Affiliates and to its and its Affiliates’ respective partners, directors, officers, employees, agents, trustees, advisors and representatives (collectively, “*Representatives*”) (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such information and instructed to keep such Information confidential), (b) to the extent requested by any regulatory authority purporting to have jurisdiction over it (including any self-regulatory authority, such as FINRA or the National Association of Insurance Commissioners) or any exchange, (c) to the extent required by the applicable Laws or by any subpoena or similar legal process, (d) to any other party hereto, (e) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (f) subject to an agreement containing provisions substantially the same as those in this Section, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement or (ii) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction relating to Borrower or any Guarantor and its obligation, (g) with the consent of Borrower or (h) to the extent such Information (x) becomes publicly available other than as a result of a breach of this Section or (y) becomes available to the Lender, or any of its respective Representatives on a nonconfidential basis from a source other than Borrower or any other Obligor. For purposes of this Section, “*Information*” means all information received from an Obligor relating such Obligor or its Subsidiary or any of their respective businesses, except that the term “*Information*” shall not include, and the Lenders shall not be subject to any confidentiality obligation with respect to any information that (i) is or

becomes available to the Lender or any of its Representatives on a nonconfidential basis prior to disclosure by an Obligor or its Subsidiary, (ii) becomes available to a Lender or any of its Representatives after disclosure by Borrower or any other Obligor from a source that, to the knowledge of such Lender, is not subject to a confidentiality obligation to Borrower or such other Obligor (iii) is or becomes publicly available other than as a result of a breach by such Lender, or (iv) is developed by a Lender or any of its Representatives. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

In the case of any Lender that has elected to receive material non-public information pursuant to the last paragraph of Section 8.02, such Lender acknowledges that (a) the Information may include material non-public information concerning an Obligor or its Subsidiary, as the case may be, (b) it has developed compliance procedures regarding the use of material non-public information and (c) it will handle such material non-public information in accordance with applicable Law, including United States federal and state securities Laws.

Section 13.18. Releases of Guarantees and Liens. (a) Notwithstanding anything to the contrary contained herein or in any other Loan Document, each Lender agrees, and the Administrative Agent is hereby irrevocably authorized by each Lender and given a limited power of attorney by each Lender to perform the actions described hereafter in this Section 13.18 (without requirement of notice to or consent of any Lender except as expressly required by Section 13.04) to take any action reasonably requested by Borrower having the effect of releasing any Collateral or Obligations (i) to the extent necessary to permit consummation of any transaction not prohibited by any Loan Document or that has been consented to by the Lenders or (ii) under the circumstances described in paragraph (b) below.

(b) At such time as the Loans and the other Obligations (other than the inchoate indemnity obligations) under the Loan Documents shall have been paid in full in cash and the Commitments have been terminated, the Collateral shall be released from the Liens created by the Security Documents, and the Security Documents and all obligations (other than those expressly stated to survive such termination) of the Administrative Agent and each Obligor under the Security Documents shall terminate, all without delivery of any instrument or performance of any act by any Person.

Section 13.19. Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of the Applicable Resolution Authority.

[Remainder of the Page Intentionally Left Blank; Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered as of the day and year first above written.

BORROWER:

ISOPLEXIS CORPORATION

By: _____

Name:

Title:

[Signature Page to Credit Agreement and Guaranty]

PERCEPTIVE CREDIT HOLDINGS III, LP,
as Administrative Agent and a Lender

By: Perceptive Credit Opportunities GP, LLC,
its general partner

By: _____
Name: Sandeep Dixit
Title: Chief Credit Officer

By: _____
Name: Sam Chawla
Title: Portfolio Manager

ANNEX C

**Exhibit B
to Credit Agreement**

FORM OF BORROWING NOTICE

Date: [_____]

To: Perceptive Credit Holdings III, LP, as Administrative Agent
c/o Perceptive Advisors LLC
51 Astor Place, 10th Floor
New York, NY 10003
Attn: Sandeep Dixit
Email: Sandeep@perceptivelife.com
Email: PCOFReporting@perceptivelife.com

Re: Borrowing under Credit Agreement

Ladies and Gentlemen:

The undersigned, ISOPLEXIS CORPORATION, a Delaware corporation (“***Borrower***”), refers to the Credit Agreement and Guaranty, dated as of December 30, 2020 (as from time to time amended, restated, supplemented or otherwise modified, the “***Credit Agreement***”), among Borrower, the Guarantors from time to time party thereto, and PERCEPTIVE CREDIT HOLDINGS III, LP, as administrative agent for the Lenders (in such capacity, the “***Administrative Agent***”). The terms defined in the Credit Agreement are herein used as therein defined.

Borrower hereby gives you notice irrevocably, pursuant to **Section 2.01[(a)/(b)/(c)/(d)]** of the Credit Agreement, of the borrowing of the Loans specified herein:

1. The proposed Tranche [A/B/C/D] Loan Borrowing Date is [_____].
2. The amount of the proposed Borrowing is \$[_____].
3. The payment instructions with respect to the funds to be made available to Borrower are as set forth on the Funds Flow attached hereto as Exhibit A:
4. Borrower hereby certifies that the following statements are true on the date hereof, and will be true on the date of the proposed borrowing of the Loans, before and after giving effect thereto and to the application of the proceeds therefrom:
 - a) the representations and warranties made by the Obligors in **Article 7** of the Credit Agreement are true and correct in all material respects (except that such materiality qualifier

shall not be applicable to any representation or warranty that already is qualified or modified as to “materiality” or “Material Adverse Effect” in the text thereof, which representation or warranty shall be true and correct in all respects subject to such qualification) on and as of the Tranche [A/B/C/D] Loan Borrowing Date and immediately after giving effect to the application of the proceeds of the Borrowing, with the same force and effect as if made on and as of such date except that to the extent that any such representation or warranty refers to a specific earlier date in which case such representation or warranty shall be true and correct on and as of such earlier date;

b) the conditions set forth in **Section [6.01/6.02/6.03/6.04]** of the Credit Agreement have been satisfied on or prior to the Tranche [A/B/C/D] Loan Borrowing Date; and

c) no Default exists or would result from the proposed Borrowing or from the application of the proceeds therefrom.

[signature to follow]

IN WITNESS WHEREOF, Borrower has caused this Borrowing Notice to be duly executed and delivered as of the day and year first above written.

BORROWER:

ISOPLEXIS CORPORATION

By: _____
Name:
Title:

Isoplexis Corporation
List of Subsidiaries of the Registrant

IsoPlexis UK Limited (organized under the laws of the United Kingdom)

IsoPlexis (Shanghai) Trading Co., Ltd. (organized under the laws of the People's Republic of China)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-260161 on Form S-8 of our report dated March 30, 2022, relating to the consolidated financial statements of IsoPlexis Corporation appearing in this Annual Report on Form 10-K for the year ended December 31, 2021.

/s/ Deloitte & Touche LLP

Hartford, Connecticut
March 30, 2022

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sean Mackay, certify that:

1. I have reviewed this Annual Report on Form 10-K of IsoPlexis Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. [paragraph omitted in accordance with Exchange Act Rule 13a-14(a)];
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - a. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 30, 2022

By: /s/ Sean Mackay
Name: Sean Mackay
Title: Chief Executive Officer and Director
(Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John Strahley, certify that:

1. I have reviewed this Annual Report on Form 10-K of IsoPlexis Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. [paragraph omitted in accordance with Exchange Act Rule 13a-14(a)];
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - a. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 30, 2022

By: /s/ John Strahley
Name: John Strahley
Title: Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of IsoPlexis Corporation (the "Company") for the period ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
1. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2022

By: /s/ Sean Mackay
Name: Sean Mackay
Title: Chief Executive Officer and Director
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished in accordance with Securities and Exchange Commission Release No. 34-47551 and shall not be considered filed as part of the Report.

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of IsoPlexis Corporation (the "Company") for the period ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2022

By: /s/ John Strahley
Name: John Strahley
Title: Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished in accordance with Securities and Exchange Commission Release No. 34-47551 and shall not be considered filed as part of the Report.