As confidentially submitted to the Securities and Exchange Commission on September 25, 2020.
This draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains strictly confidential.

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT

Under
The Securities Act of 1933

SEER, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**3826**	**82-1153150**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

3800 Bridge Parkway, Suite 102
Redwood City, California 94065
650-453-0000
(Address, including zip code and telephone number, including area code, of Registrant's principal executive offices)

Omid Farokhzad, M.D.
Chief Executive Officer
Seer, Inc.
3800 Bridge Parkway, Suite 102
Redwood City, California 94065
650-453-0000
(Name, address, including zip code and telephone number, including area code, of agent for service)

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Palo Alto, California 94304
650-493-9300

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1600 El Camino Real
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650-752-2000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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	☐	Accelerated filer	☐
		Smaller reporting company	☐
Non-accelerated filer	☒	Emerging growth company	☒

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price[(1)(2)]	Amount of Registration Fee
Class A Common Stock, $ 0.00001 par value	$	$

(1) Includes offering price of any additional shares of Class A common stock that the underwriters have the option to purchase.
(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

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

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED , 2020

PRELIMINARY PROSPECTUS

Shares

Class A Common Stock

We are offering shares of our Class A common stock. This is our initial public offering of our Class A common stock, and no public market currently exists for our Class A common stock. The rights of the holders of Class A common stock and Class B common stock are substantially identical, except with respect to voting and conversion. Each share of Class A common stock is entitled to one vote per share. Each share of Class B common stock is entitled to ten votes per share and is convertible at any time into one share of Class A common stock. Following this offering, outstanding shares of Class B common stock will represent approximately % of the voting power of our outstanding capital stock.

We expect the initial public offering price to be between $ and $ per share. We intend to apply to list our Class A common stock on the under the symbol "SEER."

We are an "emerging growth company" as defined under the federal securities laws and, as such, we have elected to comply with certain reduced reporting requirements for this prospectus and may elect to do so in future filings.

Investing in our Class A common stock involves a high degree of risk. Please read "Risk Factors" beginning on page 17 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Initial Public Offering Price	$	$
Underwriting Discounts and Commissions[(1)]	$	$
Proceeds to Seer, Inc., before expenses	$	$

(1) See "Underwriting" beginning on page 160 for additional information regarding underwriter compensation.

Delivery of the shares of Class A common stock is expected to be made on or about , 2020. We have granted the underwriters an option for a period of 30 days to purchase an additional shares of our Class A common stock. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be $ and the total proceeds to us, before expenses, will be $.

J.P. Morgan **Morgan Stanley** **BofA Securities** **Cowen**

Prospectus dated , 2020

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Through and including , 2020 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

We and the underwriters have not authorized anyone to provide you any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date of this prospectus unless the information specifically indicates that another date applies, regardless of the time of delivery of this prospectus or of any sale of the shares of Class A common stock offered hereby. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside of the United States: we have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of Class A common stock and the distribution of this prospectus outside of the United States.

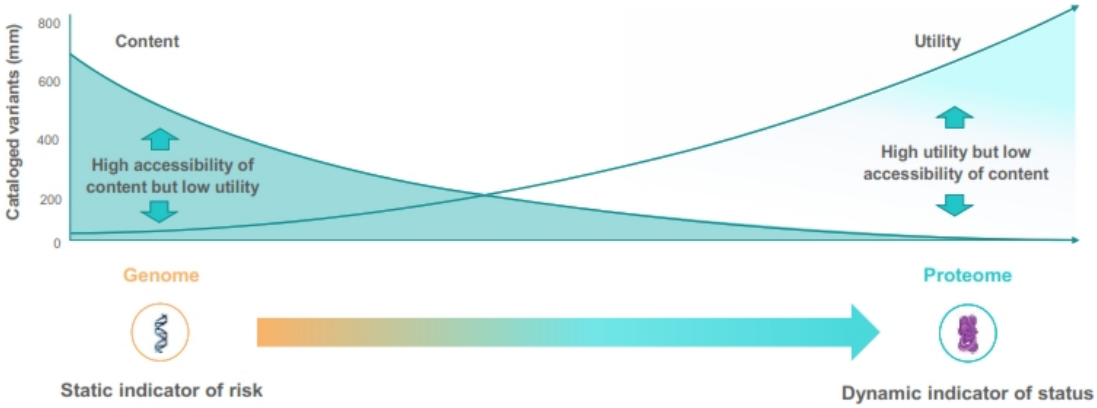
PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and is qualified in its entirety by the more detailed information and financial statements included elsewhere in this prospectus. It does not contain all of the information that may be important to you and your investment decision. You should carefully read this entire prospectus, including the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," and our financial statements and related notes. In this prospectus, unless the context requires otherwise, references to "we," "us," "our," "Seer," or "the Company" refer to Seer, Inc. A summary of key terms used in this prospectus can be found in the section titled "Glossary" located after this Prospectus Summary.

Overview

We aim to enable exceptional scientific outcomes by commercializing transformative products for researchers to unlock deep, unbiased biological information. Our initial product, the Proteograph Product Suite (Proteograph), will leverage our proprietary engineered nanoparticle (NP) technology to provide unbiased, deep, rapid and large-scale access across the proteome. Our Proteograph Product Suite is an integrated solution that is comprised of consumables, an automation instrument and software. Our Proteograph provides an easy-to-use workflow, which has the potential to make proteomic profiling, and the analysis of the thousands of samples needed to characterize the complex, dynamic nature of the proteome, accessible for nearly any laboratory. We believe that characterizing and understanding the full complexity of the proteome is foundational for accelerating biological insights and will lead to broad potential end-markets for proteomics, encompassing basic research and discovery, translational research, diagnostics and applied applications. This full understanding of the complexity of the proteome requires large-scale, unbiased and deep interrogation of thousands of samples across time, which we believe is unavailable with the proteomic approaches available today. We believe that our Proteograph will enable researchers to perform proteomics studies at scale, similar to the manner in which next generation sequencing (NGS) technologies have transformed genomics.

Proteins are the functional units of all forms of life. While deoxyribonucleic acid (DNA) may be used as a static indicator of health risk, proteins are dynamic indicators of physiology and may be used to track health over time, gauge disease progression and monitor therapeutic response. Despite the central role proteins play in biology, the proteome is relatively unexplored compared to the genome, particularly the rich functional content that could be derived from large-scale proteomics studies. We believe large-scale characterization of the proteome has not been feasible with existing proteomics approaches, which broadly fall into two categories: (i) unbiased but not scalable, or (ii) scalable but biased. Current *de novo*, or unbiased, approaches require complex, lengthy, and labor- and capital-intensive workflows, which limit their scalability to small, under-powered studies, and require significant processing expertise. On the other hand, targeted or biased methods only enable interrogation of a limited number of known proteins per sample. Although biased approaches are scalable, they lack the breadth and depth necessary to appropriately characterize the proteome and catalog its many protein variants. Thus, we believe that proteomics researchers are forced into an unattractive trade-off between the number of samples in a study and the depth and breadth of the analysis. These trade-offs limit researchers' abilities to advance characterization of the proteome to match the current characterization of the genome. We believe large-scale proteomic analysis is needed for a more complete understanding of biology.



We plan to commercialize our Proteograph utilizing a three phase plan that has been shown to be effective and optimal for introducing disruptive products in numerous life sciences technology markets, including NGS. We are currently in the first phase, during which we will collaborate with a small number of key opinion leaders in proteomics, whose assessment and validation of products can significantly influence other researchers in their respective markets. During the second phase, early access limited release, which we expect to commence in 2021, we plan to sell our Proteograph to select sites performing large-scale proteomics or genomics research. We will work closely with these sites, which we expect will serve as models for the rest of the market, to exemplify applications that demonstrate the unique value proposition of our Proteograph. We expect this phase to continue through 2021 and lead into the third phase of commercialization, broad commercial availability, in early 2022. We believe by following this approach we can appropriately scale our operations, deliver exceptional customer experiences, foster publications and develop a robust pipeline of customers to drive our revenue growth.

Challenges of Accessing the Proteome

The human proteome is dynamic and far more complex and diverse in structure, composition and number of variants than either the genome or transcriptome. Starting from the genome, there are multiple biological steps that take place to arrive at the proteome, each step driving increasing complexity and diversity. The human genome of approximately 20,000 genes is estimated to give rise to 1,000,000 or more protein variants, in part because a single gene produces distinct ribonucleic acid (RNA) isoforms through the process of transcription and a myriad of structurally distinct proteins through the process of translation. Biological processes can further chemically modify these proteins in unique ways, resulting in a large number of protein variants through post-translational modifications. Overall, these processes result in many levels of protein diversity, from amino acid sequence and structural variations, to post-translational modifications (PTMs), to functional changes due to interactions between the proteins themselves, known as protein-protein interactions (PPIs). In addition, all of these forms of diversity can differ between states of health and disease. We believe the fundamental challenge with existing proteomics methods is their inability to measure the breadth and depth of the proteome's complexity, rapidly and at scale.

Background of Massively Parallel Sampling

The ability to perform massively parallel sampling in biology has been transformational to researchers' ability to perform large-scale and unbiased biological analysis. For example, before NGS, genomic approaches were not scalable to either read the entire genome or process very large numbers of samples. Researchers could only sequence hundreds of fragments of DNA or RNA at a time, and not easily in parallel. Genetic analysis was limited to biased, shallow genetic studies that were time-consuming and not scalable. As a result, researchers in genomics faced similar challenges that researchers currently face in proteomics. The introduction of NGS enabled massively parallel sampling of small fragments of DNA, allowing researchers to, in parallel, sequence tens of millions, and, through subsequent innovations, currently tens of billions, of fragments of DNA per sample. This transformative approach to sampling enabled genomic sequencing technologies to scale and created the path to genomic end-market

opportunities, including basic research and discovery, translational research and clinical applications, including early cancer detection, recurrence monitoring and non-invasive prenatal testing. Given the utility of proteins for measuring function, health and disease, we believe the same, if not a greater, opportunity exists for providing unbiased, deep, rapid and scalable access to the proteome.

Our Proprietary Engineered Nanoparticle Technology

Our proprietary engineered NP technology overcomes the limitations of existing methods and is the foundation for our Proteograph Product Suite's easy-to-use workflow for unbiased, deep, rapid and scalable proteomic analysis. Our approach is based on proprietary engineered NPs that enable unbiased and massively parallel sampling of intact proteins across the proteome, capturing a myriad of molecular information at the level of protein variants as well as PPIs. Our NPs are designed to eliminate the need for complex workflows required by other unbiased approaches, which we believe will make proteomics more accessible to the broader scientific community.

The diameter of a nanoparticle is typically in the tens to hundreds of nanometers. As a reference, the diameter of the human hair is 80,000 nanometers. When nanoparticles are placed in contact with a biological sample, a thin layer of intact proteins rapidly, selectively and reproducibly adsorbs onto the surface of a nanoparticle upon contact, forming what is called a protein "corona." Additional intact proteins can also join the corona layer by binding directly to a protein that has already attached to the nanoparticle through PPIs and intact protein complexes may also attach to the nanoparticle directly. Our NPs' ability to capture whole and intact proteins and their many diverse variants provides access to protein structural information, including information on PPIs. At binding equilibrium, which occurs within minutes after our NPs come into contact with the protein, the selective sampling of proteins by our NPs is robust and highly reproducible.

The protein sampling and binding of proteins to the nanoparticle surface are driven by three primary factors: (i) affinity of a given protein for a given nanoparticle's physicochemical surface; (ii) concentration of a given protein in a biological sample; and (iii) affinity of the proteins for other proteins on the surface of the nanoparticle, forming PPIs. We can use a variety of different methods and materials to design and create different nanoparticles. Each nanoparticle can have distinct physicochemical properties that generate a unique protein corona pattern and a unique proteomic fingerprint. We can combine nanoparticles into panels to provide a representative and thorough sampling across the dynamic range of the proteome, from high to low abundance proteins. In effect, the properties of protein binding to a panel of nanoparticles are functionally equivalent to, and can replace, complex, biochemical laboratory workflows for the preparation of samples for deep, unbiased mass spectrometry (MS), and which enable the capture of thousands of proteins from biofluids for large-scale proteomics studies. Virtually any solubilized biological sample can be interrogated with nanoparticles, including cell or tissue homogenates, blood or blood components (such as plasma or serum, urine), saliva, cerebrospinal fluid and synovial fluid. The versatility of nanoparticles provides the opportunity to use a vast universe of different nanoparticles with different physicochemical properties to selectively, reproducibly and deeply sample the proteome in an unbiased way.

5 issued and 24 pending patents

Our NPs enable the unique capabilities of our Proteograph Product Suite, including the ability to:

- eliminate complex biofluid processing workflows required by other unbiased proteomic approaches;
- sample in an unbiased manner across the dynamic range of the proteome in a variety of biological samples, including cell or tissue homogenates, blood or blood components (such as plasma or serum), urine, saliva, cerebrospinal fluid, and synovial fluid;
- identify and distinguish protein variants at the peptide level;
- identify and quantify protein variants and PPIs;
- use machine learning to design, synthesize and select different NPs and NP panels to create multiple products and applications; and
- be compatible across a wide range of laboratory workflows, automation equipment and sample processing and detection methods, lowering the hurdle for product adoption.

Our Proteograph Product Suite

Our proprietary engineered NP technology forms the basis for our first product, the Proteograph Product Suite. Our Proteograph is an integrated solution consisting of consumables, an automation instrument and software to perform unbiased, deep proteomic analysis at scale in a matter of hours. We designed our Proteograph to be efficient and easy-to-use, and to leverage broadly-used laboratory instrumentation to enable adoption in both decentralized and centralized settings and be widely available to life sciences researchers.

Our Proteograph's key components are the following:

- Consumables: Our Proteograph consumables consist of our NP panel and all other consumables necessary to assay samples on our automation instrument.
- Automation Instrument: Our Proteograph automation instrument is custom-configured for researchers to assay samples in approximately seven hours, which includes thirty minutes of set-up time and six and a half hours of automated instrument time. The output from our automation instrument is peptides ready to be processed on an MS instrument, which is a widely-accessible platform for protein detection.
- Software: Our Proteograph software was designed for ease-of-use and was developed to help users arrive at insights quickly and efficiently following peptide detection by an MS instrument.

The output from our automation instrument is peptides ready to be processed on an MS instrument, which is a widely-accessible platform for protein detection. The Proteograph Product Suite is detector agnostic and, therefore, we believe, will be adaptable to other protein detection instruments in the future. The MS component of our Proteograph workflow is either provided by the researcher's laboratory or can be outsourced to a third-party

provider. We estimate that there are approximately 16,000 MS instruments with configurations typically used to perform proteomic analysis installed worldwide and, therefore, we believe that MS systems are readily accessible by researchers.

For our first Proteograph assay, we will employ a panel of five NPs. We designed the performance specifications of our Proteograph to meet the core needs of the market in terms of protein coverage and sample throughput required for proteomic experiments that are unbiased and at-scale. The product will allow for the interrogation and processing of up to 16 samples by our five proprietary engineered NPs in parallel on a single 96-well plate in approximately seven hours.

Proteograph Product Suite Performance

The four key technical attributes of our Proteograph Product Suite are its breadth of protein sampling, depth of coverage, accuracy and precision of measurement. In addition to its technical performance, our Proteograph automation instrument's rapid throughput is an important characteristic to scale the number of samples assayed. We believe that our Proteograph Product Suite is the only product to provide these technical and operational capabilities in an integrated solution to enable large-scale proteomic analysis.

- ***Breadth of protein sampling.*** Breadth of protein sampling refers to our Proteograph Product Suite's ability to conduct unbiased, highly parallel sampling of the proteome across its entire dynamic range, from high to low abundant proteins. Given the unique characteristics of our NPs, our Proteograph Product Suite allows for the unbiased highly parallel sampling of the proteome, and it does this across its entire dynamic range from high to low abundant proteins. Each uniquely engineered NP selectively captures hundreds of distinct intact proteins from a biosample based on their abundance and affinity for the NP surface. Our Proteograph leverages a panel of unique NPs to capture significantly more proteins and protein variants than current methods of unbiased proteomic analysis.

- ***Depth of coverage.*** Depth of coverage refers to our Proteograph's ability to evaluate the proteome across the wide dynamic range of abundance of proteins. The range from the most abundant to the least abundant protein in biological samples can vary greatly. In plasma, this range is estimated to be at least ten orders of magnitude, and the rich diversity of biology resides outside the most abundant proteins. Sampling across the entire dynamic range has been one of the seminal challenges in the field of proteomics. Conventional approaches to address this challenge have employed laborious depletion and fractionation methods, which can be avoided with the automated and scalable workflow of our Proteograph Product Suite.

- ***Accuracy of measurement.*** Accuracy refers to how close the measured abundance of a protein is to the true abundance in a sample. Accuracy of protein abundance measurement can be demonstrated by MS signal intensity of the proteins sampled with our Proteograph, and comparing these values with measurements obtained directly by immuno-assay (ELISA). Our Proteograph assay can distinguish changes in protein abundance with significant accuracy.

- ***Precision of measurement.*** Precision refers to how close several measurements of protein abundance in the same sample are to each other. Less precision in the measurement of a protein adds noise to an experiment, requiring a larger number of samples in the study to observe a true difference. Precision is typically measured as the coefficient of variation (CV%), or standard deviation divided by the mean times 100. Therefore, a lower CV% represents a more precise outcome. Our Proteograph analysis shows lower CV%s than fractionation and depletion methods, which is notable since we achieve lower CV%s while concurrently sampling significantly more proteins.

- ***Rapid and large-scale.*** Our Proteograph enables rapid and large-scale proteomic sample processing in a seven-hour workflow, compared to other unbiased solutions that can take days to weeks. We believe this increased throughput will enable researchers to perform large-scale proteomics studies that were not previously accessible, but are needed for a more complete characterization of the proteome, and thus biology.

Markets

The proteome comprises millions of protein variants whose expression varies by cell, tissue, organ and system, as well as across time, and whose interaction with other proteins and biomolecules are essential to driving health and disease. No commercial product has existed that enables researchers to assess the proteome deeply, broadly, rapidly and at scale across thousands of samples. Despite this limitation, researchers rely on laborious, expensive and complex methods to survey as much of the proteome as they can. While NGS transformed life sciences end-markets through massively parallel access to the genome, lack of similar unbiased, deep, rapid and large-scale capabilities has to date evaded the field of proteomics. We believe our Proteograph enables such access to the proteome, and will allow researchers to undertake the scale of studies we believe are needed to understand the complexity of the proteome, and by extension biology.

We believe the two primary near-term markets for our Proteograph are the proteomics market, which was $32 billion in 2019, according to Allied Market Research, and the genomics market, which was $21 billion in 2019, according to Technavio. Within these markets, potential applications of our Proteograph span basic research and discovery, translational research, diagnostics and applied applications. We believe that our Proteograph's unique value proposition will resonate with proteomics researchers who already value deep and unbiased proteomic information, and who desire to scale experiments to far greater sample sizes at a fraction of the time and cost of current approaches. We also believe that as more genomics investigators incorporate other -omics approaches to elucidate key genomic findings, our Proteograph will uniquely provide large-scale, unbiased and deep proteomic information to complement genomic information, and enable researchers to gain a clearer picture of biology and a deeper understanding of genomic risk factors. Longer-term, we believe that the capabilities offered by our Proteograph and future products may potentially lead to new end-markets, applications, and business models that complement existing proteomics and genomics markets.

The Advantages of Our Proteograph Product Suite

We believe our proprietary engineered NP technology and Proteograph Product Suite have the following advantages:

- Our Proteograph Product Suite is expected to be the first commercially available solution to provide the combination of unbiased, deep, rapid and large-scale access to the proteome.
- Our Proteograph Product Suite provides insight into protein variation and PPIs at a depth and scale that we believe sets a new standard for unbiased and deep proteomics, and is unattainable with other existing approaches.
- Our Proteograph Product Suite was designed to enable broad adoption across a wide variety of customers in both decentralized and centralized settings.
- Our proprietary engineered NPs are a core technology from which we can develop a range of products, applications and platforms.
- Our NP technology inherently provides significant operational leverage in research and development, manufacturing and commercialization.
- Our Proteograph Product Suite has the potential to provide sustainable differentiation.

Our Strategy

We aim to enable exceptional scientific outcomes by commercializing transformative products for researchers to unlock deep, unbiased biological information. Our growth strategy is to:

- Drive adoption of our Proteograph Product Suite to enable researchers to create large-scale unbiased proteomic datasets that generate transformative scientific insights.

- Invest in market development activities to increase awareness of the importance of large-scale proteomic data and the ability to access it.
- Continually innovate to develop and commercialize additional transformative products to access the proteome and accelerate our understanding of biology.
- Rapidly build our commercial infrastructure and NP manufacturing capabilities to provide for our commercial launch in the United States and internationally.
- Foster the creation of an ecosystem of customers, partners and collaborators whose expertise and offerings complement and enhance the power and utility of our products.
- Expand our proprietary engineered NP technology to analyze molecules beyond proteins.

Risks Associated with Our Business

Our business is subject to numerous risks and uncertainties that you should consider before investing in our company. These risks are described more fully in the section titled "Risk Factors" in this prospectus. These risks include, but are not limited to, the following:

- We are an early-stage life sciences technology company with a history of net losses, which we expect to continue, and we may not be able to generate meaningful revenues or achieve and sustain profitability in the future.
- We have a limited operating history, which may make it difficult to evaluate the prospects for our future viability and predict our future performance.
- 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.
- The size of the markets for our Proteograph Product Suite may be smaller than estimated, and new market opportunities may not develop as quickly as we expect, or at all, limiting our ability to successfully sell our products.
- We have not yet commercially launched our Proteograph Product Suite, and we may not be able to successfully commercially launch our Proteograph as planned.
- Even if we commercially launch our Proteograph Product Suite, our success depends on broad scientific and market acceptance of our Proteograph, which we may fail to achieve.
- Even if our Proteograph Product Suite is commercialized and achieves broad scientific and market acceptance, if we fail to improve it or introduce compelling new products, our revenues and our prospects could be harmed.
- The COVID-19 pandemic and efforts to reduce its spread have adversely impacted, and are expected to continue to materially and adversely impact, our business and operations.
- If we are unable to obtain and maintain sufficient intellectual property protection for our products and technology, 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 have identified material weaknesses in our internal control over financial reporting. If our remediation measures are ineffective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to report our financial condition or results of operations accurately or on a timely basis, which may adversely affect investor confidence in us and, as a result, the value of our Class A common stock.

Corporate Information and History

We were incorporated in Delaware on March 16, 2017, under the name Seer Biosciences, Inc., and changed our name to Seer, Inc. on July 16, 2018. Our principal executive offices are located at 3800 Bridge Parkway, Suite 102, Redwood City, California 94065. Our telephone number is 650-543-0000. Our website address is http://seer.bio. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus and should not be considered to be part of this prospectus.

We use Seer and Proteograph as trademarks in the United States and other countries. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

Implications of Being an Emerging Growth Company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. We will remain an emerging growth company until the earliest to occur of: the last day of the fiscal year in which we have more than $1.07 billion in annual revenue; the date we qualify as a "large accelerated filer," with at least $700 million of equity securities held by non-affiliates; the issuance, in any three-year period, by us of more than $1.0 billion in non-convertible debt securities; and the last day of the fiscal year ending after the fifth anniversary of our initial public offering. As a result of this status, we have taken advantage of reduced reporting requirements in this prospectus and may elect to take advantage of other reduced reporting requirements in our future filings with the Securities and Exchange Commission. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. 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, delaying the adoption of these accounting standards until they would apply to private companies. We have elected to use this extended transition period to enable us to comply with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with the new or revised accounting standards as of public company effective dates.

THE OFFERING

Class A common stock offered by us	shares
Underwriter's option to purchase additional shares of Class A common stock from us	The underwriters have been granted an option to purchase up to additional shares of Class A common stock from us at any time within 30 days from the date of this prospectus.
Class A common stock to be outstanding after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares in full)
Class B common stock to be outstanding after this offering	shares
Total Class A common stock and Class B common stock to be outstanding after this offering	shares
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately $ million (or approximately $ million if the underwriters exercise their option to purchase additional shares in full), based upon the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. The principal purposes of this offering are to obtain additional capital to support our operations, establish a public market for our Class A common stock and facilitate our future access to the public capital markets. We currently intend to use the net proceeds from this offering, together with our existing cash, for research and development, to commercialize our Proteograph Product Suite and for general corporate purposes. We may also use a portion of the proceeds to in-license, acquire or invest in additional businesses, technologies, products or assets. Although we have no specific agreements, commitments or understandings with respect to any in-licensing activity or acquisitions, we evaluate these opportunities and engage in related discussions with other companies from time-to-time.
Risk factors	See "Risk Factors" beginning on page 17 and other information included in this prospectus for a discussion of factors that you should consider carefully before deciding to invest in our Class A common stock.

Voting rights	Shares of Class A common stock are entitled to one vote per share. Shares of Class B common stock are entitled to ten votes per share. Holders of our Class A common stock and Class B common stock will generally vote together as a single class, unless otherwise required by law or our amended and restated certificate of incorporation. Upon completion of this offering, holders of our outstanding Class B common stock, which includes our Chief Executive Officer, will hold approximately % of the voting power of our outstanding capital stock and will have the ability to control the outcome of matters submitted to our stockholders for approval, including the election of our directors, amendments of our organizational documents and any merger, consolidation, sale of all or substantially all of our assets or other major corporate transactions. See the sections titled "Principal Stockholders" and "Description of Capital Stock" for additional information.
Proposed trading symbol	"SEER"

The number of shares of our common stock that will be outstanding after this offering is based on shares of our Class A common stock and shares of our Class B common stock outstanding as of , 2020, and excludes the following:

- shares of our Class A common stock issuable upon the exercise of options to purchase shares of our Class A common stock outstanding as of , 2020, with a weighted-average exercise price of $ per share;
- shares of our Class A common stock issuable upon the exercise of options to purchase shares of our Class A common stock granted after , 2020, with a weighted-average exercise price of $ per share;
- shares of our Class A common stock issuable upon the vesting of restricted stock units (RSUs) outstanding as of , 2020;
- shares of our Class A common stock issuable upon the vesting of RSUs granted after , 2020; and
- shares of our Class A common stock reserved for future issuance under our equity compensation plans, consisting of:
  - shares of our Class A common stock to be reserved for future issuance under our 2020 Equity Incentive Plan (our 2020 Plan), which will become effective prior to the completion of this offering, and any additional shares that become available under our 2020 Plan pursuant to provisions thereof that automatically increase the share reserve under the plan each year; and
  - shares of our Class A common stock reserved for future issuance under our 2017 Stock Incentive Plan (our 2017 Plan) (and no shares of our Class A common stock reserved for future issuance under our 2020 RSU Equity Incentive Plan (our RSU Plan)), and upon the termination of such 2017 Plan and RSU Plan in connection with the effectiveness of our 2020 Plan, an equivalent number of shares of our Class A common stock to be added to the shares reserved for future issuance under our 2020 Plan above.

Except as otherwise indicated, all information in this prospectus assumes:

- shares of convertible preferred stock that will automatically convert into shares of Class A common stock immediately prior to the completion of this offering pursuant to the terms of our amended and restated certificate of incorporation; the filing and effectiveness of our amended and restated certificate of incorporation in Delaware and the effectiveness of our amended and restated bylaws will each occur immediately prior to the completion of this offering;
- no exercise of outstanding stock options or settlement of outstanding RSUs subsequent to , 2020; and
- no exercise by the underwriters of their option to purchase up to an additional shares of our Class A common stock from us.

SUMMARY FINANCIAL AND OTHER DATA

The following tables summarize our financial and other data. We have derived the summary statement of operations data for the years ended December 31, 2018 and 2019, and the balance sheet data as of December 31, 2019 from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future. The following summary financial and other data should be read in conjunction with the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Selected Financial Data" and our financial statements and related notes included elsewhere in this prospectus.

Statement of Operations Data

	Year Ended December 31,	
	2018	2019
	(in thousands, except share and per share data)	
Total revenue	$ —	$ 116
Operating expenses:		
Research and development[1]	3,776	12,393
General and administrative[1]	2,982	4,606
Total operating expenses	6,758	16,999
Loss from operations	(6,758)	(16,883)
Other income (expense):		
Interest income	451	850
Interest expense	—	(5)
Total other income	451	845
Net loss	$ (6,307)	$ (16,038)
Net loss per share attributable to common stockholders, basic and diluted[2]	$ (0.74)	$ (1.08)
Weighted-average common shares outstanding, basic and diluted [2]	8,502,926	14,878,157
Pro forma net loss per common share, basic and diluted[2]		$ (0.35)
Pro forma weighted-average common shares used to compute basic and diluted net loss per common share[2]		45,913,238

(1) Costs and expenses include stock-based compensation as follows:

	Year Ended December 31,	
	2018	2019
	(in thousands)	
Research and development	$ 287	$ 766
General and administrative	385	791
Total stock-based compensation	$ 672	$ 1,557

(2) See Note 11 to our financial statements for an explanation of the calculations of our basic and diluted net loss per share attributable to common stockholders, pro forma net loss per share attributable to common stockholders and the weighted-average number of shares used in the computation of the per share amounts.

Balance Sheet Data

	As of December 31, 2019		
	Actual	Pro Forma[1]	Pro Forma as Adjusted[2][3]
		(in thousands)	
Cash, cash equivalents and investments	$ 86,020		
Working capital[4]	82,991		
Total assets	93,236		
Total liabilities	5,557		
Accumulated deficit	(22,586)		
Total stockholders' equity	87,679		

(1) The pro forma column in the balance sheet data table above reflects the automatic conversion of all shares of our convertible preferred stock into 62,117,410 shares of Class A common stock, as if such conversions had occurred on December 31, 2019.

(2) The pro forma as adjusted column in the balance sheet data table above gives effect to (i) the pro forma adjustments set forth above and (ii) the receipt of $ million in net proceeds from the sale and issuance by us of shares of our Class A common stock in this offering, based upon the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the amount of our pro forma as adjusted cash, cash equivalents and investments, working capital, total assets and total stockholders' equity by $, assuming that the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting estimated underwriting discounts and commissions payable by us. An increase or decrease of 1.0 million shares in the number of shares of Class A common stock offered by us would increase or decrease, as applicable, the amount of our pro forma as adjusted cash, cash equivalents and investments, working capital, total assets and total stockholders' equity by $ assuming the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions payable by us.

(4) We define working capital as current assets less current liabilities. See our financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

GLOSSARY

Summary of Key Terms Used in this Prospectus

Accuracy. In the context of proteomics studies, accuracy of measurement refers to how close the measured abundance of a protein is to the true abundance in a sample.

Biased. Biased refers to molecular analyses that depend upon specific ligands that are targeted to specific proteins in the case of biased proteomics, or to specific genes or gene mutations in the case of biased genomics. Biased contrasts with unbiased, which does not require specific ligands to target molecules. Biased is also referred to as targeted since the ligands used are directed against specific target molecules.

Breadth. In the context of proteomics studies, breadth of sampling refers to the number of proteins that are sampled in a proteomics study.

Centralized. Centralized refers to a centralized laboratory in an institution where services, often highly technical or requiring specific capabilities and equipment, are performed for others in the institution. Examples of centralized laboratories include core labs for proteomics and genomics. Centralized contrasts with decentralized laboratories where technology and/or equipment is dispersed in an institution.

Consumables. Our consumables refer to the nanoparticle formulations, related reagents and disposable items in our assays that are provided to our customers to conduct proteomic assays using our Proteograph Product Suite.

Decentralized. Decentralized refers to a laboratory configuration in an institution where a specific technology, capabilities and equipment is dispersed throughout the institution. Decentralized contrasts with centralized where technology, capabilities and/or equipment is centralized in an institution, often in a core laboratory.

Depth. In the context of proteomics studies, depth of coverage refers to the magnitude of the range of protein concentrations that are represented in a data set of proteomic information. Thus, a data set which is deep has a wide range of protein concentrations in the components. For example, this range could represent more than five orders of magnitude of mass per volume of sample that are contained in that data set.

Functional context/characterization. Functional context/characterization, in the case of genes, refers to the details of how genes are hypothesized to interact biologically, either directly or through the mRNA or protein molecules that derive from the genes. The interactions of these molecules produce a specific biological function.

Genomics. Genomics refers to the study of all an organism's genes and their interactions to influence the organism. Large-scale studies are required to understand how changes in an organism's genes influence the organism.

Instrument. In the context of our Proteograph, our instrument refers to the automated, robotic, liquid handling workstation that is used along with our consumables to conduct proteomic assays using our Proteograph Product Suite.

Interactome. Interactome refers to the broad set of interaction networks among molecules, such PPIs. Other interactions may include those between small molecules and proteins.

Interrogation. In the context of our Proteograph, interrogation refers to analyses of one of more samples to explore the proteomic information contained in those samples.

Large-scale. In the context of proteomics studies, large-scale refers to studies of more than 100 samples, given that most proteomics studies, particularly those that cover a wide range of protein concentrations (i.e. deep studies) are in the range of less than 50 samples.

-omics. This term refers to various different biological analyses approaches whereby researchers can analyze complex biological data, often in high throughput methods, to find novel associations between biological entities, pinpoint relevant biomarkers and build elaborate markers of disease and physiology. Examples of various "omics"

analyses include: genomics, proteomics, transcriptomics, epigenomics, and metabolomics. When two or more of the -omics analyses approaches are combined either directly in analyses and/or in examination of -omics data sets, the approach is referred to as “multi-omics.”

Mass spectrometry (MS). Mass spectrometry refers to an analytical technique that can be used to accurately measure the mass-to-charge ratio of different ions within a sample. The ions are derived from the sample by bombarding, or “ionizing,” the sample with electrons. MS technology allows molecules, including proteins, to be analyzed accurately and with very high sensitivity at the atomic level. Analyzing complex biological samples, however, often requires prior sample preparation to allow for the sample to be more easily ionized and processed in an MS instrument.

Nanoparticle. Nanoparticle refers to a particle of matter that is generally tens to hundreds of nanometers in diameter. The small size of nanoparticles, which is between atomic scale and bulk material scale, results in material properties that can vary significantly from larger particles of the same material. These differences in material properties can be physical or chemical, and often involve differences in surface properties.

Peptide. Peptide refers to a chemical entity that is between two and 50 amino acids. A polypeptide that contains more than 50 amino acids is labelled as a protein.

Phenotype. Phenotype refers to the observable characteristics or traits of an organism, which can be manifested in form or structure by biochemical or physiological properties, or by behavior.

Polymorphism. Polymorphism refers to the occurrence of two or more forms or morphs of genes that are seen across a population. Polymorphisms can be, but are not always, associated with changes in phenotype, and these phenotypic changes are mediated through proteins and protein variants that can result from the polymorphism. Polymorphisms can be as small as a single nucleotide, and these are known as single nucleotide polymorphisms.

Post-translational modifications (PTMs). Post-translational modifications refer to the covalent and generally enzymatic modifications of proteins following protein synthesis. Examples of PTMs include phosphorylation, which is the addition of a phosphate group to an amino acid within a protein, or glycosylation, which refers to the addition of a carbohydrate group to an amino acid within a protein.

Precision. In the context of proteomics studies, precision of measurement refers to how close several measurements of protein abundance in the same sample are to each other.

Protein. Protein refers to a polypeptide of more than 50 amino acids. Proteins conduct a vast array of functions within an organism, including catalyzing enzymatic reactions, other molecular processes, cellular processes, and cell structure. The function of proteins is highly dependent on the three dimensional structure of the intact protein, including protein variants such as post-translational modifications. Moreover, these functional processes are often mediated through PPIs.

Protein-protein interactions (PPIs). Protein-protein interactions refer to specific physical interactions between two or more proteins driven by physicochemical forces, and which are the result of molecular mechanisms that mediate biological function.

Protein variant. Protein variant, also known as a protein isoform, refers to a set of similar proteins that originate from a single gene or gene family. These variations can be generated by different molecular mechanisms, including alternative splicing of RNAs, various expression patterns of RNAs and post-translational modifications.

Proteograph Product Suite. Our Proteograph Product Suite refers to an integrated solution consisting of consumables, which includes our nanoparticles, our automatic instrument, and our data analysis software.

Proteomic(s). Proteomic(s) refers to the large-scale study of proteins. The proteome is the entire set of proteins that is produced or modified in an organism or system.

Software. Our software refers to our integrated software suite that helps our customers process and interrogate the data that is generated by MS instruments after a proteomic assay has been performed using our Proteograph Product Suite.

Throughput. Throughput refers to the rate at which an assay can be performed on during a given time period.

Transcriptome. Transcriptome refers to the sum total of all messenger RNA (mRNA) molecules that are expressed from the genes of an organism, as the result of a biological process called “transcription” whereby the information in a strand of DNA is copied into a new molecule of mRNA.

Unbiased. Unbiased refers to molecular analyses that does not depend upon specific ligands that are targeted to specific proteins, genes or gene mutations. Unbiased contrasts with biased, which requires specific ligands to target molecules. Unbiased is also referred to as *de novo* since it enables the discovery of new molecular information by not being restricted to specific ligands and/or targets.

RISK FACTORS

Investing in our Class A common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our financial statements and the related notes and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this prospectus, before deciding whether to invest in our Class A common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and prospects. In such an event, the market price of our Class A common stock could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and the market price of our Class A common stock.

Risks Related to Our Business and Industry

We are an early-stage life sciences technology company with a history of net losses, which we expect to continue, and we may not be able to generate meaningful revenues or achieve and sustain profitability in the future.

We are an early-stage life sciences technology company, and we have incurred significant losses since we were formed in 2017, and expect to continue to incur losses in the future. We incurred net losses of $6.3 million and $16.0 million in 2018 and 2019, respectively. As of December 31, 2019, we had an accumulated deficit of $22.6 million. These losses and accumulated deficit were primarily due to the substantial investments we have made to develop and improve our technology and our Proteograph Product Suite. Over the next several years, we expect to continue to devote substantially all of our resources towards continuing development and future commercialization of our Proteograph Product Suite and research and development efforts for products. These efforts may prove more costly than we currently anticipate. We have not generated any product revenue and we may never generate revenue sufficient to offset our expenses, or at all. In addition, as a public company, we will incur significant legal, accounting, administrative, insurance and other expenses that we did not incur as a private company. Accordingly, we cannot assure you that we will achieve profitability in the future or that, if we do become profitable, we will sustain profitability.

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 have not commercialized our Proteograph Product Suite or any other products and have not generated any revenue to date. Our operations to date have been limited to developing our technology and products. Our prospects must be considered in light of the uncertainties, risks, expenses, and difficulties frequently encountered by companies in their early stages of operations. We have not yet achieved market acceptance for our products, produced our products at scale, established a sales model, or conducted sales and marketing activities necessary for successful product commercialization. Consequently, predictions about our future success or viability are highly uncertain and may not be as accurate as they could be if we had a longer operating history or a company history of successfully developing and commercializing products.

In addition, as a business with a limited operating history, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown obstacles. We will eventually need to transition from a company with a focus on research and development to a company capable of supporting commercial activities as well, and we may not be successful in such a transition. We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in emerging 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 successfully, our results of operations could differ materially from our expectations, and our business, financial condition and results of operations could be adversely affected.

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 may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- our ability to successfully commercialize our Proteograph Product Suite on our anticipated timeline;
- the timing and cost of, and level of investment in, research and development and commercialization activities relating to our Proteograph Product Suite, including our Proteograph automation instrument and proprietary engineered nanoparticle (NP) technology, which may change from time to time;
- the level of demand for any products we are able to commercialize, particularly our Proteograph, which may vary significantly from period to period;
- our ability to drive adoption of our Proteograph in our target markets and our ability to expand into any future target markets;
- the prices at which we will be able to sell our Proteograph;
- the volume and mix of our sales between our Proteograph consumables, automation instruments and software, or changes in the manufacturing or sales costs related to our products;
- the length of time of the sales cycle for purchases of our Proteograph, including lead time needed to procure Proteograph automation instruments from our third-party contract manufacturer;
- the timing and amount of expenditures that we may incur to develop, commercialize or acquire additional products and technologies or for other purposes, such as the expansion of our facilities;
- changes in governmental funding of life sciences research and development or changes that impact budgets, budget cycles;
- seasonal spending patterns of our customers;
- the timing of when we recognize any revenues;
- future accounting pronouncements or changes in our accounting policies;
- the outcome of any future litigation or governmental investigations involving us, our industry or both;
- higher than anticipated service, replacement and warranty costs;
- the impact of the COVID-19 pandemic on the economy, investment in life sciences and research industries, our business operations, and resources and operations of our customers, suppliers, and distributors; and
- general industry, economic and market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

The cumulative effects of the 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.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If we are unable to commercialize products or generate revenue, or if our operating results fall below the expectations of analysts or investors or below any guidance we may provide, or if the guidance we provide is below the expectations of analysts or investors, it could cause the market price of our Class A common stock to decline.

The size of the markets for our Proteograph Product Suite may be smaller than estimated, and new market opportunities may not develop as quickly as we expect, or at all, limiting our ability to successfully sell our products.

The market for proteomics and genomics technologies and products is evolving, making it difficult to predict with any accuracy the size of the markets for our current and future products, including our Proteograph Product Suite. Our estimates of the total addressable market for our current and future products are based on a number of internal and third-party estimates and assumptions. In particular, our estimates are based on our expectations that researchers in the market for certain life sciences research tools and technologies will view our products as competitive alternatives to, or better options than, existing tools and technologies. We also expect researchers will recognize the ability of our products to complement, enhance and enable new applications of their current tools and technologies. We expect them to recognize the value proposition offered by our products, enough to purchase our products in addition to the tools and technologies they already own. Underlying each of these expectations are a number of estimates and assumptions that may be incorrect, including the assumption that government or other sources of funding will continue to be available to life sciences researchers at times and in amounts necessary to allow them to purchase our products. In addition, sales of new products into new market opportunities may take years to develop and mature and we cannot be certain that these market opportunities will develop as we expect. New life sciences technology may not be adopted until the consistency and accuracy of such technology, method or device has been proven. As a result, the sizes of the annual total addressable market for new markets and new products are even more difficult to predict. Our product is an innovative new product, and while we draw comparisons between the evolution and growth of the genomics and proteomics markets, the proteomics market may develop more slowly or differently. While we believe our assumptions and the data underlying our estimates of the total addressable market for our products are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates, or those underlying the third-party data we have used, may change at any time, thereby reducing the accuracy of our estimates. As a result, our estimates of the total addressable market for our products may be incorrect.

The future growth of the market for our current and future products depends on many factors beyond our control, including recognition and acceptance of our products by the scientific community and the growth, prevalence and costs of competing products and solutions. Such recognition and acceptance may not occur in the near term, or at all. If the markets for our current and future products are smaller than estimated or do not develop as we expect, our growth may be limited and our business, financial condition and operational results of operations could be adversely affected.

We have not yet commercially launched our Proteograph Product Suite, and we may not be able to successfully commercially launch our Proteograph as planned.

We have not yet commercially launched our Proteograph Product Suite. We plan to follow a three phase launch plan to commercialize our Proteograph, which includes a collaboration phase, an early access limited release phase and a broad commercial availability phase. We are currently in the collaboration phase of our commercial launch plan. Our commercial launch plan may not progress as planned due to:

- the inability to establish the capabilities and value proposition of our Proteograph with key opinion leaders in a timely fashion;
- the potential need or desire to modify aspects of our Proteograph prior to entering into the second or third phases of our commercial launch plan;
- changing industry or market conditions, customer requirements or competitor offerings over the span of our commercial launch plan;
- delays in building out our sales, customer support and marketing organization as needed for each of the phases of our commercial launch plan; and
- delays in ramping up manufacturing, either internally or through our suppliers to meet the expected demand in each of the phases of our commercial launch plan.

To the extent our commercial launch plan is delayed or unsuccessful, our financial results will be adversely impacted.

Even if we commercially launch our Proteograph Product Suite, our success depends on broad scientific and market acceptance of our Proteograph, which we may fail to achieve.

Our ability to achieve and maintain scientific and commercial market acceptance of our Proteograph Product Suite will depend on a number of factors. We expect that our Proteograph will be subject to the market forces and adoption curves common to other new technologies. The market for proteomics and genomics technologies and products is in its early stages of development. If widespread adoption of our Proteograph takes longer than anticipated, we will continue to experience operating losses.

The success of life sciences products is due, in large part, to acceptance by the scientific community and their adoption of certain products in the applicable field of research. The life sciences scientific community is often led by a small number of early adopters and key opinion leaders who significantly influence the rest of the community through publications in peer-reviewed journals. In such journal publications, the researchers will describe not only their discoveries, but also the methods, and typically the products used, to fuel such discoveries. Mentions in peer-reviewed journal publications is a driver for the general acceptance of life sciences products, such as our Proteograph. During the collaboration and early access limited release phases of our commercialization launch plan, we intend to collaborate with a small number of key opinion leaders who are highly skilled at evaluating novel technologies and whose feedback can help us solidify our commercialization plans and processes. Ensuring that early adopters and key opinion leaders publish research involving the use of our products during the collaboration and early access limited release phases is critical to ensuring our products gain widespread scientific acceptance. In addition, continuing collaborative relationships with such key opinion leaders will be vital to maintaining any market acceptance we achieve. If too few researchers describe the use of our products, too many researchers shift to a competing product and publish research outlining their use of that product or too many researchers negatively describe the use of our products in publications, it may drive customers away from our products and it may delay our progression towards the broad commercial release phase of our commercialization plan.

Other factors in achieving commercial market acceptance, include:

- our ability to market and increase awareness of the capabilities of our Proteograph;
- the ability of our Proteograph to demonstrate comparable performance in intended use applications broadly in the hands of customers as achieved in the collaboration and early access limited release phases of our commercialization plan;
- our customers' willingness to adopt new products and workflows;
- our Proteograph's ease of use and whether it reliably provides advantages over other alternative technologies;
- the rate of adoption of our Proteograph by academic institutions, laboratories, biopharmaceutical companies and others;
- the prices we charge for our Proteograph;
- our ability to develop new products and workflows and solutions for customers;
- if competitors develop and commercialize products that perform similar functions as our Proteograph; and
- the impact of our investments in product innovation and commercial growth.

We cannot assure you that we will be successful in addressing each of these criteria or other criteria that might affect the market acceptance of any products we commercialize, particularly our Proteograph. If we are unsuccessful in achieving and maintaining market acceptance of our Proteograph, our business, financial condition and results of operations would be adversely affected.

If we are unable to establish sales and marketing capabilities, we may not be successful in commercializing our Proteograph Product Suite.

We have limited experience as a company in sales and marketing and our ability to achieve profitability depends on our being able to attract customers for our Proteograph. Although members of our management team have considerable industry experience, in the future we will be required to expand our sales, marketing, distribution and customer service and support capabilities with the appropriate technical expertise prior to the broad commercial launch of our Proteograph. To perform sales, marketing, distribution, and customer service and support successfully, we will face a number of risks, including:

- our ability to attract, retain and manage the sales, marketing and customer service and support force necessary to commercialize and gain market acceptance for our technology;
- the time and cost of establishing a specialized sales, marketing and customer service and support force; and
- our sales, marketing and customer service and support force may be unable to initiate and execute successful commercialization activities.

We may seek to enlist one or more third parties to assist with sales, distribution and customer service and support globally or in certain regions of the world. There is no guarantee, if we do seek to enter into such arrangements, that we will be successful in attracting desirable sales and distribution partners or that we will be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any third-party sales and distribution partners, are not successful, our Proteograph may not gain market acceptance, which could materially impact our business operations.

Even if our Proteograph Product Suite is commercialized and achieves broad scientific and market acceptance, if we fail to improve it or introduce compelling new products, our revenues and our prospects could be harmed.

Even if we are able to commercialize our Proteograph Product Suite and achieve broad scientific and market acceptance, our ability to attract new customers and increase revenue from existing customers will depend in large part on our ability to enhance and improve our Proteograph and to introduce compelling new products. The success of any enhancement to our Proteograph or introduction of new products depends on several factors, including timely completion and delivery, competitive pricing, adequate quality testing, integration with existing technologies, appropriately timed and staged introduction and overall market acceptance. Any new product or enhancement to our Proteograph that we develop may not be introduced in a timely or cost-effective manner, may contain defects, errors, vulnerabilities or bugs, or may not achieve the market acceptance necessary to generate significant revenue.

The typical development cycle of new life sciences products can be lengthy and complicated, and may require new scientific discoveries or advancements, considerable resources and complex technology and engineering. Such developments may involve external suppliers and service providers, making the management of development projects complex and subject to risks and uncertainties regarding timing, timely delivery of required components or services and satisfactory technical performance of such components or assembled products. If we do not achieve the required technical specifications or successfully manage new product development processes, or if development work is not performed according to schedule, then such new technologies or products may be adversely impacted. If we are unable to successfully develop new products, enhance our Proteograph to meet customer requirements, compete with alternative products, or otherwise gain and maintain market acceptance, our business, results of operations and financial condition could be harmed.

The COVID-19 pandemic and efforts to reduce its spread have adversely impacted, and are expected to continue to materially and adversely impact, our business and operations.

The COVID-19 pandemic has had, and is expected to continue to have, an adverse impact on our operations, particularly as a result of preventive and precautionary measures that we, other businesses, and governments are taking. Governmental mandates related to COVID-19 or other infectious diseases, or public health crises, have impacted, and we expect them to continue to impact, our personnel and personnel at third-party manufacturing facilities in the United States and other countries, and the availability or cost of materials, which would disrupt or

delay our receipt of instruments, components and supplies from the third parties we rely on to, among other things, produce our Proteograph automation instrument and NPs. For instance, there are standing "stay-at-home" orders in California, and specifically San Mateo County where our headquarters is located, that require businesses to implement certain social distancing protocols and other written health and safety plans and measures which may affect productivity and morale. We have continued to operate within the rules applicable to our business; however, an extended implementation of these governmental mandates could further impact our ability to operate effectively and conduct ongoing research and development or other activities. The COVID-19 pandemic has also had an adverse effect on our ability to attract, recruit, interview and hire at the pace we would typically expect to support our rapidly expanding operations. To the extent that any governmental authority imposes additional regulatory requirements or changes existing laws, regulations, and policies that apply to our business and operations, such as additional workplace safety measures, our product development plans may be delayed, and we may incur further costs in bringing our business and operations into compliance with changing or new laws, regulations, and policies.

In the near term, we expect that substantially all of our revenue will be derived from sales of our Proteograph Product Suite, including our instruments and consumables, to academic and research institutions. We are currently in the collaboration phase of our commercialization plan and, as a result, in the near term, our ability to drive the adoption of our Proteograph will depend upon our ability to visit customer sites, the ability of our customers to access laboratories, install and train on our Proteograph Product Suite and conduct research in light of the COVID-19 pandemic. Additionally, as we move into the early access limited release phase of our commercialization plan, the research and development budgets of these customers, the ability of such customers to receive funding for research, and the ability of such customers to travel to our facilities, other laboratories and industry events, will become increasingly important to the adoption of our Proteograph. All of these considerations are impacted by factors beyond our control, such as:

- reductions in capacity or shutdowns of laboratories and other institutions as well as other impacts stemming from the COVID-19 pandemic, such as reduced or delayed spending on instruments or consumables as a result of such shutdowns and delays before re-opened laboratories and institutions resume previous levels of research activities that require new purchases of our instruments or consumables;
- decreases in government funding of research and development; and
- changes to programs that provide funding to research laboratories and institutions, including changes in the amount of funds allocated to different areas of research, changes that have the effect of increasing the length of the funding process or the impact of the COVID-19 pandemic on our customers and potential customers and their funding sources.

Additionally, our suppliers have also been impacted by the COVID-19 pandemic. For example, our automation instrument manufacturer, Hamilton Company, has experienced a surge in demand for equipment and associated consumables used for COVID-19 diagnostics, and as a result, we have experienced longer lead times for our instruments. We have also experienced supply delays for critical hardware, instrumentation and medical and testing supplies that we use for product development, as these other components and supplies are otherwise diverted to COVID-19-related testing and other uses.

The ultimate impact of the COVID-19 pandemic is highly uncertain and subject to sudden change. This impact could have a material, adverse impact on our liquidity, capital resources, operations and business and those of the third parties on which we rely, and could worsen over time. The extent to which the COVID-19 pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others. While we do not yet know the full extent of potential impacts on our business, any of these occurrences could significantly harm our business, results of operations and financial condition.

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, results of operations and financial condition.

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. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for our Proteograph Product Suite 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, results of operations and financial condition.

If we do not sustain or successfully manage our anticipated growth, our business and prospects will be harmed.

Our anticipated growth will place significant strains on our management, operational and manufacturing systems and processes, sales and marketing team, financial systems and internal controls and other aspects of our business. As of September 1, 2020, we had 55 employees. Developing and commercializing our Proteograph will require us to hire and retain scientific, sales and marketing, software, manufacturing, customer service, distribution and quality assurance personnel. In addition, we expect that we will need to hire additional accounting, finance and other personnel in connection with our becoming, and our efforts to comply with the requirements of being, a public company. Once public, our management and other personnel will need to devote a substantial amount of time towards maintaining compliance with these requirements and effectively manage these growth activities. We may face challenges integrating, developing and motivating our rapidly growing employee base. To effectively manage our growth, we must continue to improve our operational and manufacturing systems and processes, our financial systems and internal controls and other aspects of our business and continue to effectively expand, train and manage our personnel. Our ability to successfully manage our expected growth is uncertain given the fact that we have been in operation only since 2017. As our organization continues to grow, we will be required to implement more complex organizational management structures, and may find it increasingly difficult to maintain the benefits of our corporate culture, including our ability to quickly develop and launch new and innovative products. If we do not successfully manage our anticipated growth, our business, results of operations, financial condition and prospects will be harmed.

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 Omid Farokhzad, one of our founders and our Chief Executive Officer; Omead Ostadan, our President and Chief Operating Officer; and David Horn, our Chief Financial Officer, is critical to our vision, strategic direction, product development and commercialization efforts. The departure of one or more of our executives 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 and ability to successfully transition from a company primarily focused on development to commercialization 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 systems 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 is intense, particularly in the San Francisco Bay Area. 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. Due to the competition for qualified personnel in the San Francisco Bay Area, we expect to continue to utilize foreign nationals to fill part of our recruiting needs. 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 administration has made restricting immigration and reforming the work visa process a key focus of its initiatives and these efforts may adversely affect our ability to find 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 would 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 expect to be dependent upon revenue generated from the sale of our Proteograph Product Suite from the time it is commercialized through the foreseeable future.

We expect that our Proteograph Product Suite will be our first commercial product. While we anticipate having early access limited release in 2021, we do not expect to have broad commercial availability for our Proteograph until early 2022. If we are able to successfully commercialize our Proteograph, we expect that we will generate substantially all of our revenue from the sale of our Proteograph, which we expect to consist of consumables, automation instruments and software. There can be no assurance that we will be able to successfully commercialize our Proteograph, design other products that will meet the expectations of our customers or that any of our future products will become commercially viable. As technologies change in the future for life sciences research tools in general and in proteomics and genomics technologies specifically, we will be expected to upgrade or adapt our Proteograph in order to keep up with the latest technology. To date, we have limited experience simultaneously designing, testing, manufacturing and selling products and there can be no assurance we will be able to do so. Our sales expectations are based in part on the assumption that our Proteograph will increase study sizes for our future customers and their associated purchases of our consumables. If sales of our instruments fail to materialize, so will the related consumable sales and associated revenue.

In our development and commercialization plans for our Proteograph, we may forego other opportunities that may provide greater revenue or be more profitable. If our research and product development efforts do not result in commercially viable products within the anticipated timelines, or at all, our business and results of operations will be adversely affected. Any delay or failure by us to develop and release our Proteograph or new products or product enhancements would have a substantial adverse effect on our business and results of operations.

Our business will depend significantly on research and development spending by academic institutions and other research institutions, and any reduction in spending could limit demand for our products and adversely affect our business, results of operations, financial condition and prospects.

We expect that substantially all of our sales revenue in the near term will be generated from sales to academic institutions and other research institutions. Much of these customers' funding will be, in turn, provided by various state, federal and international government agencies. As a result, the demand for our Proteograph will depend upon the research and development budgets of these customers, which are impacted by factors beyond our control, such as:

- decreases in government funding of research and development;
- changes to programs that provide funding to research laboratories and institutions, including changes in the amount of funds allocated to different areas of research or changes that have the effect of increasing the length of the funding process;
- macroeconomic conditions and the political climate;
- researchers' opinions of the utility of our Proteograph;
- citation of our Proteograph in published research;
- potential changes in the regulatory environment;

- differences in budgetary cycles, especially government- or grant-funded customers, whose cycles often coincide with government fiscal year ends;
- competitor product offerings or pricing;
- market-driven pressures to consolidate operations and reduce costs; and
- market acceptance of relatively new technologies, such as our Proteograph.

In addition, various state, federal and international agencies that provide grants and other funding may be subject to stringent budgetary constraints that could result in spending reductions, reduced grant making, reduced allocations or budget cutbacks, which could jeopardize the ability of these customers, or the customers to whom they provide funding, to purchase our products. For example, congressional appropriations to the National Institutes of Health (NIH) have generally increased year-over-year for the last 19 years, and reached a new high in 2019, but the NIH also experiences occasional year-over-year decreases in appropriations, including as recently as 2013. In addition, funding for life science research has increased more slowly during the past several years compared to previous years and has actually declined in some countries. There is no guarantee that NIH appropriations will not decrease in the future, and a decrease may be more likely under the current administration, whose annual budget proposals have repeatedly decreased NIH appropriations. A decrease in the amount of, or delay in the approval of, appropriations to NIH or other similar United States or international organizations, such as the Medical Research Council in the United Kingdom, could result in fewer grants benefiting life sciences research. These reductions or delays could also result in a decrease in the aggregate amount of grants awarded for life sciences research or the redirection of existing funding to other projects or priorities, any of which in turn could cause our customers and potential customers to reduce or delay purchases of our products. Our operating results may fluctuate substantially due to any such reductions and delays. Any decrease in our customers' budgets or expenditures, or in the size, scope or frequency of their capital or operating expenditures, could materially and adversely affect our business, results of operations, financial condition and prospects.

We rely on a single contract manufacturer to manufacture and supply our instruments. If this manufacturer should fail or not perform satisfactorily, our ability to commercialize and supply our instruments would be adversely affected.

We rely on a single contract manufacturer, Hamilton Company, a manufacturer of precision measurement devices, automated liquid handling workstations, and sample management systems located in Nevada and other locations, to manufacture and supply our instruments. Since our contract with Hamilton does not commit them to carry inventory or make available any particular quantities, Hamilton may give other customers' needs higher priority than ours, and we may not be able to obtain adequate supplies in a timely manner or on commercially reasonable terms. For example, due to the COVID-19 pandemic and increased demand for Hamilton's products, we have seen the lead time for our instruments increase significantly. Further, if Hamilton is unable to obtain critical components used in our Proteograph or supply our instruments on the timelines we require, our business and commercialization efforts would be harmed.

In the event it becomes necessary to utilize a different contract manufacturer for our products, we would experience additional costs, delays and difficulties in doing so as a result of identifying and entering into an agreement with a new manufacturer as well as preparing such new manufacturer to meet the logistical requirements associated with manufacturing our instruments, and our business would suffer.

In addition, certain of the components used in our instruments are sourced from limited or sole suppliers. If we were to lose such suppliers, there can be no assurance that we will be able to identify or enter into agreements with alternative suppliers on a timely basis on acceptable terms, if at all. An interruption in our ability to sell and deliver instruments to customers could occur if we encounter delays or difficulties in securing these components, or if the quality of the components supplied do not meet specifications, or if we cannot then obtain an acceptable substitute. Our suppliers have also been impacted by the COVID-19 pandemic, and we have also experienced supply delays for critical hardware, instrumentation and medical and testing supplies that we use for product development, as these other components and supplies are otherwise diverted to COVID-19-related testing and other uses. If any of these events occur, our business, results of operations, financial condition and prospects could be harmed.

We have limited experience producing and supplying our products, and we may be unable to consistently manufacture or source our automation instruments and consumables to the necessary specifications or in quantities necessary to meet demand on a timely basis and at acceptable performance and cost levels.

Our Proteograph Product Suite is an integrated workstation with many different components that work together. As such, a quality defect in a single component can compromise the performance of the entire solution. In order to successfully generate revenue from our Proteograph Product Suite, we need to supply our customers with products that meet their expectations for quality and functionality in accordance with established specifications on a timely basis. Our instruments are manufactured by Hamilton at their facility using complex processes, sophisticated equipment and strict adherence to specifications and quality systems procedures. Given the complexity of this automation instrumentation, individual units may occasionally require additional installation and service time prior to becoming available for customer use.

We leverage well-established unit operations to formulate and manufacture our NPs at our facilities in Redwood City, California. We procure certain components of our consumables from third-party manufacturers, which includes the commonly-available raw materials needed for manufacturing our proprietary engineered NPs. These manufacturing processes are complex. As we move to towards commercial scale formulation and manufacturing of our NP panels, if we are not able to repeatably produce our NPs at commercial scale or source them from third-party suppliers, or encounter unexpected difficulties in packaging our consumables, our business will be adversely impacted.

As we continue to scale commercially and develop new products, and as our products incorporate increasingly sophisticated technology, it will be increasingly difficult to ensure our products are produced in the necessary quantities without sacrificing quality. There is no assurance that we or our third-party manufacturer will be able to continue to manufacture our Proteograph automation instrument so that it consistently achieves the product specifications and produces results with acceptable quality. Our NPs and other consumables have a limited shelf life, after which their performance is not ensured. While we have completed accelerated stability testing for our NPs, our real-time long-term liquid stability studies are underway, but have not been completed. Shipment of consumables that effectively expire early or shipment of defective instruments or consumables to customers may result in recalls and warranty replacements, which would increase our costs, and depending upon current inventory levels and the availability and lead time for additional inventory, could lead to availability issues. Any future design issues, unforeseen manufacturing problems, such as contamination of our or our manufacturers' facilities, equipment malfunctions, aging components, quality issues with components and materials sourced from third-party suppliers, or failures to strictly follow procedures or meet specifications, may have a material adverse effect on our brand, business, results of operations and financial condition and could result in us or our third-party manufacturers losing International Organization for Standardization (ISO) quality management certifications. If our third-party manufacturers fails to maintain ISO quality management certifications, customers might choose not to purchase products from us.

In addition, as we commercialize our Proteograph Product Suite, we will also need to make corresponding improvements to other operational functions, such as our customer support, service and billing systems, compliance programs and our internal quality assurance programs. We cannot assure you that any increases in scale, related improvements and quality assurance will be successfully implemented or that appropriate personnel will be available. As we develop additional products, we may need to bring new equipment on-line, implement new systems, technology, controls and procedures and hire personnel with different qualifications.

An inability to manufacture products and components that consistently meet specifications, in necessary quantities, at commercially acceptable costs and without significant delays, may have a material adverse effect on our business, results of operations, financial condition and prospects.

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

Our Proteograph Product Suite utilizes 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, and as we commercialize our Proteograph, these risks may increase. We expect to provide warranties that our products 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 Proteograph, we depend upon third parties for the supply of our instruments and various components, many of which require a significant degree of technical expertise to produce. If our suppliers fail to produce our Proteograph automation instrument and 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 Proteograph contain defects, we may experience:

- a failure to achieve market acceptance for our Proteograph or expansion of our Proteograph sales;
- 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 or replacements;
- inability to attract new customers;
- diversion of resources from our manufacturing and research and development departments into 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.

In addition, we expect that our Proteograph Product Suite will be used with our potential customers' own mass spectrometry (MS) instruments or the MS instrument of a third-party service provider and the performance of these MS instruments is outside of our control. If such third-party products are not produced to specification, are produced in accordance with modified specifications, or are defective, they may not be compatible or perform as intended with our Proteograph. In such case, the reliability, results and performance of our Proteograph may be compromised. The occurrence of any one or more of the foregoing could negatively affect our business, financial condition, and results of operations.

If we do not successfully develop and deploy our Proteograph software, our commercialization efforts and therefore business and results of operations could suffer.

The success of our Proteograph Product Suite depends, in part, on our ability to design and deploy our Proteograph software in a manner that enables the integration with our potential customers' systems and accommodates our potential customers' needs. Without our Proteograph software, the use of MS instruments can require expert knowledge and scalable high-performance computer infrastructure to run efficiently and can make it difficult for our customers to understand and evaluate the quality of their results.

We have and will continue to spend significant amounts of effort developing our Proteograph software, and potential enhanced versions over time, to meet our customers' and potential customers' evolving needs. There is no assurance that the development or deployment of our Proteograph software, or any potential enhancements, will be

compelling to our customers. In addition, we may experience delays in our release dates of our Proteograph software, and there can be no assurance that our Proteograph software will be released according to schedule. If our software development and deployment plan does not accurately anticipate customer demands or if we fail to develop our Proteograph software in a manner that satisfies customer preferences in a timely and cost-effective manner, our Proteograph may fail to gain market acceptance.

If our facilities or our third-party manufacturers' facilities become unavailable or inoperable, our research and development program and commercialization launch plan could be adversely impacted and manufacturing of our instruments and consumables could be interrupted.

Our Redwood City, California, facilities house our corporate, research and development and quality assurance teams. Our instruments are manufactured at our third-party manufacturer's facilities in Nevada, and our consumables are manufactured at various locations in the United States and internationally.

Our facilities in Redwood City and those of our third-party manufacturers are vulnerable to natural disasters, public health crises, including the impact of the COVID-19 pandemic, and catastrophic events. For example, our Redwood City facilities are located near earthquake fault zones and are vulnerable to damage from earthquakes as well as other types of disasters, including fires, floods, power loss, communications failures and similar events. If any disaster, public health crisis or catastrophic event were to occur, our ability to operate our business would be seriously, or potentially completely, impaired. If our facilities or our third-party manufacturer's facilities become unavailable for any reason, we cannot provide assurances that we will be able to secure alternative manufacturing facilities with the necessary capabilities and equipment on acceptable terms, if at all. We may encounter particular difficulties in replacing our Redwood City facilities given the specialized equipment housed within it. The inability to manufacture our instruments or consumables, combined with our limited inventory of manufactured instruments and consumables, may result in the loss of future customers or harm our reputation, and we may be unable to re-establish relationships with those customers in the future. Because our NPs are perishable and must be kept in temperature controlled storage, the loss of power to our facilities, mechanical or other issues with our storage facilities or other events that impact our temperature controlled storage could result in the loss of some or all of such NPs, and we may not be able to replace them without disruption to our customers or at all.

If our research and development program or commercialization program were disrupted by a disaster or catastrophe, the launch of new products, including our Proteograph Product Suite, and the timing of improvements to our products could be significantly delayed and could adversely impact our ability to compete with other available products and solutions. If our or our third-party manufacturer's capabilities are impaired, we may not be able to manufacture and ship our products in a timely manner, which would adversely impact our business. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all.

If we experience a significant disruption in our information technology systems or breaches of data security, our business could be adversely affected.

We rely, or will rely, on information technology systems to keep financial records, facilitate our research and development initiatives, manage our manufacturing operations, maintain quality control, fulfill customer orders, maintain corporate records, communicate with staff and external parties and operate other critical functions. Our information technology systems and those of our vendors and partners are potentially vulnerable to disruption due to breakdown, malicious intrusion and computer viruses or other disruptive events, including, but not limited to, natural disasters and catastrophes. Cyberattacks and other malicious internet-based activity continue to increase and cloud-based platform providers of services have been and are expected to continue to be targeted. Methods of attacks on information technology systems and data security breaches change frequently, are increasingly complex and sophisticated, including social engineering and phishing scams, and can originate from a wide variety of sources. In addition to traditional computer "hackers," malicious code, such as viruses and worms, employee theft or misuse, denial-of-service attacks and sophisticated nation-state and nation-state supported actors now engage in attacks, including advanced persistent threat intrusions. Despite our efforts to create security barriers to such threats, it is virtually impossible for us to entirely mitigate these risks. In addition, we have not finalized our information technology and data security procedures and therefore, our information technology systems may be more susceptible

to cybersecurity attacks than if such security procedures were finalized. Despite any of our current or future efforts to protect against cybersecurity attacks and data security breaches, there is no guarantee that our efforts are adequate to safeguard against all such attacks and breaches. Moreover, it is possible that we may not be able to anticipate, detect, appropriately react and respond to, or implement effective preventative measures against, all cybersecurity incidents.

If our security measures, or those of our vendors and partners, are compromised due to any cybersecurity attacks or data security breaches, including as a result of third-party action, employee or customer error, malfeasance, stolen or fraudulently obtained log-in credentials or otherwise, our reputation could be damaged, our business and reputation may be harmed, we could become subject to litigation and we could incur significant liability. If we were to experience a prolonged system disruption in our information technology systems or those of certain of our vendors and partners, it could negatively impact our ability to serve our customers, which could adversely impact our business, financial condition, results of operations and prospects. If operations at our facilities were disrupted, it may cause a material disruption in our business if we are not capable of restoring functionality on an acceptable timeframe. In addition, our information technology systems, and those of our vendors and partners, are potentially vulnerable to data security breaches, whether by internal bad actors, such as employees or other third parties with legitimate access to our or our third-party providers' systems, or external bad actors, which could lead to the exposure of personal data, sensitive data and confidential information to unauthorized persons. Any such data security breaches could lead to the loss of trade secrets or other intellectual property, or could lead to the exposure of personal information, including sensitive personal information, of our employees, customers and others, any of which could have a material adverse effect on our business, reputation, financial condition and results of operations.

In addition, any such access, disclosure or other loss or unauthorized use of information or data could result in legal claims or proceedings, regulatory investigations or actions, and other types of liability under laws that protect the privacy and security of personal information, including federal, state and foreign data protection and privacy regulations, violations of which could result in significant penalties and fines. Furthermore, defending a suit, regardless of its merit, could be costly, divert management's attention and harm our reputation. In addition, although we seek to detect and investigate all data security incidents, security breaches and other incidents of unauthorized access to our information technology systems and data can be difficult to detect and any delay in identifying such breaches or incidents may lead to increased harm and legal exposure of the type described above. Moreover, there could be public announcements regarding any cybersecurity incidents and any steps we take to respond to or remediate such incidents, and if securities analysts or investors perceive these announcements to be negative, it could, among other things, have a material adverse effect on the price of our Class A common stock.

The cost of protecting against, investigating, mitigating and responding to potential breaches of our information technology systems and data security breaches and complying with applicable breach notification obligations to individuals, regulators, partners and others can be significant. As cybersecurity incidents continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities. The inability to implement, maintain and upgrade adequate safeguards could have a material adverse effect on our business, financial condition, results of operations and prospects. While we currently maintain cybersecurity insurance, our insurance policies may not be adequate to compensate us for the potential costs and other losses arising from such disruptions, failures or security breaches. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, financial condition, results of operations and prospects.

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 the ordinary course of our business, we currently, and in the future will, collect, store, transfer, use or process sensitive data, including personally identifiable information of employees, and intellectual property and proprietary business information owned or controlled by ourselves and other parties. The secure processing, storage, maintenance, and transmission of this critical information are vital to our operations and business strategy. 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 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.

Furthermore, regulations promulgated pursuant to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), establish privacy and security standards that limit the use and disclosure of individually identifiable health information (known as “protected health information”) and require the implementation of administrative, physical and technological safeguards to protect the privacy of protected health information and ensure the confidentiality, integrity and availability of electronic protected health information. Determining whether protected health information has been handled in compliance with applicable privacy standards and our contractual obligations can require complex factual and statistical analyses and may be subject to changing interpretation. Although we take measures to protect sensitive data from unauthorized access, use or disclosure, 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, manipulated, 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, such as the HIPAA, the Health Information Technology for Economic and Clinical Health Act (HITECH), and regulatory penalties. Notice of breaches must be made to affected individuals, the Secretary of the Department of Health and Human Services, 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 in the process of evaluating compliance needs, but do not currently have in place formal policies and procedures related to the storage, collection and processing of information, and have not conducted any internal or external data privacy audits, to ensure our compliance with all applicable data protection laws and regulations.

Additionally, we do not currently have policies and procedures in place for assessing our third-party vendors' compliance with applicable data protection laws and regulations. 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 or our third-party vendors, collaborators, contractors and consultants to comply with any applicable federal, state or similar foreign laws and regulations relating to data privacy and security, or 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.

If we commercialize our Proteograph Product Suite outside of the United States, our international business could expose us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of the United States.

Engaging in international business inherently involves a number of difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws that are or may be applicable to our business in the future, such as the European Union's General Data Protection Regulation (GDPR) and other data privacy requirements, labor and employment regulations, anti-competition regulations, the U.K. Bribery Act of 2010 and other anti-corruption laws, regulations relating to the use of certain hazardous substances or chemicals in commercial products, and require the collection, reuse, and recycling of waste from products we manufacture;
- required compliance with U.S. laws such as the Foreign Corrupt Practices Act, and other U.S. federal laws and regulations established by the office of Foreign Asset Control;
- export requirements and import or trade restrictions;
- laws and business practices favoring local companies;
- foreign currency exchange, longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- changes in social, economic, and political conditions or in laws, regulations and policies governing foreign trade, manufacturing, research and development, and investment both domestically as well as in the other countries and jurisdictions in which we operate and into which we may sell our products including as a result of the separation of the United Kingdom from the European Union (Brexit);
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements, and other trade barriers;
- difficulties and costs of staffing and managing foreign operations; and
- difficulties protecting, maintaining, enforcing or procuring intellectual property rights.

If one or more of these risks occurs, it could require us to dedicate significant resources to remedy such occurrence, and if we are unsuccessful in finding a solution, our financial results will suffer.

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

We face significant competition in the life sciences technology market. We currently compete with life sciences technology and the diagnostic companies that are supplying components, products and services that serve customers

engaged in proteomics analysis. These companies include Agilent Technologies, Bio-Rad Laboratories, Danaher, Luminex, Merck (and its subsidiary MilliporeSigma) and Thermo Fisher Scientific. We also compete with a number of emerging growth companies that have developed, or are developing, proteomic products and solutions, such as Nautilus Biotechnology, Olink Proteomics, Quanterix and SomaLogic.

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.

We also face competition from researchers developing their own products. The area in which we compete involves rapid innovation and some of our customers have in the past, and more may in the future, elect to create their own assays rather than rely on a third-party supplier such as ourselves. This is particularly true for the largest research centers and laboratories who are continually testing and trying new technologies, whether from a third-party vendor or developed internally. We will also compete for the resources our customers allocate for purchasing a wide range of products used to analyze the proteome, some of which may be additive to or complementary with our own but not directly competitive.

We cannot assure investors that our products will compete favorably or that we will be successful in the face of increasing competition from products and technologies introduced by our existing or future competitors, companies entering our markets or developed by our customers internally. In addition, we cannot assure investors that our competitors do not have or will not develop products or technologies that currently or in the future will enable them to produce competitive products with greater capabilities or at lower costs than ours or that are able to run comparable experiments at a lower total experiment cost. Any failure to compete effectively could materially and adversely affect our business, financial condition and operating results.

We have identified material weaknesses in our internal control over financial reporting. If our remediation measures are ineffective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to report our financial condition or results of operations accurately or on a timely basis, which may adversely affect investor confidence in us and, as a result, the value of our Class A common stock.

To date, we have never conducted a review of our internal control for the purpose of providing the reports required by the Sarbanes-Oxley Act (SOX). During our review and testing, we may identify deficiencies and be unable to remediate them before we must provide the required reports. In connection with the audit of our financial statements for the year ended December 31, 2019, we and our independent registered public accounting firm identified the following material weaknesses in our internal control over financial reporting, which remain unremediated:

- there is insufficient accounting personnel to enable segregation of duties relating to the general ledger, disbursement, and certain accounting functions;
- there are not formalized processes or controls for account reconciliations, including independent review of such reconciliations, or related financial statement analysis prepared in conformity with generally accepted accounting principles in the United States (U.S. GAAP); and

- there is not a sufficient complement of accounting personnel with the necessary U.S. GAAP technical expertise to timely identify and account for complex or non-routine transactions or to formalize accounting policies, memoranda, or controls for such transactions.

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 financial statements will not be prevented or detected on a timely basis.

We have begun to take certain actions to address the control deficiencies in our financial reporting, including hiring additional finance personnel and establishing more robust processes. While we have begun taking measures and plan to continue to take measures to design and implement an effective control environment, measures taken to date are not sufficient to remediate the material weaknesses. We cannot assure you that the measures we have taken to date and other remediation and internal control measures we implement in the future will be sufficient to remediate our current material weaknesses or prevent future material weaknesses. We may discover additional weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are unable to successfully maintain internal control over financial reporting, or identify any additional material weaknesses, the accuracy and timing of our financial reporting may be adversely affected. In addition, if we are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, when required, investors may lose confidence in the accuracy and completeness of our financial reports, we may face restricted access to the capital markets, and our stock price may be materially adversely affected. Moreover, we could become subject to investigations by regulatory authorities, which could require additional financial and management resources.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner or prevent fraud, which would harm our business.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could cause us to fail to meet our reporting obligations in a timely manner, or at all. In addition, any testing by us conducted in connection with Section 404(a) of SOX or any subsequent testing by our independent registered public accounting firm in connection with Section 404(b) of SOX, may reveal deficiencies in our internal controls over financial reporting that are deemed to be significant deficiencies or material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. As discussed above, we have identified material weaknesses in the past which we are in the process of remedying. However, our efforts to remediate previous material weaknesses may not be effective or prevent any future deficiency in our internal control over financial reporting. Ineffective internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our Class A common stock.

We will be required to disclose material changes made in our internal controls over financing reporting and procedures on a quarterly basis and our management will be required to assess the effectiveness of these controls annually. Beginning with our second annual report on Form 10-K after we become a public company, we will be required to make a formal assessment of the effectiveness of our internal control over financial reporting, and once we cease to be an emerging growth company, we will be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, for as long as we are an "emerging growth company" under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404(b).

To achieve compliance with Section 404(a) within the prescribed period, we will be engaging in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a plan to assess and document the adequacy of our internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are designed and operating effectively and implement a continuous reporting and improvement process for internal control over financial reporting.

We could be an "emerging growth company" for up to five years. An independent assessment of the effectiveness of our internal controls could detect problems that our management's assessment might not identify. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

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 operation 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 Class A common stock.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. We base our estimates on historical experience and 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 if and when we have product sales, 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 judgements relating to our critical accounting policies change or if actual circumstances differ from our assumptions, estimates or judgements, 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 Class A common stock.

If we elect to label and promote any of our products as clinical diagnostics tests or medical devices, we would be required to obtain prior approval or clearance by the FDA, which would take significant time and expense and could fail to result in FDA clearance or approval for the intended uses we believe are commercially attractive.

Our products are currently labeled and promoted, and are, and in the near-future will be, sold primarily to academic and research institutions and research companies as Research Use Only (RUO) products, and are not currently designed, or intended to be used, for clinical diagnostic tests or as medical devices. If we elect to label and market our products for use as, or in the performance of, clinical diagnostics in the United States, thereby subjecting them to U.S. Food and Drug Administration (FDA) regulation as medical devices, we would be required to obtain premarket 510(k) clearance or premarket approval from the FDA, unless an exception applies.

We may in the future register with the FDA as a medical device manufacturer and list some of our products with the FDA pursuant to an FDA Class I listing for general purpose laboratory equipment. While this regulatory classification is exempt from certain FDA requirements, such as the need to submit a premarket notification commonly known as a 510(k), and some of the requirements of the FDA's Quality System Regulations (QSRs), we would be subject to ongoing FDA "general controls," which include compliance with FDA regulations for labeling, inspections by the FDA, complaint evaluation, corrections and removals reporting, promotional restrictions, reporting adverse events or malfunctions for our products, and general prohibitions against misbranding and adulteration.

In addition, we may in the future submit 510(k) premarket notifications to the FDA to obtain FDA clearance of certain of our products on a selective basis. It is possible, in the event we elect to submit 510(k) applications for certain of our products, that the FDA would take the position that a more burdensome premarket application, such as a premarket approval application (PMA) or a *de novo* application is required for some of our products. If such

applications were required, greater time and investment would be required to obtain FDA approval. Even if the FDA agreed that a 510(k) was appropriate, FDA clearance can be expensive and time consuming. It generally takes a significant amount of time to prepare a 510(k), including conducting appropriate testing on our products, and several months to years for the FDA to review a submission. Notwithstanding the effort and expense, FDA clearance or approval could be denied for some or all of our products for which we choose to market as a medical device or a clinical diagnostic device. Even if we were to seek and obtain regulatory approval or clearance, it may not be for the intended uses we request or that we believe are important or commercially attractive. There can be no assurance that future products for which we may seek premarket clearance or approval will be approved or cleared by FDA or a comparable foreign regulatory authority on a timely basis, if at all, nor can there be assurance that labeling claims will be consistent with our anticipated claims or adequate to support continued adoption of such products. Compliance with FDA or comparable foreign regulatory authority regulations will require substantial costs, and subject us to heightened scrutiny by regulators and substantial penalties for failure to comply with such requirements or the inability to market our products. The lengthy and unpredictable premarket clearance or approval process, as well as the unpredictability of the results of any required clinical studies, may result in our failing to obtain regulatory clearance or approval to market such products, which would significantly harm our business, results of operations, reputation, and prospects.

If we sought and received regulatory clearance or approval for certain of our products, we would be subject to ongoing FDA obligations and continued regulatory oversight and review, including the general controls listed above and the FDA's QSRs for our development and manufacturing operations. In addition, we would be required to obtain a new 510(k) clearance before we could introduce subsequent modifications or improvements to such products. We could also be subject to additional FDA post-marketing obligations for such products, any or all of which would increase our costs and divert resources away from other projects. If we sought and received regulatory clearance or approval and are not able to maintain regulatory compliance with applicable laws, we could be prohibited from marketing our products for use as, or in the performance of, clinical diagnostics and/or could be subject to enforcement actions, including warning letters and adverse publicity, fines, injunctions, and civil penalties; recall or seizure of products; operating restrictions; and criminal prosecution.

In addition, we could decide to seek regulatory clearance or approval for certain of our products in countries outside of the United States. Sales of such products outside the United States will likely be subject to foreign regulatory requirements, which can vary greatly from country to country. As a result, the time required to obtain clearances or approvals outside the United States may differ from that required to obtain FDA clearance or approval and we may not be able to obtain foreign regulatory approvals on a timely basis or at all. In Europe, we would need to comply with the new Medical Device Regulation 2017/745 and In Vitro Diagnostic Regulation 2017/746, which became effective May 26, 2017, with application dates of May 26, 2021 (postponed from 2020) and May 26, 2022 respectively. This will increase the difficulty of regulatory approvals in Europe in the future. In addition, the FDA regulates exports of medical devices. Failure to comply with these regulatory requirements or obtain and maintain required approvals, clearances and certifications could impair our ability to commercialize our products for diagnostic use outside of the United States.

Our products could become subject to government regulation as medical devices by the FDA and other regulatory agencies even if we do not elect to seek regulatory clearance or approval to market our products for diagnostic purposes, which would adversely impact our ability to market and sell our products and harm our business. If our products become subject to FDA 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 do not currently expect our Proteograph Product Suite to be subject to the clearance or approval of the FDA, as it is not intended to be used for the diagnosis, treatment or prevention of disease. However, as we expand our product line and the applications and uses of our current or products into new fields, certain of our future products could become subject to regulation by the FDA, or comparable international agencies, including requirements for regulatory clearance or approval of such products before they can be marketed. Also, 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. For example, our customers may independently elect to use our

RUO labeled products in their own laboratory developed tests (LDTs) for clinical diagnostic use, which could subject our products to government regulation, and the regulatory clearance or approval and maintenance process for such products may be uncertain, expensive, and time-consuming. Regulatory requirements related to marketing, selling, and distribution of RUO products could change or be uncertain, even if clinical uses of our RUO products by our customers were done without our consent. 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, or results of operations could be adversely affected.

The FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against laboratories offering LDTs. However, on October 3, 2014, the FDA issued two draft guidance documents that set forth the FDA's proposed risk-based framework for regulating LDTs, which are designed, manufactured, and used within a single laboratory. The draft guidance documents provide the anticipated details through which the FDA would propose to establish an LDT oversight framework, including premarket review for higher-risk LDTs, such as those that have the same intended use as FDA-approved or cleared companion diagnostic tests currently on the market. In January 2017, the FDA announced that it would not issue final guidance on the oversight of LDTs and manufacturers of products used for LDTs, but would seek further public discussion on an appropriate oversight approach, and give Congress an opportunity to develop a legislative solution. More recently, the FDA has issued warning letters to certain genomics labs for illegally marketing genetic tests that claim to predict patients' responses to specific medications, noting that the FDA has not created a legal "carve-out" for LDTs and retains discretion to take action when appropriate, such as when certain genomic tests raise significant public health concerns.

As manufacturers develop more complex diagnostic tests and diagnostic software, the FDA may increase its regulation of LDTs. Any future legislative or administrative rule making or oversight of LDTs, if and when finalized, may impact the sales of our products and how customers use our products, and may require us to change our business model in order to maintain compliance with these laws. We cannot predict how these various efforts will be resolved, how Congress or the FDA will regulate LDTs in the future, or how that regulatory system will impact our business. Changes to the current regulatory framework, including the imposition of additional or new regulations, including regulation of our products, could arise at any time during the development or marketing of our products, which may negatively affect our ability to obtain or maintain FDA or comparable regulatory approval of our products, if required. Further, sales of devices for diagnostic purposes may subject us to additional healthcare regulation and enforcement by the applicable government agencies. Such laws include, without limitation, state and federal anti-kickback or anti-referral laws, healthcare fraud and abuse laws, false claims laws, privacy and security laws, Physician Payments Sunshine Act and related transparency and manufacturer reporting laws, and other laws and regulations applicable to medical device manufacturers.

Additionally, on November 25, 2013, the FDA issued Final Guidance "Distribution of In Vitro Diagnostic Products Labeled for Research Use Only." The guidance emphasizes that the FDA will review the totality of the circumstances when it comes to evaluating whether equipment and testing components are properly labeled as RUO. The final guidance states that merely including a labeling statement that the product is for research purposes only will not necessarily render the device exempt from the FDA's clearance, approval, and other regulatory requirements if the circumstances surrounding the distribution, marketing and promotional practices indicate that the manufacturer knows its products are, or intends for its products to be, used for clinical diagnostic purposes. These circumstances may include written or verbal sales and marketing claims or links to articles regarding a product's performance in clinical applications and a manufacturer's provision of technical support for clinical applications.

We may need to raise additional capital to fund commercialization plans for our Proteograph Product Suite, including manufacturing, sales and marketing activities, expand our investments in research, and develop and commercialize new products and applications.

Based on our current plans, we believe that our current cash and cash equivalents and anticipated cash flow from operations will be sufficient to meet our anticipated cash requirements for at least twelve months from the date of this prospectus. If our available cash resources, net proceeds from this offering and anticipated cash flow from operations are insufficient to satisfy our liquidity requirements including because of lower demand for our products or the realization of other risks described in this prospectus, we may be required to raise additional capital prior to

such time 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.

We will 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:

- increasing our sales and marketing and other commercialization efforts to drive market adoption of our Proteograph Product Suite, once commercialized;
- funding development and marketing efforts of our Proteograph or any other future products;
- expanding our technologies into additional markets;
- acquiring, licensing or investing in technologies and other intellectual property rights;
- acquiring or investing in complementary businesses or assets; and
- financing capital expenditures and general and administrative expenses.

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

- our rate of progress in launching and commercializing our Proteograph and new products, and the cost of the sales and marketing activities associated with establishing adoption of our products;
- our rate of progress in, and cost of research and development activities associated with, products in research and development; and
- the effect of competing technological and market developments.

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. If we raise funds by issuing debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our Class A common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement 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 technologies or products or grant licenses on terms that are not favorable to us.

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 may acquire other companies or technologies, which could divert our management's attention, result in additional dilution to our stockholders and otherwise disrupt our operations and harm our operating results.

We may in the future seek to acquire or invest in businesses, applications or technologies that we believe could complement or expand our Proteograph Product Suite or future products, enhance our technical capabilities or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various costs and expenses in identifying, investigating and pursuing suitable acquisitions, whether or not they are consummated. We may not be able to identify desirable acquisition targets or be successful in entering into an agreement with any particular target or obtain the expected benefits of any acquisition or investment.

To date, the growth of our operations has been organic, and we have limited experience in acquiring other businesses or technologies. We may not be able to successfully integrate acquired personnel, operations and technologies, or effectively manage the combined business following an acquisition. Acquisitions could also result in dilutive issuances of equity securities, the use of our available cash, or the incurrence of debt, which could harm our operating results. In addition, if an acquired business fails to meet our expectations, our operating results, business and financial condition may suffer.

We may not realize the benefits of PrognomIQ as a separate healthcare company in the area of disease testing.

In August 2020, we transferred certain assets to PrognomIQ, as a separate healthcare company to help enable the growth of ecosystems around new applications that leverage our Proteograph for unbiased, deep and large-scale proteomic information. We continue to hold approximately 19% of the outstanding capital stock of PrognomIQ. We may not realize the potential benefits of forming PrognomIQ for a variety of reasons, including:

- PrognomIQ may be unable to successfully develop viable testing products;
- PrognomIQ's business may not help demonstrate the value of our Proteograph;
- we may be unable to reach agreement with PrognomIQ on future commercial arrangements;
- PrognomIQ may not become a meaningful customer of ours;
- PrognomIQ may need to raise additional funding in the future and be unable to do so; and
- the formation of PrognomIQ and our continuing equity stake in PrognomIQ may add complexities to our business from a finance, tax and accounting perspective.

Further, PrognomIQ is a separate entity, and as such, may decide over time to pursue a different business model, decide to do business with our competitors in addition to or instead of with us, be acquired by a competitor or take other actions that may not be beneficial to us.

Risks Related to our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our products and technology, 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 and protect 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 competitors' 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 licensor's 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 license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner or in all jurisdictions. 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. 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.

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. 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. 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 Proteograph Product Suite 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 licensor may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we and our licensor 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 licensor's 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 licensor's 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 licensor's 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 licensor's patents at risk of being invalidated or interpreted narrowly and our and our licensor's 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 our licensor initiate, or that are initiated against us or our licensor, 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.

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

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 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 licensor 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. 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, derivation and equivalent proceedings in non-U.S. jurisdictions, such as opposition proceedings. Such proceedings could result in revocation of or amendment to our patents in such a way that they no longer cover and protect our products. With respect to the validity of our patents, for example, we cannot be certain that there is no invalidating prior art of which we, our licensor, our or its 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, including parts of our Proteograph Product Suite, and to maintain our competitive position. 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, 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 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, business, financial condition, results of operations and prospects.

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.

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. 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 challenging the inventorship of our patents and other intellectual property.

We or our licensor may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets or other intellectual property as an inventor or co-inventor. For example, we or our licensor may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our products. In addition, counterparties to our consulting, sponsored research, software development and other agreements may assert that they have an ownership interest in intellectual property developed under such arrangements. In particular, certain software development agreements pursuant to which certain third parties have developed parts of our proprietary software may not include provisions that expressly assign to us ownership of all intellectual property developed for us by such third parties. Furthermore, certain of our sponsored research agreements pursuant to which we provide certain research services for third parties do not assign to us all intellectual property developed under such agreements. As such, we may not have the right to use all such developed intellectual property under such agreements, we may be required to obtain licenses from third parties and such licenses may not be available on commercially reasonable terms or at all, or may be non-exclusive. If we are unable to obtain such licenses and such licenses are necessary for the development, manufacture and commercialization of our products and technologies, we may need to cease the development, manufacture and commercialization of our products and technologies. Litigation may be necessary to defend against these and other claims challenging inventorship of our or our licensor's ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensor fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our Proteograph, including our software, workflows, consumables and reagent kits. In such an event, we may be required to obtain licenses from third parties and such licenses may not be available on commercially reasonable terms or at all, or may be non-exclusive. If we are unable to obtain and maintain such licenses, we may need to cease the development, manufacture and commercialization of our products and technologies. Even if we are successful in defending against such claims, litigation could result in substantial

costs and be a distraction to management and other employees, and certain customers or partners may defer engaging with us until the particular dispute is resolved. Any of the foregoing 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. For example, we are aware of a third party in certain jurisdictions outside of the United States that have filed to own the trademark registrations for the trademark, SEER, and have opposed our application for registration for such trademark. 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 have and 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. 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 Proteograph Product Suite 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 product 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, 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.

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 against us 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. For example, we are aware of a U.S. issued patent owned by a third party that is directed to a method for diagnosing a biological condition by analyzing certain types of proteomes, including through the use of nanoparticles. Such patent is expected to expire in 2026, without taking into account any possible patent term adjustments or extensions. We are also aware of a pending patent application in Europe owned by a third party that is directed to methods of identifying biomarkers in biofluids using nanoparticles and, if issued, is projected to expire in 2037, without taking into account any possible patent term adjustments or extensions. Such patent and patent application could be construed to cover our products and technologies, including our Proteograph Product Suite. If any of these third parties, or any other third parties, were to assert these or any other 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 nonexclusive basis, in which case third parties, including our competitors, could use the same licensed intellectual property to compete with us. 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, and the costs of these opposition proceedings could be substantial. 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 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 Class A 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 licensor 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 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. In such an event, our competitors may be able to enter the market without infringing our patents and this circumstance would have a material adverse effect on our business, financial condition, results of operations and prospects.

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

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 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.

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.

Furthermore, we or our licensor 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. 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. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

We currently rely on a license from a third party, and in the future may rely on additional licenses from other third parties, in relation to our Proteograph Product Suite 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 The Brigham and Women’s Hospital, Inc. (BWH), for patents relating to methods of using nanoparticles to measure the proteome, including the methods used in our Proteograph Product Suite and may in the future rely on licenses from other third parties with respect to our Proteograph Product Suite or other technology. Our rights to use licensed technology in our business are subject to the continuation of and compliance with the terms of this license 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 this license could result in the loss of significant rights and could harm our ability to develop, manufacture and commercialize our Proteograph. We may need to obtain additional licenses from others to advance our research, development and commercialization activities. For instance, under our license agreement with BWH, we currently in-license two

patent families that include the methods used in our Proteograph Product Suite, and to the extent any additional intellectual property developed by BWH that are not included in such licensed patent families are necessary or useful for our Proteograph Product Suite, 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 licensor and any future licensors to obtain, maintain and enforce patent protection for our licensed intellectual property. Under our license agreement with BWH and under any licenses we may enter into in the future, BWH controls, and future licensors may control, the prosecution, maintenance and enforcement of patents and patent applications that are licensed to us. BWH 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, BWH 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 prospects, financial condition or results of operations.

Our current license agreement imposes, 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, our licensor(s) may have the right to terminate our license, in which event we would not be able to develop or market products or technology covered by the licensed intellectual property. 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 licensor regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- our financial or other obligations under the license agreement;
- whether, and the extent to which, our products, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our diligence obligations under the license agreement 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 licensor(s); 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 licensor(s) 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 licensor(s), 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.

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 Proteograph, 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, including our Proteograph Product Suite. 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.

In addition, 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 has certain rights, including march-in rights, to patent rights and technology funded by the U.S. government and licensed to us from BWH. 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 provide the U.S. government to, at any time, take title 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. In addition, our rights in such inventions may be subject to certain

requirements to manufacture products embodying such inventions in the United States. 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.

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 warranties 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. 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 be subject to suits by third parties claiming ownership of what we believe to be open source software, or claiming non-compliance with the applicable open source licensing terms. Use of open source software may also present additional security risks because the public availability of such software may make it easier for hackers and other third parties to compromise or attempt to compromise our technology platform and systems.

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 licensor(s), 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 licensor(s), 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 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; and
- 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.

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

Risks Related to this Offering and Ownership of Our Class A Common Stock

Prior to this offering, there has been no public market for shares of our Class A common stock and an active trading market for our Class A common stock may never develop or be sustained.

Prior to this offering, there has been no public market for shares of our Class A common stock. We have applied to list our Class A common stock on the under the symbol "SEER." We cannot assure you that an active trading market for our Class A common stock will develop on that exchange or elsewhere. If an active trading market does not develop, or develops but is not maintained, you may have difficulty selling any of our Class A common stock that you purchase due to the limited public float. Accordingly, we cannot assure you of your ability to sell your shares of Class A common stock when desired or the prices that you may obtain for your shares.

The market price of our Class A common stock may be volatile, which could result in substantial losses for investors purchasing shares in this offering.

The initial public offering price for our Class A common stock will be determined through negotiations with the underwriters. This initial public offering price may differ from the market price of our Class A common stock after the offering. As a result, you may not be able to sell your Class A common stock at or above the initial public offering price. Some of the factors that may cause the market price of our Class A common stock to fluctuate include, but are not limited to:

- the timing of our launch and commercialization of our products and degree to which such launch and commercialization meets the expectations of securities analysts and investors;
- actual or anticipated fluctuations in our operating results, including fluctuations in our quarterly and annual results;
- operating expenses being more than anticipated;
- the failure or discontinuation of any of our product development and research programs;
- changes in the structure or funding of research at academic and research laboratories and institutions, including changes that would affect their ability to purchase our instruments or consumables;
- the success of existing or new competitive businesses or technologies;
- announcements about new research programs or products of our competitors;

- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- litigation and governmental investigations involving us, our industry or both;
- regulatory or legal developments in the United States and other countries;
- volatility and variations in market conditions in the life sciences technology sector generally, or the proteomics or genomics sectors specifically;
- investor perceptions of us or our industry;
- the level of expenses related to any of our research and development programs or products;
- actual or anticipated changes in our estimates as to our financial results or development timelines, variations in our financial results or those of companies that are perceived to be similar to us or changes in estimates or recommendations by securities analysts, if any, that cover our Class A common stock or companies that are perceived to be similar to us;
- whether our financial results meet the expectations of securities analysts or investors;
- the announcement or expectation of additional financing efforts;
- sales of our Class A common stock by us or sales of our Class A common stock or Class B common stock by our insiders or other stockholders;
- the expiration of market standoff or lock-up agreements;
- general economic, industry and market conditions; and
- the COVID-19 pandemic, natural disasters or major catastrophic events.

Recently, stock markets in general, and the market for life sciences technology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations, particularly in light of the current COVID-19 pandemic. Broad market and industry factors may seriously affect the market price of our Class A common stock, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our stock shortly following this offering. Following periods of such volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

The multi-class structure of our common stock will have the effect of concentrating voting control with those stockholders who held our capital stock prior to the completion of this offering and it may depress the trading price of our Class A common stock.

Our Class A common stock, which is the stock we are offering in this offering, has one vote per share, and our Class B common stock has ten votes per share, except as otherwise required by law. Our Class B common stock is held by our founders and early investors. Following this offering, the holders of our Class B common stock will hold in the aggregate % of the voting power of our capital stock.

As a result, the holders of our Class B common stock collectively will continue to control a majority of the combined voting power of our common stock and therefore be able to control all matters submitted to our stockholders for approval. This control will limit to the stockholders' influence over corporate matters for approximately five years following this offering, including the election of directors, amendments of our organizational documents and any sale of the company or other major corporate transaction requiring stockholder

approval. This may prevent or discourage unsolicited proposals to acquire the company. Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions, such as certain transfers effected for estate planning purposes where sole dispositive power and exclusive voting control with respect to the shares of Class B common stock is retained by the transferring holder. The Class B common stock will also automatically convert into Class A common stock upon the earlier of the first day following the fifth anniversary of the closing of this offering and December 31, 2025. See the section titled "Description of Capital Stock—Common stock—Conversion of Class B Common Stock" for additional information about conversions. The conversion of Class B common stock to Class A common stock will have the effect, over time, of increasing the relative voting power of those individual holders of Class B common stock who retain their shares over the long term.

In addition, FTSE Russell and Standard & Poor's no longer allow most newly public companies utilizing dual or multi-class capital structures to be included in their indices. Affected indices include the Russell 2000 and the S&P 500, S&P MidCap 400, and S&P SmallCap 600, which together make up the S&P Composite 1500. Under the announced policies, our multi-class capital structure would make us ineligible for inclusion in any of these indices, and as a result, mutual funds, exchange-traded funds and other investment vehicles that attempt to passively track these indices will not be investing in our stock. It is unclear what effect, if any, exclusion from any indices has had on the valuations of the affected publicly traded companies. It is possible that such policies could depress the valuations of public companies excluded from such indices compared to those of other companies that are included.

If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our Class A common stock, the price of our Class A common stock could decline.

The trading market for our Class A common stock will rely in part on the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain research coverage by industry or securities analysts. If no or few analysts commence coverage of us, the trading price of our Class A common stock could decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our Class A common stock, the price of our Class A common stock could decline. If one or more of these analysts cease to cover our Class A common stock, we could lose visibility in the market for our Class A common stock, which in turn could cause the price of our Class A common stock to decline.

Sales of a substantial number of shares of our Class A common stock by our existing stockholders following this offering could cause the price of our Class A common stock to decline.

Sales of a substantial number of shares of our Class A common stock in the public market could occur at any time following the expiration of the market standoff and lock-up agreements or the early release of these agreements or the perception in the market that the holders of a large number of shares of Class A common stock intend to sell shares and could reduce the market price of our Class A common stock. After giving effect to (i) the filing and effectiveness of our amended and restated certificate of incorporation, (ii) the automatic conversion of all shares of our convertible preferred stock outstanding as of , 2020 into shares of Class A common stock and (iii) the issuance and sale of shares of Class A common stock by us in this offering, we will have shares of Class A common stock outstanding and 20,000,000 shares of Class B common stock outstanding. Of these shares, the shares of Class A common stock we are selling in this offering may be resold in the public market immediately, unless purchased by our affiliates. The remaining 67,862,770 shares of Class A common stock, or % of our outstanding shares of Class A common stock after this offering and all shares of our Class B common stock (and any share of Class A common stock into which they are converted) are currently prohibited or otherwise restricted from being sold in the public market under securities laws, market standoff agreements entered into by our stockholders with us, or lock-up agreements entered into by our stockholders with the underwriters; however, subject to applicable securities law restrictions and excluding shares of Class A common stock issued pursuant to the early exercise of unvested stock options that will remain unvested, the shares of our Class A common stock outstanding after this offering will be able to be sold in the public market beginning on , 2021. The representatives may, in their sole discretion, release all or some portion of the shares subject to lock-up agreements at any time and for any reason. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public

market to the extent permitted by the provisions of applicable vesting schedules, any applicable market standoff and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act of 1933, as amended, or the Securities Act.

Moreover, after this offering, holders of an aggregate of 63,413,774 shares of our Class A common stock will have rights, subject to conditions, to require us to file registration statements with the SEC covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders as described under "Description of Capital Stock—Registration Rights." We also plan to register all shares of Class A common stock that we may issue under our equity compensation and employee stock purchase plans. Once we register these shares, they can be freely sold in the public market upon issuance and, if applicable, vesting, subject to volume limitations applicable to affiliates and the lock-up agreements described in the section titled "Underwriting" in this prospectus. Sales of Class A common stock in the public market as restrictions end or pursuant to registration rights may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the trading price of our Class A common stock to fall and make it more difficult for you to sell shares of our Class A common stock. See the section titled "Shares Eligible for Future Sale" for more information regarding shares of Class A common stock that may be sold in the public market after this offering.

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

We cannot specify with certainty the particular uses of the net proceeds we will receive from this offering. Our management will have broad discretion in the application of the net proceeds, including for any of the purposes described in the section titled "Use of Proceeds" in this prospectus. Our management may spend a portion or all of the net proceeds from this offering in ways that our stockholders may not desire or that may not yield a favorable return. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations and prospects. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

We do not expect to pay any dividends for the foreseeable future. Investors in this offering may never obtain a return on their investment.

You should not rely on an investment in our Class A common stock to provide dividend income. We do not anticipate that we will pay any dividends to holders of our Class A common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations, fund our research and development programs and continue to invest in our commercial infrastructure. In addition, any future credit facility or financing we obtain may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our Class A common stock. Accordingly, investors must rely on sales of their Class A common stock after price appreciation, which may never occur, as the only way to realize any return on their investment. As a result, investors seeking cash dividends should not purchase our Class A common stock.

Our amended and restated bylaws designate 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 provide that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, 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 that will become effective upon the closing of this offering specifies that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, stockholders, officers, or other employees to us or our stockholders, (c) any action or proceeding asserting a claim arising pursuant to, or seeking to enforce any right, obligation or remedy under, any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws, (d) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction on the Court of Chancery of the State of Delaware, or (e) any action or proceeding asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another state court in

Delaware or, if no state court in Delaware has jurisdiction, the federal district court for the District of Delaware) and any appellate court therefrom, in all cases subject to the court having jurisdiction over the claims at issue and the indispensable parties; provided that the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act.

Section 22 of the Securities Act of 1933, as amended (the Securities Act), creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated bylaws also provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

Any person or entity purchasing or otherwise acquiring or holding or owning (or continuing to hold or own) any interest in any of our securities shall be deemed to have notice of and consented to the foregoing bylaw provisions. Although we believe these exclusive forum provisions benefit us by providing increased consistency in the application of Delaware law and federal securities laws in the types of lawsuits to which each applies, the exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum of its choosing for disputes with us or any of our directors, officers, stockholders, or other employees, which may discourage lawsuits with respect to such claims against us and our current and former directors, officers, stockholders, or other employees. Our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder as a result of our exclusive forum provisions. Further, in the event a court finds either exclusive forum provision contained in our amended and restated bylaws to be unenforceable or inapplicable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our results of operations.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect prior to the closing of this offering 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 Class A common stock.

Our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our restated certificate of incorporation and restated bylaws contain provisions that may make the acquisition of our company more difficult, including the following:

- any transaction that would result in a change in control of our company requires the approval of a majority of our outstanding Class B common stock voting as a separate class;
- our multi-class common stock structure provides our holders of Class B common stock with the ability to significantly influence the outcome of matters requiring stockholder approval, even if they own significantly less than a majority of the shares of our outstanding Class A common stock and Class B common stock;
- our board of directors will be classified into three classes of directors with staggered three-year terms and directors will only be able to be removed from office for cause by the affirmative vote of holders of at least two-thirds of the voting power of our then outstanding capital stock;
- certain amendments to our amended and restated certificate of incorporation will require the approval of stockholders holding two-thirds of the voting power of our then outstanding capital stock;
- any stockholder-proposed amendment to our amended and restated bylaws will require the approval of stockholders holding two-thirds of the voting power of our then outstanding capital stock;

- our stockholders will only be able to take action at a meeting of stockholders and will not be able to take action by written consent for any matter;
- our stockholders will be able to act by written consent only if the action is first recommended or approved by the board of directors;
- vacancies on our board of directors will be able to be filled only by our board of directors and not by stockholders;
- only the chair of the board of directors, chief executive officer or a majority of the board of directors are authorized to call a special meeting of stockholders;
- certain litigation against us can only be brought in Delaware;
- our restated certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued, without the approval of the holders of our capital stock; and
- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders.

These anti-takeover defenses could discourage, delay, or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors of their choosing and to cause us to take other corporate actions they desire, any of which, under certain circumstances, could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our Class A common stock.

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

As of December 31, 2018 and 2019, we had U.S. federal and state net operating loss carryforwards, or NOLs, of $5.3 million and $35.1 million, respectively, which if not utilized will expire in 2031 for state purposes. 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 an “ownership change.” In addition, this offering or 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, including in connection with this offering, 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 the reduced disclosure requirements applicable to emerging growth companies may make our Class A common stock less attractive to investors.

We are an “emerging growth company,” as defined in 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 SOX, 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 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. As a result, the information we provide stockholders will be different than the information that is available with respect to other public companies. In this prospectus, we have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our Class A common stock less attractive if we rely on these exemptions. If some investors find our Class A common stock less attractive as a result, there may be a less active trading market for our Class A common stock and 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 financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

We will incur significant increased costs and management resources as a result of operating as a public company.

As a public company, we will 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, in anticipation of becoming a public company, we will need to adopt additional internal controls and disclosure controls and procedures, retain a transfer agent and adopt 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 SOX, and the related rules and regulations implemented by the SEC and , have increased legal and financial compliance costs and will make some compliance activities more time-consuming. We intend 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. In connection with this offering, we intend to increase our directors' and officers' insurance coverage, which will increase our insurance cost. In the future, it may be more expensive or more difficult for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain 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.

If you purchase our Class A common stock in this offering, you will incur immediate and substantial dilution as a result of this offering.

If you purchase our Class A common stock in this offering, you will incur immediate and substantial dilution of $ per share, representing the difference between the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, and our pro forma net tangible book value per share after giving effect to (i) the filing and effectiveness of our amended and restated certificate of incorporation, (ii) the automatic conversion of all shares of our convertible preferred stock outstanding as of , 2020 into shares of Class A common stock and (iii) the issuance and sale of shares of Class A common stock by us in this offering. As of , 2020, there were shares of

our Class A common stock subject to outstanding stock options with a weighted-average exercise price of $ per share. To the extent that these outstanding stock options and warrants are ultimately exercised or the underwriters exercise their option to purchase additional shares of our Class A common stock, you will incur further dilution. See the section titled “Dilution” for more information.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy, research and development costs, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that are in some cases beyond our control and may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “would,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “believe,” “estimate,” “predict,” “potential,” or “continue” or the negative of these terms or other similar expressions. Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

- estimates of our addressable market, market growth, future revenue, key performance indicators, expenses, capital requirements and our needs for additional financing;
- our ability to successfully implement our three phase commercial launch plan;
- the implementation of our business model and strategic plans for our Proteograph Product Suite;
- our expectations regarding the rate and degree of market acceptance of our Proteograph Product Suite;
- competitive companies and technologies and our industry;
- our ability to manage and grow our business and commercialize our Proteograph;
- 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 manufacturers and suppliers;
- the potential effects of government regulation;
- our ability to hire and retain key personnel and to manage our future growth effectively;
- our ability to obtain additional financing in this or future offerings;
- the volatility of the trading price of our Class A common stock;
- our expectations regarding use of proceeds from this offering;
- the benefits of the PrognomIQ, Inc. transaction;
- the impact of COVID-19 on our business; and
- our expectations about market trends.

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described in the section titled “Risk Factors” and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be

achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we undertake no obligation to update or revise any forward-looking statements contained herein to reflect events or circumstances after the date of this prospectus, whether as a result of any new information, future events or otherwise.

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

MARKET, INDUSTRY AND OTHER DATA

This prospectus contains estimates, projections and other information concerning our industry, our business and the markets for our Proteograph Product Suite, including data regarding the estimated size of such markets. We obtained the industry, market and similar dataset forth in this prospectus from our internal estimates and research and from academic and industry research, publications, surveys and studies conducted by third parties, including governmental agencies. In some cases, we do not expressly refer to the sources from which this information is derived. In that regard, when we refer to one or more sources of this type of information in any paragraph, you should assume that other information of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. While we believe that the data we use from third parties are reliable, we have not separately verified these data. Further, while we believe our internal research is reliable, such research has not been verified by any third party. You are cautioned not to give undue weight to any such information, projections and estimates. The sources listed below are not a part of this prospectus and are not incorporated by reference in this prospectus.

The sources of industry, market and other data contained in this prospectus are listed below:

1. Allied Market Research. “Global Proteomics Market - Opportunity Analysis and Industry Forecast, 2018-2025” (March 2019).

2. Technavio. “Genomics Market by Solution and Geography - Forecast and Analysis 2020-2024”.

3. Pubmed Database. PubMed is the National Library of Medicine. PubMed comprises more than 30 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

4. UniProt Database. The Universal Protein Resource (UniProt) is a comprehensive resource for protein sequence and annotation data. The UniProt databases are the UniProt Knowledgebase (UniProtKB), the UniProt Reference Clusters (UniRef), and the UniProt Archive (UniParc).

5. ClinVar. ClinVar is a freely accessible, public archive of reports of the relationships among human variations and phenotypes, with supporting evidence.

6. dbSNP. dbSNP is a public-domain archive for human single nucleotide variations, microsatellites, and small-scale insertions and deletions along with publication, population frequency, molecular consequence, and genomic and RefSeq mapping information for both common variations and clinical mutations.

There are published studies referenced throughout this prospectus, the citations for those studies are listed below:

1. Blume, J. E. et al. Rapid, deep and precise profiling of the plasma proteome with multi-nanoparticle protein corona. *Nat. Commun.* 11, (2020).

2. Keshishian, H. et al. Quantitative, multiplexed workflow for deep analysis of human blood plasma and biomarker discovery by mass spectrometry. *Nat. Protoc.* 12, 1683–1701 (2017).

3. Schwenk, J. M. et al. The Human Plasma Proteome Draft of 2017: Building on the Human Plasma PeptideAtlas from Mass Spectrometry and Complementary Assays. *J. Proteome Res.* 16, 4299–4310 (2017).

4. Liao, W. Y. et al. Heparin co-factor II enhances cell motility and promotes metastasis in non-small cell lung cancer. *J. Pathol.* 235, 50–64 (2015).

5. Szklarczyk, D. et al. STRING v11: Protein-protein association networks with increased coverage, supporting functional discovery in genome-wide experimental datasets. *Nucleic Acids Res.* 47, D607–D613 (2019).

USE OF PROCEEDS

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

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover of this prospectus, would increase or decrease, as applicable, the aggregate net proceeds to us from this offering by approximately $ million, assuming the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares of Class A common stock offered by us would increase or decrease, as applicable, the net proceeds to us from this offering by approximately $ million, assuming that the assumed initial public offering price remains the same, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the initial public offering price or the number of shares by these amounts would have a material effect on our uses of the proceeds from this offering, although it may change the time at which we will need to seek additional capital.

The principal purposes of this offering are to obtain additional capital to support our operations, establish a public market for our Class A common stock and facilitate our future access to the public capital markets. We currently intend to use the net proceeds from this offering, together with our existing cash to support research and development, to commercialize our Proteograph Product Suite and for general corporate purposes. We may also use a portion of the proceeds to in-license, acquire or invest in additional businesses, technologies, products or assets. Although we have no specific agreements, commitments or understandings with respect to any in-licensing activity or acquisitions, we evaluate these opportunities and engage in related discussions with other companies from time-to-time.

Our expected use of proceeds from this offering represents our current intentions based on our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the proceeds to be received upon the completion of this offering or the actual amounts that we will spend on the uses set forth above.

The amount and timing of our actual expenditures will depend on numerous factors, including the results of our research and development and commercialization efforts, cash flows from operations, the anticipated growth of our business and any unforeseen cash needs. As a result, our management will have broad discretion over the use of the proceeds from this offering.

Pending their uses, we plan to invest the net proceeds of this offering in short-term, interest-bearing, investment-grade instruments, including certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have not declared or paid any cash dividends on our capital stock since our inception. We intend to retain future earnings, if any, to finance the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Payment of future cash dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements and contractual restrictions of then-existing debt instruments and other factors that our board of directors deems relevant.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of , 2020:

- on an actual basis;
- on a pro forma basis to give effect to:
  - the automatic conversion of all of our outstanding shares of convertible preferred stock into an aggregate of shares of Class A common stock immediately prior to the completion of this offering as if such conversion had occurred on , 2020,
  - the filing and effectiveness of our amended and restated certificate of incorporation, which will occur immediately prior to the completion of this offering; and
- on a pro forma as adjusted basis, to give effect to:
  - the pro forma adjustments set forth above; and
  - the sale and issuance of shares of our Class A common stock by us in this offering, based upon the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information set forth in the table below is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

You should read this information in conjunction with our financial statements and the related notes and the sections titled “Selected Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” that are included elsewhere in this prospectus.

	, 2020		
	Actual	**Pro Forma**	**Pro Forma as Adjusted[1]**
	(in thousands, except share and per share data)		
Cash and cash equivalents	$	$	$
Stockholders’ equity:			
Convertible preferred stock, par value $0.00001 per share: shares authorized, issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted			
Preferred stock, par value $0.00001 per share: no shares authorized, issued and outstanding, actual; shares authorized and no shares issued and outstanding, pro forma and pro forma as adjusted			
Class A common stock, par value $0.00001 per share: shares authorized, issued and outstanding, actual; shares authorized, shares issued and outstanding, pro forma; and shares authorized, shares issued and outstanding, pro forma as adjusted			
Class B common stock, par value $0.00001 per share: shares authorized, shares issued and outstanding, actual; shares authorized, shares issued and outstanding, pro forma and pro forma as adjusted			
Additional paid-in capital			
Accumulated other comprehensive income			
Accumulated deficit			
Total stockholders’ equity			
Total capitalization	$	$	$

(1) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the amount of our pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders’ equity and total capitalization by $, assuming that the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions payable by us. An increase or decrease of 1.0 million shares in the number of shares of Class A common stock offered by us would increase or decrease, as applicable, the amount of our pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders’ equity and total capitalization by $, assuming the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions payable by us.

The pro forma and pro forma as adjusted columns in the table above are based on shares of our Class A common stock and Class B common stock outstanding as of , 2020, and excludes the following:

- shares of our Class A common stock issuable upon the exercise of options to purchase shares of our Class A common stock outstanding as of , 2020, with a weighted-average exercise price of $ per share;
- shares of our Class A common stock issuable upon the exercise of options to purchase shares of our Class A common stock granted after , 2020, with a weighted-average exercise price of $ per share;

- shares of our Class A common stock issuable upon the vesting of RSUs outstanding as of , 2020;
- shares of our Class A common stock issuable upon the vesting of RSUs granted after , 2020; and
- shares of our Class A common stock reserved for future issuance under our equity compensation plans, consisting of:
  - shares of our Class A common stock to be reserved for future issuance under our 2020 Plan, which will become effective prior to the completion of this offering, and any additional shares that become available under our 2020 Plan pursuant to provisions thereof that automatically increase the share reserve under the plan each year; and
  - shares of our Class A common stock reserved for future issuance under our 2017 Plan (and no shares of our RSU Plan, and upon the termination of such 2017 Plan and RSU Plan in connection with the effectiveness of our 2020 Plan, an equivalent number of shares of our Class A common stock to be added to the shares reserved for future issuance under our 2020 Plan above.

DILUTION

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

Our historical net tangible book value (deficit) as of , 2020 was $ million, or $ per share. Our historical net tangible book value (deficit) is the amount of our total tangible assets less our total liabilities. Historical net tangible book value per share represents historical net tangible book value (deficit) divided by the number of shares of our Class A common stock and Class B common stock outstanding as of , 2020.

Our pro forma net tangible book value as of , 2020 was $ million, or $ per share. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to the conversion of all outstanding shares of our convertible preferred stock into an aggregate of shares of Class A common stock immediately prior to the completion of this offering. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares of our Class A common stock and Class B common stock outstanding as of , 2020, after giving effect to the conversion of all outstanding shares of our convertible preferred stock into an aggregate of shares of our Class A common stock immediately prior to the completion of this offering.

After giving further effect to our sale of shares of Class A common stock in this offering at the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, based on shares of Class A common stock outstanding as of , 2020, our pro forma as adjusted net tangible book value as of , 2020 would have been approximately $ million, or approximately $ per share. This represents an immediate increase in pro forma as adjusted net tangible book value of $ per share to our existing stockholders and an immediate dilution in pro forma as adjusted net tangible book value of approximately $ per share to new investors purchasing Class A common stock in this offering. Dilution per share to new investors purchasing Class A common stock in this offering is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$
Pro forma net tangible book value per share as of , 2020	$	
Increase in pro forma net tangible book value per share attributable to new investors purchasing shares of Class A common stock in this offering	$	
Pro forma as adjusted net tangible book value per share after this offering		
Dilution in pro forma as adjusted net tangible book value per share to new investors in this offering		$

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, our pro forma as adjusted net tangible book value as of , 2020 after this offering by approximately $ million, or approximately $ per share, and would decrease (increase) dilution to investors in this offering by approximately $ per share, assuming that the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares of Class A common stock we are offering. An increase or decrease of 1.0 million in the number of shares of our Class A common stock we are offering would increase or decrease, as applicable, our pro forma as adjusted net tangible book value as of , 2020 after this offering by approximately $ million, or approximately $ per share, and would decrease or increase, as applicable, dilution to investors in this offering by approximately $ per share, assuming the assumed initial public offering price per share remains the same, after deducting the underwriting discounts and commissions and estimated offering expenses

payable by us. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

If the underwriters fully exercise their option to purchase additional shares of Class A common stock at the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover of this prospectus, assuming the number of shares offered by us as set forth on the cover page of this prospectus remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, pro forma as adjusted net tangible book value after this offering would increase to approximately $ per share, and there would be an immediate dilution of approximately $ per share to new investors.

The following table summarizes, on a pro forma as adjusted basis, as of , 2020, the difference between the number of shares of common stock purchased from us (on an as converted to Class A common stock basis), the total consideration paid, and the weighted-average price per share paid, by existing stockholders and by new investors in this offering, assuming an initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and before deducting underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
			(dollars in thousands)		
Existing stockholders		%	$	%	$
New investors					$
Total		100 %	$	100 %	

The table above assumes no exercise of the underwriters' option to purchase additional shares of Class A common stock in this offering. If the underwriters' option to purchase additional shares of Class A common stock is exercised in full, the number of shares of our common stock held by existing stockholders would be reduced to % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors participating in the offering would be increased to % of the total number of shares outstanding after this offering.

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the total consideration paid by new investors by $ million, assuming that the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discounts and commissions payable by us. Similarly, an increase or decrease of 1.0 million shares in the number of shares of Class A common stock offered by us would increase or decrease, as applicable, the total consideration paid by new investors by $ million, assuming no change in the assumed initial public offering price and after deducting the underwriting discounts and commissions payable by us.

The number of shares of our common stock that will be outstanding after this offering is based on shares of our Class A common stock and shares of Class B common stock outstanding as of , 2020, and excludes the following:

- shares of our Class A common stock issuable upon the exercise of options to purchase shares of our Class A common stock outstanding as of , 2020, with a weighted-average exercise price of $ per share;
- shares of our Class A common stock issuable upon the exercise of options to purchase shares of our Class A common stock granted after , 2020, with a weighted-average exercise price of $ per share;
- shares of our Class A common stock issuable upon the vesting of RSUs outstanding as of , 2020;

- shares of our Class A common stock issuable upon the vesting of RSUs granted after , 2020; and
- shares of our Class A common stock reserved for future issuance under our equity compensation plans, consisting of:
  - shares of our Class A common stock to be reserved for future issuance under our 2020 Plan, which will become effective prior to the completion of this offering, and any additional shares that become available under our 2020 Plan pursuant to provisions thereof that automatically increase the share reserve under the plan each year; and
  - shares of our Class A common stock reserved for future issuance under our 2017 Plan (and no shares of our RSU Plan), and upon the termination of such 2017 Plan and RSU Plan in connection with the effectiveness of our 2020 Plan, an equivalent number of shares of our Class A common stock to be added to the shares reserved for future issuance under our 2020 Plan above.

SELECTED FINANCIAL DATA

The following selected statement of operations data for the years ended December 31, 2018 and 2019, and the balance sheet data as of December 31, 2018 and 2019, have been derived from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future. You should read the following selected financial and other data below in conjunction with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

Statement of Operations Data

	Year Ended December 31,	
	2018	2019
	(in thousands, except share and per share data)	
Total revenue	$ —	$ 116
Operating expenses:		
Research and development[1]	3,776	12,393
General and administrative[1]	2,982	4,606
Total operating expenses	6,758	16,999
Loss from operations	(6,758)	(16,883)
Other income (expense):		
Interest income	451	850
Interest expense	—	(5)
Total other income	451	845
Net loss	$ (6,307)	$ (16,038)
Net loss per share attributable to common stockholders, basic and diluted[2]	$ (0.74)	$ (1.08)
Weighted-average common shares outstanding, basic and diluted [2]	8,502,926	14,878,157
Pro forma net loss per common share, basic and diluted[2]		$ (0.35)
Pro forma weighted-average common shares used to compute basic and diluted net loss per common share[2]		45,913,238

(1) Operating expenses include stock-based compensation as follows:

	Year Ended December 31,	
	2018	2019
	(in thousands)	
Research and development	$ 287	$ 766
General and administrative	385	791
Total stock-based compensation	$ 672	$ 1,557

(2) See Note 11 to our financial statements for an explanation of the calculations of our basic and diluted net loss per share attributable to common stockholders, pro forma net loss per share attributable to common stockholders and the weighted-average number of shares used in the computation of the per share amounts.

Balance Sheet Data

	As of December 31,	
	2018	2019
	(in thousands)	
Cash, cash equivalents and investments	$ 30,953	$ 86,020
Working capital[(3)]	27,521	82,991
Total assets	33,696	93,236
Total liabilities	3,721	5,557
Accumulated deficit	(6,548)	(22,586)
Total stockholders' equity	29,975	87,679

(3) We define working capital as current assets less current liabilities. See our financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section titled "Selected Financial Data" and our financial statements and related notes included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties, including those described in the section titled "Special Note Regarding Forward Looking Statements." Our actual results and the timing of selected events could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those set forth under the section titled "Risk Factors."

Overview

We aim to enable exceptional scientific outcomes by commercializing transformative products for researchers to unlock deep, unbiased biological information. Our initial product, the Proteograph Product Suite (Proteograph), will leverage our proprietary engineered nanoparticle (NP) technology to provide unbiased, deep, rapid and large-scale access across the proteome. Our Proteograph Product Suite is an integrated solution that is comprised of consumables, an automation instrument and software. Our Proteograph provides an easy-to-use workflow, which has the potential to make proteomic profiling, and the analysis of the thousands of samples needed to characterize the complex, dynamic nature of the proteome, accessible for nearly any laboratory. We believe that characterizing and understanding the full complexity of the proteome is foundational for accelerating biological insights and will lead to broad potential end-markets for proteomics, encompassing basic research and discovery, translational research, diagnostics and applied applications. This full understanding of the complexity of the proteome requires large-scale, unbiased and deep interrogation of thousands of samples across time, which we believe is unavailable with the proteomic approaches available today. We believe that our Proteograph will enable researchers to perform proteomics studies at scale, similar to the manner in which next generation sequencing (NGS) technologies have transformed genomics.

Since we were incorporated in 2017, we have devoted substantially all of our resources to research and development activities, including with respect to our Proteograph Product Suite, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital, building our commercial infrastructure and providing general and administrative support for these activities.

Our revenue to date has been nominal and generated from research collaborations and activities. Our initial product, the Proteograph Product Suite, has not yet been commercialized, and we have not generated any revenue from product sales to date. Our ability to generate product revenue sufficient to achieve profitability, if ever, will depend on the successful commercialization of our Proteograph Product Suite. We plan to commercialize our Proteograph utilizing a three phase plan that has been shown to be effective and optimal for introducing disruptive products in numerous life sciences technology markets, including NGS. We are currently in the first phase, during which we will collaborate with a small number of key opinion leaders in proteomics, whose assessment and validation of products can significantly influence other researchers in their respective markets. During the second phase, early access limited release, which we expect to commence in 2021, we plan to sell our Proteograph to select sites performing large-scale proteomics or genomics research. We will work closely with these sites, which we expect will serve as models for the rest of the market, to exemplify applications that demonstrate the unique value proposition of our Proteograph. We expect this phase to continue through 2021 and lead into the third phase of commercialization, broad commercial availability, in early 2022.

We intend to commercialize our Proteograph Product Suite as an integrated solution comprising consumables, an automation instrument and software. Our commercial strategy will focus on growing adoption by the research community of our Proteograph, expanding the installed base and increasing utilization to generate revenue from the purchase of our Proteograph consumables. We expect a highly efficient sales model since our Proteograph does not have a large capital expenditure component and our Proteograph automation instrument integrates with most existing proteomics laboratories' workflows and also complements large-scale genomics research.

We intend to commercialize our Proteograph through a direct sales channel in the United States, and through both direct and distributor sales channels in regions outside the United States. Given our stage of development, we currently have limited marketing and no sales, commercial product distribution or service and support capabilities. We intend to build the necessary infrastructure for these activities in the United States, European Union, the United Kingdom, and potentially other countries and regions, including Asia-Pacific, as we execute on our three phase commercial launch strategy for our Proteograph.

We leverage well-established unit operations to formulate and manufacture our NPs at our facilities in Redwood City, California. We procure some of our consumables, including components of our NPs, from third-party manufacturers, which includes the commonly-available raw materials needed for manufacturing our proprietary engineered NPs. We are currently manufacturing using our pilot line and building out our manufacturing capabilities as we ramp towards broad commercial availability. We obtain some of the reagents and components used in our Proteograph workflow from third-party suppliers. While some of these reagents and components are sourced from a single supplier, these products are readily available from numerous suppliers. While we currently plan to handle filling and packaging of our Proteograph assay and the related consumables, in the future, we may have our filling and packaging outsourced to a third-party. We conduct vendor and component qualification for components provided by third-party suppliers and quality control tests on all of our NPs. We will need to substantially expand our NP manufacturing capabilities to enable the successful commercialization of our Proteograph Product Suite.

We have designed our Proteograph automation instrument and have outsourced the manufacturing of our Proteograph automation instrument to Hamilton Company, a leading manufacturer of automated liquid handling workstations. We have entered into a non-exclusive agreement with Hamilton that covers the manufacturing of our Proteograph automation instrument and its continued supply on a purchase order basis. The agreement has an initial term that runs three years following our commercial launch. Pricing for the supply of our Proteograph automation instrument is on a fixed schedule during the initial term of the agreement, with tiered pricing dependent upon the number of units purchased in a twelve-month period.

Since our incorporation, we have incurred significant losses and negative cash flows from operations. During the year ended December 31, 2019, we incurred a net loss of $16.0 million and used $13.1 million of cash in operations. As of December 31, 2019, we had an accumulated deficit of $22.6 million. We expect to continue to incur significant and increasing losses and do not expect positive cash flows from operations for the foreseeable future, and our net losses may fluctuate significantly from period to period, depending on the timing of and expenditures on our planned commercialization and research and development activities.

To date, we have financed our operations primarily through private placements of convertible preferred stock. From the date of our incorporation through December 31, 2019, we have raised aggregate net proceeds of approximately $108.0 million from the issuance of convertible preferred stock, net of issuance costs. In May 2020, we raised an additional $54.9 million, net of offering costs, from the issuance of convertible preferred stock. As of December 31, 2019, we had unrestricted cash and cash equivalents of $17.5 million and investments of $68.5 million.

We expect our expenses to increase significantly in connection with our ongoing activities, as we:

- continue to develop and commercialize our Proteograph Product Suite;
- attract, hire and retain qualified personnel;
- establish a sales, marketing, service, support and distribution infrastructure in advance of commercialization;
- build-out and expand our in-house NP manufacturing capabilities;
- continue to engage in research and development of other products and enhancements to our Proteograph;
- implement operational, financial and management information systems;
- obtain, maintain, expand, and protect our intellectual property portfolio; and,

- build the infrastructure to operate as a public company.

- ***PrognomIQ***

In August 2020, we transferred certain assets related to disease testing to PrognomIQ, Inc. (PrognomIQ), a new wholly-owned subsidiary, in exchange for all of its outstanding equity interests. Following the transfer, we completed a pro-rata distribution to our stockholders of most of the shares of capital stock of PrognomIQ. Following the distribution and a subsequent $55.0 million equity financing of PrognomIQ, we hold approximately 19% of the outstanding capital stock in PrognomIQ.

The rationale for this transaction was to enable the growth of ecosystems around new applications that leverage unbiased, deep and large-scale proteomic information, and to focus on our core strategy, which is to be a provider of proteomics solutions to all customers across these ecosystems. Our relationship with PrognomIQ does not preclude us from selling our Proteograph to any customer in any geography, nor does it preclude our customers from using our Proteograph in any way. We believe that PrognomIQ will help us drive the adoption of our Proteograph Product Suite in disease testing applications.

Omid Farokhzad, Chief Executive Officer and Chair of our board of directors, serves as the Chair of PrognomIQ's board of directors. Philip Ma, Ph.D. has served as our Chief Business Officer and will serve as the Chief Executive Officer of PrognomIQ. Dr. Ma is expected to fully transition to PrognomIQ by the end of October 2020.

COVID-19 Pandemic

As a result of the COVID-19 pandemic, we could experience disruptions that could severely impact our business. For example, we have experienced longer lead times from Hamilton for orders of our automation instruments and may experience delays and longer lead times from our other suppliers of critical hardware, instrumentation and consumables used for product development and manufacturing operations. Pandemic precautions and preventative measures may also impact our commercialization plans due to restrictions on our customers' ability to access laboratories, causing delays in the delivery and installation of our Proteograph products, training such customers on our products, and their ability to conduct research. The ongoing build-out of our expansion facilities may also be delayed by COVID-related restrictions. Furthermore, COVID-19 has adversely affected the broader economy and financial markets, resulting in an economic downturn that could curtail the research and development budgets of our customers, our ability to hire additional personnel and our financing prospects. Any of the foregoing could harm our operations and we cannot anticipate all the ways in which it could be adversely impacted by health epidemics such as COVID-19.

For additional details, see the section titled "Risk Factors."

Components of Results of Operations

Revenue

We have not generated any revenue from product sales and may not do so in the near future. Our revenue to date has been generated from research collaborations and activities.

Research and Development Expenses

Research and development, or R&D, expenses include cost associated with performing services under research and development service contracts and research and development of our technology and product candidates. R&D expenses consist primarily of employee compensation, including stock-based compensation, and related benefits, laboratory supplies used for in-house research, consulting costs, costs related to clinical studies for the collection of biological samples for research use, which relate to the assets transferred to PrognomIQ, and allocated overhead, including rent, depreciation, information technology and utilities.

We plan to increase our investment in our R&D efforts related to our Proteograph Product Suite, our product development pipeline and our proprietary engineered NP technology. Therefore, we expect R&D expenses will

increase in absolute dollars in future periods as we incur expenses associated with hiring additional personnel, purchasing supplies and materials, and the allocation of facility expense associated with the ongoing build-out of our expansion facilities to support our R&D efforts.

General and Administrative Expenses

General and administrative expenses consist primarily of employee compensation, including stock-based compensation, and related benefits for executive management, finance, administration and human resources, allocated overhead, professional service fees and other general overhead costs to support our operations.

We expect to incur additional general and administrative expenses as we continue to invest in our personnel as we grow and with the additional costs incurred as a result of preparing to operate as a public company, including accounting, human resources, legal, insurance and investor relations costs. As a result, we expect general and administrative expenses to increase in absolute dollars in future periods.

Interest Income

Interest income consists of interest earned on cash, cash equivalents and investments.

Interest Expense

Interest expense consists of interest related to certain convertible promissory notes that were issued in May 2019. These notes were converted to convertible preferred stock in November 2019.

Results of Operations

Comparisons of the Years Ended December 31, 2018 and 2019

The following table summarizes our results of operations for the periods presented:

	Year ended December 31,		Change	
	2018	2019	Amount	%
	(dollars in thousands)			
Revenue:				
Research revenue	$ —	$ 58	$ 58	*
Grant revenue	—	58	58	*
Total revenue	—	116	116	*
Operating expenses:				
Research and development	3,776	12,393	8,617	228 %
General and administrative	2,982	4,606	1,624	54 %
Total operating expenses	6,758	16,999	10,241	152 %
Loss from operations	(6,758)	(16,883)	(10,125)	150 %
Other income (expense):				
Interest income	451	850	399	88 %
Interest expense	—	(5)	(5)	*
Total other income	451	845	394	87 %
Net loss	(6,307)	(16,038)	(9,731)	154 %
Other comprehensive income:				
Unrealized gain on available-for-sale securities	—	24	24	*
Comprehensive loss	$ (6,307)	$ (16,014)	$ (9,707)	154 %

**** Not meaningful***

Revenue

	Year ended December 31,		Change	
	2018	2019	Amount	%
	(dollars in thousands)			
Revenue	$ —	$ 116	$ 116	*

Revenue increased by $0.1 million from $0 in 2018 due to approximately $58,000 received under a Small Business Innovation Research grant awarded in the third quarter of 2019, as well as approximately $58,000 earned for research collaboration.

Research and Development

	Year ended December 31,		Change	
	2018	2019	Amount	%
	(dollars in thousands)			
Research and development	$ 3,776	$ 12,393	$ 8,617	228 %

R&D expenses increased by $8.6 million, or 228%, from $3.8 million in 2018 to $12.4 million in 2019. The increase was primarily due to an increase in product development efforts related to our Proteograph Product Suite including $3.7 million in employee compensation costs, stock-based compensation and other related costs due to growth in research and development personnel, $1.4 million related to the expansion of facilities and maintenance and depreciation of laboratory equipment, $1.5 million in laboratory materials, supplies and reagents used for in-house research and $0.4 million in professional and consulting fees. It also reflects an increase in clinical study fees of $1.5 million related to the costs associated with clinical studies for the collection of biological samples for research use, which relate to the assets transferred to PrognomIQ.

General and Administrative

	Year ended December 31,		Change	
	2018	2019	Amount	%
	(dollars in thousands)			
General and administrative	$ 2,982	$ 4,606	$ 1,624	54 %

General and administrative expenses increased by $1.6 million, or 54%, from $3.0 million in 2018 to $4.6 million in 2019, primarily due to a $1.0 million increase in employee compensation, including stock-based compensation and other related expenses, as a result of both converting consultants to full-time employees and an increase in personnel. Other increases include $0.4 million in professional and consulting fees related to accounting and audit services and corporate legal matters, and an increase of $0.1 million related to business license fees and taxes.

Total Other Income

	Year ended December 31,		Change	
	2018	2019	Amount	%
	(dollars in thousands)			
Total other income	$ 451	$ 845	$ 394	87 %

Total other income increased by $0.4 million, or 87%, from $0.5 million in 2018 to $0.8 million in 2019. The increase in interest income was attributable to higher amounts of excess cash invested in money market funds and U.S. Treasury securities as a result of $71.7 million raised in convertible preferred stock financings during 2019, compared to $29.9 million raised in convertible preferred stock financings during 2018.

Liquidity and Capital Resources

Since the date of our incorporation, we have not generated any revenue from product sales and have incurred significant operating losses and negative cash flows from operations. Our operations have been funded primarily through the sale and issuance of convertible preferred stock since inception. We anticipate that we will continue to incur net losses and do not expect positive cash flows from operations for the foreseeable future. As of December 31, 2019, we had an accumulated deficit of $22.6 million. As of December 31, 2019, we had unrestricted cash and cash equivalents of $17.5 million and investments of $68.5 million.

Based upon our current operating plan, we believe our existing cash, cash equivalents and investments will enable us to fund our operating expenses and capital expenditure requirements through at least the next 12 months. We continue to face challenges and uncertainties and, as a result, our available capital resources may be consumed more rapidly than currently expected due to: (i) delays in execution of or a significant expansion of our commercialization plans; (ii) changes we may make to the business that affect ongoing operating expenses; (iii) changes we may make in our business or commercialization strategy; (iv) changes we may make in our research and development spending plans; (v) the impact of the COVID-19 pandemic; and (vi) other items affecting our forecasted level of expenditures and use of cash resources including potential acquisitions.

We may be unable to raise additional funds or to enter into financing agreements or arrangements on favorable terms, or at all. Our failure to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on our business, results of operations and financial condition, and could force us to delay future commercialization efforts. We cannot assure you that we will ever be profitable or generate positive cash flow from operating activities or that, if we achieve profitability, we will be able to sustain it.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Year ended December 31,	
	2018	2019
	(in thousands)	
Net cash used in operating activities	$ (4,651)	$ (13,073)
Net cash used in investing activities	(168)	(72,383)
Net cash provided by financing activities	29,945	72,331
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 25,126	$ (13,125)

Operating Activities

In 2019, cash used in operating activities was $(13.1) million, attributable to a net loss of $(16.0) million, partially offset by a net change in our net operating assets and liabilities of $1.0 million, and by non-cash charges of $2.0 million. Non-cash charges primarily consisted of $1.6 million in stock-based compensation and $0.7 million of depreciation and amortization, offset by $(0.3) million of net accretion of discounts on available-for-sales securities. The change in our net operating assets and liabilities was primarily due to increased accrued liabilities related to clinical study fees of $0.4 million, tenant improvements of $0.3 million, professional services and consulting costs of $0.4 million, and $0.2 million in other general business expenses, offset by deposits related to a lease agreement of $(0.3) million.

In 2018, cash used in operating activities was $(4.7) million, attributable to a net loss of $(6.3) million, partially offset by a net change in our net operating assets and liabilities of $1.0 million, and by non-cash charges of $0.7 million, which primarily consisted of stock-based compensation. The change in our net operating assets and liabilities was due to increased account payables and accrued liabilities of $1.3 million which was primarily driven by laboratory equipment purchases, offset by increases in prepaid expenses and other assets that was primarily driven by multi-year maintenance contracts purchased on the laboratory equipment.

Investing Activities

In 2019, cash used in investing activities was $72.4 million, which related to purchases of available-for-sale securities, net of proceeds from maturities of $68.3 million, in addition to $4.1 million in payments primarily for laboratory equipment.

In 2018, cash used in investing activities was $0.2 million, which related to payments for property and equipment used for general business operations.

Financing Activities

In 2019, cash provided by financing activities was $72.3 million. This was attributable to the net proceeds of $17.3 million from the issuance of Series C convertible preferred stock, net of issuance costs and $54.6 million from the issuance of Series D convertible preferred stock, net of issuance costs.

In 2018, cash provided by financing activities was $29.9 million which was attributable to the net proceeds from the issuance of Series B convertible preferred stock, net of issuance costs.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2019:

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	(in thousands)				
Operating lease obligations	$ 8,788	$ 453	$ 1,609	$ 1,691	$ 5,035

In addition, we enter into agreements as a part of normal course of business with various vendors, which are generally cancellable without material penalty upon written notice. Payments associated with these agreements are not included in this table of contractual obligations.

Our operating lease obligations reflect our lease obligations for our headquarters facility in Redwood City, California. In June 2020, we amended the lease agreement for this facility to expand the office and laboratory space covered by the lease, extend the lease through February 2032, and increase the annual base rent for the expanded premises. Upon occupancy of the expansion facility that is anticipated to occur in the second half of 2021, the annual base rent will be $0.9 million in the first 12 months of the lease term (subject to an abatement period of nine months), and increases on an annual basis to $1.2 million in the final 12 months of the lease term. The amendment also provides for tenant incentives in the amount of $2.4 million.

Off-Balance Sheet Arrangements

Since the date of our incorporation, we have not engaged in any off-balance sheet arrangements, as such term is defined in the rules and regulations of the SEC.

Critical Accounting Policies, Significant Judgments and Use of Estimates

The discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as revenue and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and

future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

While our significant accounting policies are described in the notes to our financial statements, we believe that the following critical accounting policies are most important to understanding and evaluating our reported financial results.

Accrued Research and Development Expenses

We record accrued liabilities for estimated costs of research and development activities conducted by third-party service providers, which include expenses associated with clinical studies for the collection of biological samples for research use. These costs are a significant component of our research and development expenses. We accrue for these costs based on factors such as estimates of the work completed and in accordance with agreements established with its third-party service providers under the service agreements. We include these costs in accrued research and development in the balance sheets and within research and development expenses in the statements of operations and comprehensive loss. We make significant judgments and estimates such as when services are performed and the level of effort expended in each period to determine the accrued liabilities balance in each reporting period. As actual costs become known, we adjust our accrued liabilities. We have not experienced any material differences between accrued costs and actual costs incurred. However, the status and timing of actual services performed, number of patients enrolled and the rate of patient enrollments may vary from our estimates, resulting in adjustments to expense in future periods. As these accrued expenses are associated with clinical studies for the collection of biological samples for research use, which relate to the assets transferred to PrognomIQ, we do not anticipate similar accrued expenses going forward.

Stock-Based Compensation

We account for stock-based compensation by measuring and recognizing compensation expense for all share-based awards made to employees and non-employees based on estimated grant-date fair values. We use the straight-line method to allocate compensation cost to reporting periods over the requisite service period, which is generally the vesting period. We recognize actual forfeitures by reducing the stock-based compensation in the same period as the forfeitures occur. We estimate the fair value of share-based awards to employees and non-employees using the Black-Scholes option-pricing valuation model. The Black-Scholes model requires the input of subjective assumptions, including fair value of common stock, expected term, expected volatility, risk-free interest rate, and expected dividend yield, which are described in greater detail below.

Estimating the fair value of equity-settled awards as of the grant date using 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 is recognized. These inputs are subjective and generally require significant analysis and judgment to develop. These inputs are as follows:

- Fair value of common stock—Historically, as there has been no public market for our common stock, the fair value of our common stock was determined by our board of directors based in part on valuations of our common stock prepared by a third-party valuation specialist. See the subsection titled "Fair Value of Common Stock" below.

- Expected term—The expected term represents the average period that our options granted are expected to be outstanding and is determined using the simplified method (based on the mid-point between the weighted-average vesting date and the end of the contractual term). We have very limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for our stock option grants.

- Expected volatility—Since we are a privately-held company and do not have any trading history for our common stock, the expected volatility was estimated based on the historical average volatility for comparable publicly traded life sciences technology companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, life cycle stage,

or area of specialty. We will continue to apply this process until enough historical information regarding the volatility of our own stock price becomes available.

- Risk-free interest rate—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of the options.

- Expected dividend yield—We have never paid dividends on our common stock and have no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

For options granted to non-employee consultants, the fair value of these options is also measured using the Black-Scholes option-pricing model reflecting the same assumptions as applied to employee options in each of the reported periods, other than the expected term which is assumed to be the remaining contractual life of the option.

We will continue to use judgment in evaluating the expected volatility, expected terms, and interest rates utilized for our stock-based compensation calculations on a prospective basis. Assumptions we used in applying the Black-Scholes option-pricing model to determine the estimated fair value of our stock options granted involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our equity-based compensation could be materially different.

The intrinsic value of all outstanding options as of December 31, 2019 was $ million, of which $ million related to unvested options as of such date, based on the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus.

Fair Value of Common Stock

Historically, for all periods prior to this initial public offering, the fair values of the shares of our common stock underlying our share-based awards were determined on each grant date by our board of directors with input from management and the assistance of an independent third-party valuation specialist. Given the absence of a public trading market of our common stock, and in accordance with the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, or the Practice Aid, our board of directors exercised reasonable judgment and considered numerous objective and subjective factors to determine the best estimate of the fair value of our common stock at each grant date. These factors include:

- external market conditions affecting the life sciences technology industry and trends within the industry;

- our stage of development;

- the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock;

- the prices at which we sold shares of our convertible preferred stock;

- actual operating results and financial performance, including our levels of available capital resources;

- the progress of our research and development efforts and business strategy;

- equity market conditions affecting comparable public companies;

- general U.S. market conditions; and

- the lack of marketability of our common stock.

In valuing our common stock, the fair value of our business, or enterprise value, was determined using various valuation methods, including combinations of income, market and asset approaches with input from management. The income approach determines value by using one or more methods that convert anticipated economic benefits into a present single amount. The application of the income approach establishes value by methods that discount or capitalize earnings or cash flow, by a discount or capitalization rate that reflects investors' rate of return

expectations, market conditions, and the relative risk of the subject investment. The market approach involve identifying and evaluating comparable public companies and acquisition targets that operate in the same industry or which have similar operating characteristics as the subject company. From the comparable companies, publicly available information is used to extrapolate market-based valuation multiples that are applied to historical or prospective financial information in order to derive an indication of value. The asset approach determines the value of the underlying assets and liabilities of a business as a means of determining the value of the business in aggregate. This approach can include the value of both tangible and intangible assets.

The Practice Aid identifies various available methods for allocating enterprise value across classes and series of capital stock to determine the estimated fair value of common stock at each valuation date. In accordance with the Practice Aid, we considered the following methods:

- Option Pricing Method (OPM). Under the OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the convertible preferred stock and common stock are inferred by analyzing these options. This method is appropriate to use when the range of possible future outcomes is difficult to predict and thus creates highly speculative forecasts.

- Probability-Weighted Expected Return Method (PWERM). The PWERM is a scenario-based analysis that estimates value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class. This method is generally most appropriate to use when the time to a liquidity event is short, making the range of possible future outcomes relatively easy to predict.

Based on our early stage of development and other relevant factors, we determined that an OPM was the most appropriate method for allocating our enterprise value to determine the estimated fair value of our common stock for valuations during 2018 and 2019.

Starting in 2020, we used a hybrid method to determine the estimated fair value of our common stock, which included both the OPM and PWERM models.

Application of these approaches involves the use of estimates, judgment, and assumptions that are highly complex and subjective, such as those regarding our expected future revenue, expenses, and cash flows, discount rates, market multiples, the selection of comparable companies, and the probability of future events. Changes in any or all of these estimates and assumptions, or the relationships between those assumptions, impact our valuations as of each valuation date and may have a material impact on the valuation of common stock. The assumptions underlying these valuations represent our management’s best estimate, which involve inherent uncertainties and the application of management judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation could be materially different.

After the completion of this offering, the fair value of each share of underlying common stock will be determined based on the closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded.

Emerging Growth Company Status

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Other exemptions and reduced reporting requirements under the JOBS Act for emerging growth companies include presentation of only two years audited financial statements in a registration statement for an initial public offering, an exemption from the requirement to provide an auditor’s report on internal controls over financial reporting pursuant to the Sarbanes-Oxley Act, an exemption from any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation, and less extensive disclosure about our executive compensation arrangements. We have elected to use the extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that (i) we

are no longer an emerging growth company or (ii) we affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

We will remain an emerging growth company under the JOBS Act until the earliest of (i) the last day of our first fiscal year in which we have total annual gross revenue of $1.07 billion or more, (ii) the date on which we have issued more than $1.0 billion of non-convertible debt instruments during the previous three fiscal years or (iii) the date on which we are deemed a "large accelerated filer" under the rules of the SEC with at least $700.0 million of outstanding equity securities held by non-affiliates, or (iv) the last day of the fiscal year following the fifth anniversary of completion of this offering.

Recent Accounting Pronouncements

See Note 2 to our financial statements included elsewhere in this prospectus for more information about recent accounting pronouncements, the timing of their adoption, and our assessment, to the extent we have made one yet, of their potential impact on our financial condition of results of operations.

Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. As a result of becoming a public company, we will be required, pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, as amended, to furnish a report by our management on, among other things, the effectiveness of our internal control over financial reporting for the first fiscal year beginning after the effective date of the registration statement of which this prospectus is a part or the date we are no longer an EGC as defined in the JOBS Act, if we take advantage (as we expect to do) of the exemptions for EGCs contained in the JOBS Act. This assessment will need to include disclosures of any material weaknesses identified by our management in our internal control over financial reporting.

In connection with the audits of our financial statements included elsewhere in this prospectus, we and our independent registered public accounting firm identified material weaknesses related to:

- there being insufficient accounting personnel to enable segregation of duties relating to the general ledger, disbursement, and certain accounting functions.
- there not being formalized processes or controls for account reconciliations, including independent review of such reconciliations, or related financial statement analysis prepared in conformity with U.S. GAAP; and
- there not being a sufficient complement of accounting personnel with the necessary U.S. GAAP technical expertise to timely identify and account for complex or non-routine transactions or to formalize accounting policies, memoranda, or controls for such transactions.

Under standards established by the Public Company Accounting Oversight Board, a material weakness is a deficiency, or 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 and corrected on a timely basis.

We are working to remediate the material weaknesses and are taking steps to strengthen our internal control over financial reporting through the hiring of additional finance and accounting personnel. With the additional personnel, we intend to take appropriate and reasonable steps to remediate these material weaknesses through the implementation of appropriate segregation of duties, formalization of accounting policies and controls and retention of appropriate expertise for complex accounting transactions. However, we cannot assure you that these measures will significantly improve or remediate the material weaknesses described above. As of December 31, 2019, the material weaknesses have not been remediated.

The actions that we are taking are subject to ongoing executive management review, and will also be subject to audit committee oversight. If we are unable to successfully remediate the material weakness, or if in the future, we identify further material weaknesses in our internal control over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated.

Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

Our cash, cash equivalents and investments as of December 31, 2019 consist of $86.0 million in money market funds and U.S. Treasury securities. Such interest-earning instruments carry a degree of interest rate risk. The goals of our investment policy are liquidity and capital preservation; we do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate exposure. We believe that we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the short-term nature of our cash, cash equivalents, restricted cash and investments.

BUSINESS

Overview

We aim to enable exceptional scientific outcomes by commercializing transformative products for researchers to unlock deep, unbiased biological information. Our initial product, the Proteograph Product Suite (Proteograph), will leverage our proprietary engineered nanoparticle (NP) technology to provide unbiased, deep, rapid and large-scale access across the proteome. Our Proteograph Product Suite is an integrated solution that is comprised of consumables, an automation instrument and software. Our Proteograph provides an easy-to-use workflow, which has the potential to make proteomic profiling, and the analysis of the thousands of samples needed to characterize the complex, dynamic nature of the proteome, accessible for nearly any laboratory. We believe that characterizing and understanding the full complexity of the proteome is foundational for accelerating biological insights and will lead to broad potential end-markets for proteomics, encompassing basic research and discovery, translational research, diagnostics and applied applications. This full understanding of the complexity of the proteome requires large-scale, unbiased and deep interrogation of thousands of samples across time, which we believe is unavailable with the proteomic approaches available today. We believe that our Proteograph will enable researchers to perform proteomics studies at scale, similar to the manner in which next generation sequencing (NGS) technologies have transformed genomics.

Proteins are the functional units of all forms of life. While deoxyribonucleic acid (DNA) may be used as a static indicator of health risk, proteins are dynamic indicators of physiology and may be used to track health over time, gauge disease progression and monitor therapeutic response. Despite the central role proteins play in biology, the proteome is relatively unexplored compared to the genome, particularly the rich functional content that could be derived from large-scale proteomics studies. We believe large-scale characterization of the proteome has not been feasible with existing proteomics approaches, which broadly fall into two categories: (i) unbiased but not scalable, or (ii) scalable but biased. Current *de novo*, or unbiased, approaches require complex, lengthy, and labor- and capital-intensive workflows, which limit their scalability to small, under-powered studies, and require significant processing expertise. On the other hand, targeted or biased methods only enable interrogation of a limited number of known proteins per sample. Although biased approaches are scalable, they lack the breadth and depth necessary to appropriately characterize the proteome and catalog its many protein variants. Thus, we believe that proteomics researchers are forced into an unattractive trade-off between the number of samples in a study and the depth and breadth of the analysis. These trade-offs limit researchers' abilities to advance characterization of the proteome to match the current characterization of the genome. We believe large-scale proteomic analysis is needed for a more complete understanding of biology.

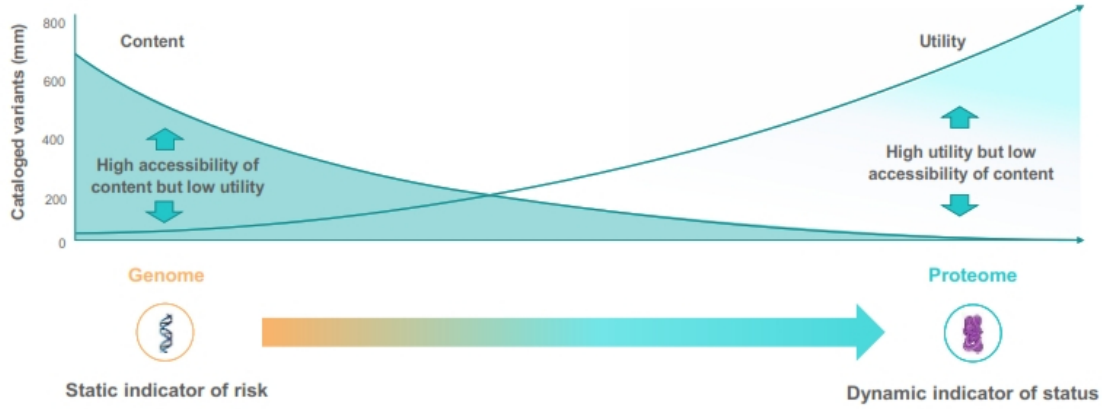
Much like NGS enabled large-scale access to the genome and transformed science and medicine, we believe that widespread access to unbiased and deep proteomics will lead to novel biological insights, deepen understanding of health and disease, and aid functional characterization of genomic variants. We believe these capabilities appeal to a broad range of researchers and can lead to the creation of substantial end-market opportunities that may extend well beyond human health. We are initially focused on driving adoption of our Proteograph with customers in proteomics and genomics markets, who see the value of large-scale, unbiased, deep proteomics. Allied Market Research estimates the proteomics market was $32 billion in 2019. We believe that our Proteograph's unique capabilities will enable researchers to undertake studies not possible today, particularly those of larger scale. We also believe that our Proteograph will complement genomics technologies by adding critical missing information that can provide functional context to genomic variation. According to the dbSNP database, approximately 695 million individual genetic variants have been identified to date; however, fewer than 0.2% of those variants have been cataloged in the ClinVar database with a reported relationship between variation and phenotype. We believe unbiased, deep and large-scale proteomics can help researchers map biological function of genomic variants, identify the most impactful disease and response-specific risk factors, and accelerate discovery of molecular mechanisms of health and disease. We believe these capabilities will broadly appeal to researchers and entities undertaking large-scale genomics studies. Therefore, we believe we will attract spending from the genomics market, estimated by Technavio to be $21 billion in 2019. In addition to the markets and applications that apply to current proteomics and genomics researchers, we believe our Proteograph is likely to lead to entirely new applications and market opportunities, much like NGS has done in genomics over the last fifteen years.

We plan to commercialize our Proteograph utilizing a three phase plan that has been shown to be effective and optimal for introducing disruptive products in numerous life sciences technology markets, including NGS. We are currently in the first phase, during which we will collaborate with a small number of key opinion leaders in proteomics, whose assessment and validation of products can significantly influence other researchers in their respective markets. During the second phase, early access limited release, which we expect to commence in 2021, we plan to sell our Proteograph to select sites performing large-scale proteomics or genomics research. We will work closely with these sites, which we expect will serve as models for the rest of the market, to exemplify applications that demonstrate the unique value proposition of our Proteograph. We expect this phase to continue through 2021 and lead into the third phase of commercialization, broad commercial availability, in early 2022. We believe by following this approach we can appropriately scale our operations, deliver exceptional customer experiences, foster publications and develop a robust pipeline of customers to drive our revenue growth.

The Importance of Proteomics

Proteomics has been a key area of focus for researchers given the utility of the detailed and complex information to understanding biology that resides at the protein level. Virtually every function within a living organism occurs by the action of a protein or a group of proteins interacting with each other and working in concert. For example, enzymes catalyze chemical and biochemical reactions, hormones regulate cellular processes, receptors facilitate signal detection, antibodies provide immunity, and proteins also function in cellular and sub-cellular structure, storage, motility, and transport processes. Proteins are dynamic indicators of status and can be used to track a person's health, disease progression and therapeutic response. By contrast, DNA is effectively a blueprint of what a person's physiology could be, not an indicator of current physiological state. In short, DNA represents risk and proteins represent status.

Despite the impact that proteins have on biology and physiology, the human proteome is relatively unexplored compared to the human genome. While the understanding of biology and disease mechanisms has advanced significantly over the past decade through large-scale data collection technologies, we believe these advances have mainly been in genomics. The widespread adoption of molecular profiling techniques, including NGS, has led to the identification of approximately 695 million genetic variations across all genomes that have been sequenced. Although this information has significantly improved the understanding of biology, the functional context at the protein level has not been established for the vast majority of this genomics information. In other words, researchers have not been able to connect phenotypic information with the relevant genotypic information. We believe that if we enable researchers to generate large bodies of proteomic data, to couple with large bodies of genomic data, they will be better positioned to understand the relationship between variation and function and its impact on biology.



Challenges of Accessing the Proteome

The human proteome is dynamic and far more complex and diverse in structure, composition and number of variants than either the genome or transcriptome. Starting from the genome, there are multiple biological steps that

take place to arrive at the proteome, each step driving increasing complexity and diversity. The human genome of approximately 20,000 genes is estimated to give rise to 1,000,000 or more protein variants, in part because a single gene produces distinct ribonucleic acid (RNA) isoforms through the process of transcription and a myriad of structurally distinct proteins through the process of translation. Biological processes can further chemically modify these proteins in unique ways, resulting in a large number of protein variants through post-translational modifications. Overall, these processes result in many levels of protein diversity, from amino acid sequence and structural variations, to post-translational modifications (PTMs), to functional changes due to interactions between the proteins themselves, known as protein-protein interactions (PPIs). In addition, all of these forms of diversity can differ between states of health and disease. We believe the fundamental challenge with existing proteomics methods is their inability to measure the breadth and depth of the proteome's complexity, rapidly and at scale.

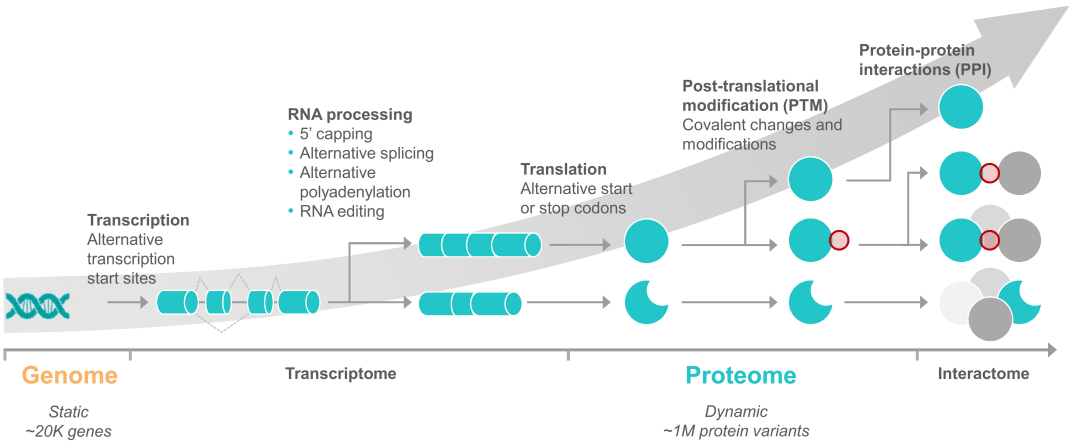
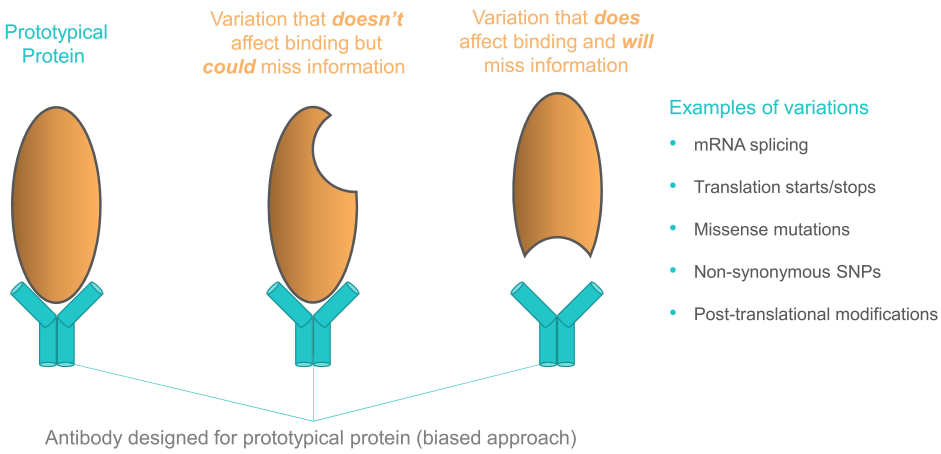


Image from Isabell Bludau et al. Proteomic and interactomic insights into the molecular basis of cell functional diversity. *Nature Reviews Molecular Cell Biology* (2020).

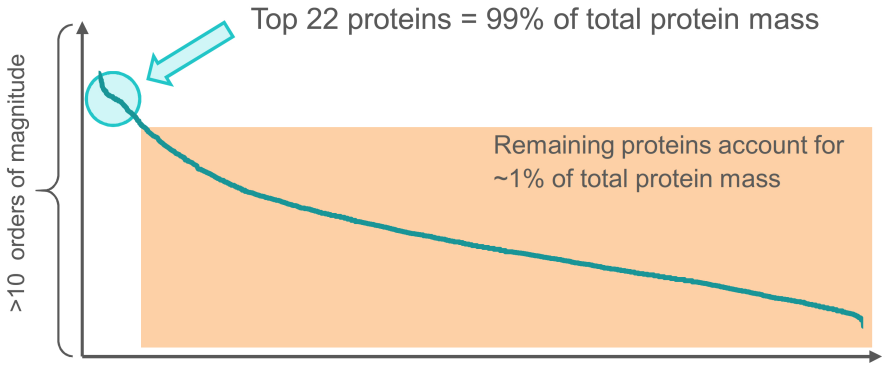
Limitations of Biased Approaches to Proteomics

Unlike DNA, proteins' structures, chemistries and concentrations in any given sample are widely variable. Proteins also lack a direct amplification mechanism which creates technological challenges for identifying proteins at low concentration. This is different than DNA, which has an inherent and direct amplification mechanism for its replication, a mechanism that researchers have exploited with technologies such as polymerase chain reaction (PCR) for detection of DNA at low concentrations. Given the diversity of protein structures, coupled with the lack of a common amplification mechanism, researchers often use analyte-specific reagents (ASRs) to measure proteins. ASRs are ligands, such as antibodies, that have been designed to bind to specific areas of proteins, and therefore, involve a targeted or biased approach. This biased approach is limited in that ASRs do not have the capability to interrogate the entirety of the protein structure that they bind to and may not detect the presence of important protein variants. The average length of a human protein is approximately 470 amino acids, whereas the average binding site of an ASR is an epitope with a length of five to eight amino acids. ASRs cannot recognize differences between proteins outside of this small epitope binding site and therefore may not differentiate among protein variants. While a large number of ASRs can be designed to detect a large number of different proteins, because this approach is limited in its ability to measure protein variation, we believe that ASRs and other biased approaches are not optimal for discovery given the inherent protein complexity. This limitation of biased approaches is illustrated in the figure below where an antibody is unable to differentiate between two distinct variants of the same protein. If such variants are differentially related to health and disease, such approach may fail to discover important insights. Biased approaches, in general, are useful when the scientist or clinician knows what he or she is specifically analyzing. This is analogous to the role of PCR in genomics, which amplifies a specific DNA fragment in a targeted or biased manner to confirm the presence of a specific mutation, whereas NGS employs an unbiased approach to interrogate the breadth of the genome.



Limitations of Current Unbiased Approaches to Proteomics

Rather than interrogating proteins at the amino acid level, there are unbiased approaches that interrogate proteins at the peptide level, providing amino-acid level resolution to protein variants. However, current unbiased approaches are limited by lack of scalability due to the vastly different concentrations of different proteins in samples. The concentration of proteins in plasma, for example, can span ten orders of magnitude from the most abundant protein, which is albumin, to some of the least abundant proteins, such as cytokines. The top 22 most abundant proteins account for approximately 99% of the total protein mass in the plasma, yet the many thousands of less abundant proteins comprising the other one percent of the total proteins by mass have significant impact on biology. Therefore, it is critical to be able to broadly and deeply detect proteins across the proteome, including those proteins that appear in low concentrations in plasma.



Mass spectrometry (MS) can be used as an unbiased or biased detection technology, and has been used for detection of proteins and their variants for unbiased discovery, biased research and clinical applications. Given the varying dynamic range of protein concentrations in plasma and other biological samples, current MS methods for proteomic detection require complex sample preparation workflows that involve depletion of abundant proteins and grouping of the remaining proteins into smaller units through fractionation in order to measure deeper into the proteome. We believe current unbiased approaches are not widely adopted by researchers because the workflows, protocols and unit operations are extremely complex, the process is expensive and the time required to complete such analysis is significant. As one example of these complex methods, in a paper from *Keshishian, H. et al.*, the researchers first depleted the most abundant proteins with immuno-affinity columns and then separated the remaining proteins by many subsequent and complex chromatographic steps and mass spectrometer injections. This

approach identified 4,500 different proteins, but only across 16 samples. The study took multiple months to complete.

The critical unmet needs in proteomic analysis remain how to collect unbiased proteomic data on thousands of proteins in a sample spanning more than ten orders of dynamic range in concentration and how to do so in thousands of samples at a reasonable cost and in a reasonable amount of time. Genomics faced a similar unmet need before the advent of NGS, which allowed for massively parallel sampling.

Background of Massively Parallel Sampling

The ability to perform massively parallel sampling in biology has been transformational to researchers' ability to perform large-scale and unbiased biological analysis. For example, before NGS, genomic approaches were not scalable to either read the entire genome or process very large numbers of samples. Researchers could only sequence hundreds of fragments of DNA or RNA at a time, and not easily in parallel. Genetic analysis was limited to biased, shallow genetic studies that were time-consuming and not scalable. As a result, researchers in genomics faced similar challenges that researchers currently face in proteomics. The introduction of NGS enabled massively parallel sampling of small fragments of DNA, allowing researchers to, in parallel, sequence tens of millions, and, through subsequent innovations, currently tens of billions, of fragments of DNA per sample. This transformative approach to sampling enabled genomic sequencing technologies to scale and created the path to genomic end-market opportunities, including basic research and discovery, translational research and clinical applications, including early cancer detection, recurrence monitoring and non-invasive prenatal testing. Given the utility of proteins for measuring function, health and disease, we believe the same, if not a greater, opportunity exists for providing unbiased, deep, rapid and scalable access to the proteome.

Our Proprietary Engineered Nanoparticle Technology

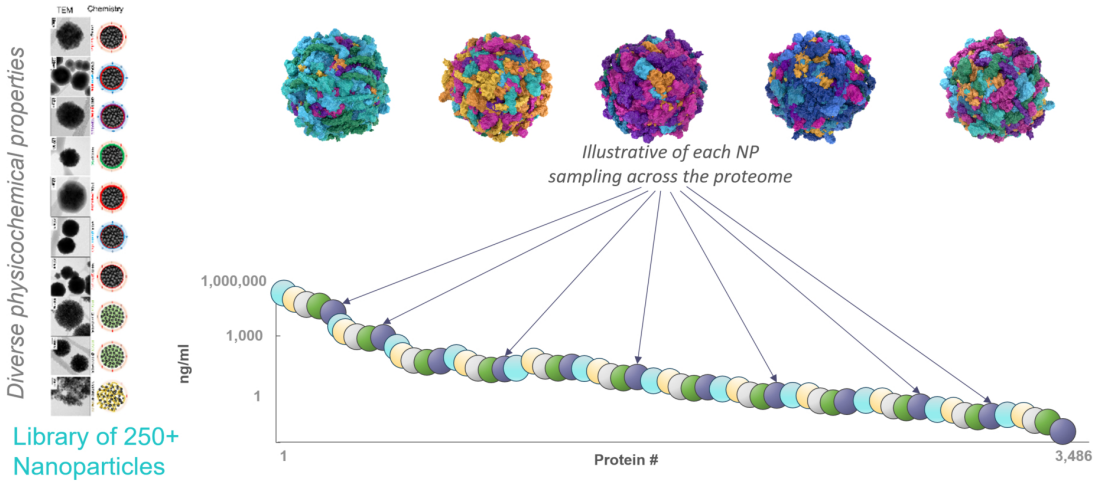
Our proprietary engineered NP technology overcomes the limitations of existing methods and is the foundation for our Proteograph Product Suite's easy-to-use workflow for unbiased, deep, rapid and scalable proteomic analysis. Our approach is based on proprietary engineered NPs that enable unbiased and massively parallel sampling of intact proteins across the proteome, capturing a myriad of molecular information at the level of protein variants as well as PPIs. Our NPs are designed to eliminate the need for complex workflows required by other unbiased approaches, which we believe will make proteomics more accessible to the broader scientific community.

The diameter of a nanoparticle is typically in the tens to hundreds of nanometers. As a reference, the diameter of the human hair is 80,000 nanometers. When nanoparticles are placed in contact with a biological sample, a thin layer of intact proteins rapidly, selectively and reproducibly adsorbs onto the surface of a nanoparticle upon contact, forming what is called a protein “corona.” Additional intact proteins can also join the corona layer by binding directly to a protein that has already attached to the nanoparticle through PPIs and intact protein complexes may also attach to the nanoparticle directly. Our NPs’ ability to capture whole and intact proteins and their many diverse variants provides access to protein structural information, including information on PPIs. At binding equilibrium, which occurs within minutes after our NPs come into contact with the protein, the selective sampling of proteins by our NPs is robust and highly reproducible.

5 issued and 24 pending patents

The protein sampling and binding of proteins to the nanoparticle surface are driven by three primary factors: (i) affinity of a given protein for a given nanoparticle’s physicochemical surface; (ii) concentration of a given protein in a biological sample; and (iii) affinity of the proteins for other proteins on the surface of the nanoparticle, forming PPIs. We can use a variety of different methods and materials to design and create different nanoparticles. Each nanoparticle can have distinct physicochemical properties that generate a unique protein corona pattern and a unique proteomic fingerprint. We can combine nanoparticles into panels to provide a representative and thorough sampling across the dynamic range of the proteome, from high to low abundance proteins. In effect, the properties of protein binding to a panel of nanoparticles are functionally equivalent to, and can replace, complex, biochemical laboratory workflows for the preparation of samples for deep, unbiased MS, and which enable the capture of thousands of proteins from biofluids for large-scale proteomics studies. Virtually any solubilized biological sample can be interrogated with nanoparticles, including cell or tissue homogenates, blood or blood components (such as plasma or serum, urine), saliva, cerebrospinal fluid and synovial fluid. The versatility of nanoparticles provides the opportunity to use a vast universe of different nanoparticles with different physicochemical properties to selectively, reproducibly and deeply sample the proteome in an unbiased way.

The figure below illustrates the dynamic range of the proteome with high abundance proteins in the upper left of the curve and low abundance proteins in the lower right of the curve. Each of our unique nanoparticles has different physicochemical properties, which allows it to sample selectively across the breadth of the proteome.



Our NPs enable the unique capabilities of our Proteograph Product Suite, including the ability to:

- eliminate complex biofluid processing workflows required by other unbiased proteomic approaches;
- sample in an unbiased manner across the dynamic range of the proteome in a variety of biological samples, including cell or tissue homogenates, blood or blood components (such as plasma or serum), urine, saliva, cerebrospinal fluid, and synovial fluid;
- identify and distinguish protein variants at the peptide level;
- identify and quantify protein variants and PPIs;
- use machine learning to design, synthesize and select different NPs and NP panels to create multiple products and applications; and
- be compatible across a wide range of laboratory workflows, automation equipment and sample processing and detection methods, lowering the hurdle for product adoption.

We have validated our NP technology and the principle of protein corona formation as a robust and reproducible method to deeply and broadly profile the proteome in a high-throughput manner. In our recent publication in *Nature Communications* (Blume et al.), we demonstrated a rapid, deep and precise profiling of the plasma proteome with our proprietary engineered NP technology.

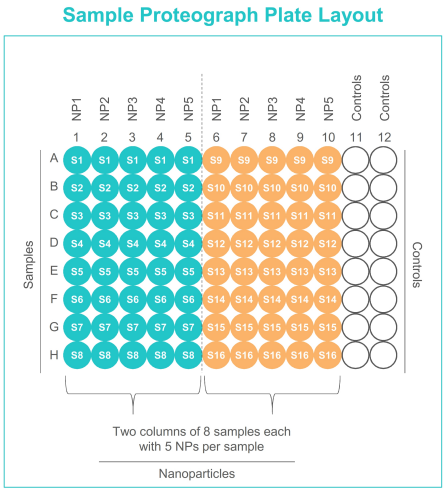
Our Proteograph Product Suite

Our proprietary engineered NP technology forms the basis for our first product, the Proteograph Product Suite. Our Proteograph is an integrated solution consisting of consumables, an automation instrument and software to perform unbiased, deep proteomic analysis at scale in a matter of hours. We designed our Proteograph to be efficient and easy-to-use, and to leverage broadly-used laboratory instrumentation to enable adoption in both decentralized and centralized settings and be widely available to life sciences researchers.

Our Proteograph consumables consist of our NP panel and all other consumables necessary to assay samples on our automation instrument. Our Proteograph automation instrument is custom-configured for researchers to assay samples in approximately seven hours, which includes thirty minutes of set-up time and six and a half hours of automated instrument time. The output from our automation instrument is peptides ready to be processed on an MS instrument, which is a widely-accessible platform for protein detection. The Proteograph Product Suite is detector agnostic and, therefore, we believe, will be adaptable to other protein detection instruments in the future. The MS component of our Proteograph workflow is either provided by the researcher's laboratory or can be outsourced to a third-party provider. We estimate that there are approximately 16,000 MS instruments with configurations typically used to perform proteomic analysis installed worldwide and, therefore, we believe that MS systems are readily accessible by researchers. Finally, we provide a data analytics software suite to analyze the output from the system that helps researchers interpret and gain insights into their data.

Consumables

For our first Proteograph assay, we will employ a panel of five NPs. Our Proteograph consumables also include buffers and reagents for protein lysis and digestion, peptide purification and peptide quantification. We designed the performance specifications of our Proteograph to meet the core needs of the market in terms of protein coverage and sample throughput required for proteomic experiments that are unbiased and at-scale. The product will allow for the interrogation and processing of up to 16 samples by our five proprietary engineered NPs in parallel on a single 96-well plate in approximately seven hours. Eighty wells are arrayed in two groups of columns with eight samples and five particles in each column. The remaining 16 wells are for integrated quality control samples for gathering assay metrics and aid in troubleshooting. We include these quality controls because they greatly facilitate comparison of results across different assays, and also help to differentiate between anomalous versus accurate results in an assay.



The ready availability of the non-particle reagents combined with our ability to efficiently and quickly design different NPs with different properties, greatly simplifies the development and production of future iterations or additional versions of our Proteograph assays to address potential customer needs, such as expanded coverage or specialized assays. Additionally, we can introduce new assays that include a different number of NPs and process different sample numbers. Our customers also can easily process the new assay using their existing Proteograph automation instrument, which allows for a greater number of samples to be analyzed in parallel, or additional NPs to analyze the proteome at greater depth.

Automation Instrument

We designed our NPs for robust performance in assays run on our Proteograph automation instrument, which is a custom-configured industry-standard liquid handling workstation. Our Proteograph instrument is designed to be robust and reproducible in its ability to consistently run experiments at the scale of hundreds to thousands of samples. Our instrument allows for rapid highly parallel proteomic sampling of multiple biosamples using multiple NPs on a 96-well plate. The assay protocol is fully automated after approximately thirty minutes of set-up time. The flexibility of our instrument, coupled with the inherent diversity of our NP technology, provides for many potential applications and study workflows that can suit particular experimental needs.

Our Proteograph automation instrument has been configured to process one full 96-well plate at a time. For our first Proteograph assay this translates into processing 16 samples in parallel for each 96-well plate run. Our Proteograph Instrument Control Software (PICS) for the Proteograph is fixed and tailored to our specified workflow. Each new Proteograph assay will be able to run on our same Proteograph automation instrument with a new NP

panel and an accompanying software update. After an initial 30 minute set-up process, our first Proteograph assay runs for approximately six and one-half hours on our automation instrument. The output of our Proteograph assay and instrument is peptides that are quantified, dried, and reconstituted when ready to inject into a mass spectrometer for quantitative detection, either on an MS provided by the user or sent out for MS analysis to a third-party provider.

Software

Our Proteograph software was designed for ease-of-use and was developed to help users arrive at insights quickly and efficiently following peptide detection by an MS instrument. To accommodate varying customer needs, we have designed our Proteograph software to be deployed as cloud-based and, in the future, on-premise. Both deployment options will provide a predefined workflow for data management and analysis that leverages publicly available MS data analysis tools. Without our software, the use of these tools requires expert knowledge and scalable high-performance computer infrastructure to run efficiently. We believe that our software could accelerate adoption among non-proteomic experts by providing an intuitive user interface that automates and simplifies data handling, processing and analysis, and which provides access to a scalable infrastructure.

Another potential roadblock for researchers is understanding and evaluating the quality of their results. Our Proteograph assay incorporates a series of controls for monitoring quality of the assay. Our software provides an integrated view of the results of these control runs. Using the software, the customer can evaluate trends over time and implement performance boundaries around the expected values that flag unexpected outcomes in the data. Providing a simple, consistent interface for customers to evaluate the control data and generate a quality control (QC) report will help them understand our approach to QC in our Proteograph and simplify support. Eventually, user communities might provide an avenue for customers to share their experiences against the backdrop of a common environment and understanding.

We expect that our Proteograph will enable generation of large volumes of proteomic data, and we have developed our Proteograph software to ensure that handling, management and analysis of data does not create new bottlenecks for researchers. Our Proteograph software offers ease of implementation and addresses key customer needs, which include analysis of raw MS data with pre-configured parameters, integrated QC reporting, the ability to visualize and download the primary data analysis, and statistical analysis tools. Our software is highly scalable and is designed to accommodate multi-instrument settings, rapidly expanding data volumes and emerging data analysis tools. Finally, as we continue to improve and extend our product portfolio, we expect to expand our Proteograph software suite to include advanced data analysis tools, including PPI analysis, mapping of PTMs, genetic polymorphisms, multi-omics integration, and systems biology framework analysis.

From Sample to Data Using our Proteograph Product Suite

Proteomic analysis using our Proteograph Product Suite has five primary steps:

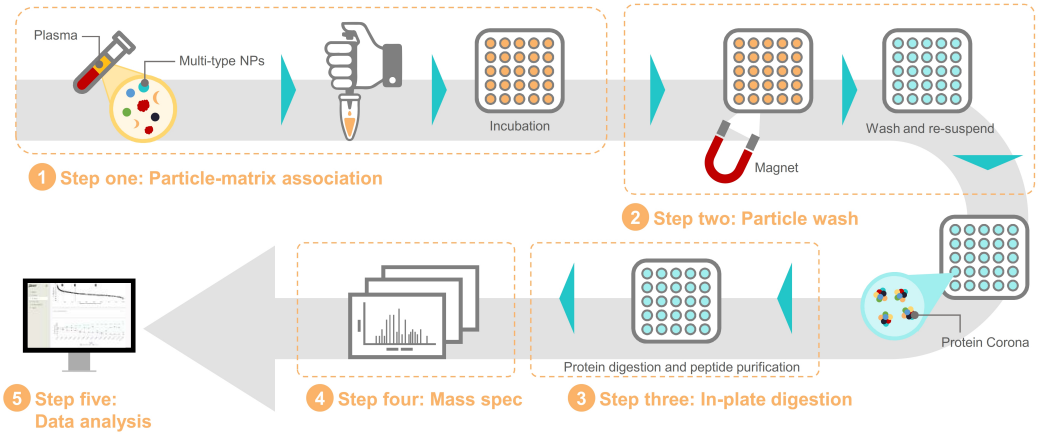
1. *Particle-Matrix Association*. NPs can be mixed with a wide variety of soluble biological sample types (matrices), including cell or tissue homogenates, blood or blood components (such as plasma or serum), urine, saliva, cerebrospinal fluid, and synovial fluid. After combining the biosample and the NP, the mixture is incubated in a solution that mimics physiological conditions, producing protein-corona on the surface of the NPs.

2. *Particle Wash*. NPs are then captured by a magnetic field, after which they undergo repeated cycles of wash with buffer to remove unbound, or loosely bound, proteins.

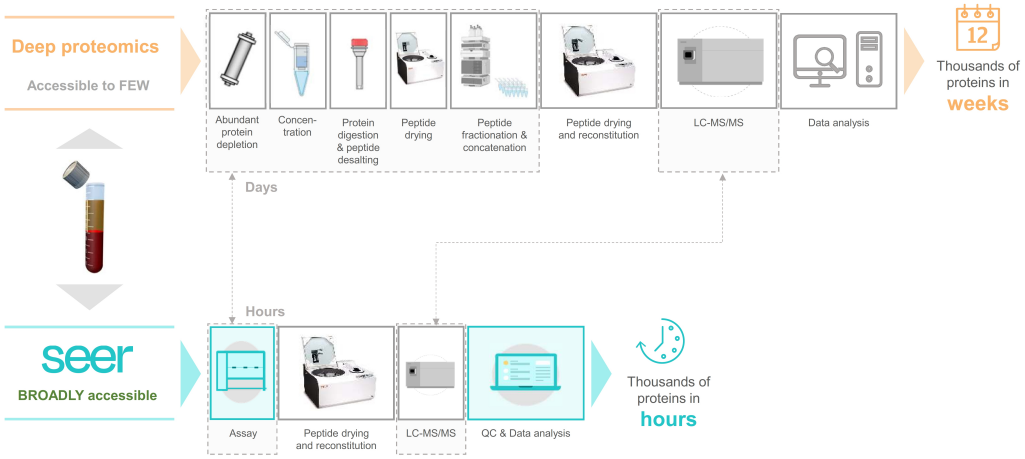
3. *In-plate Digestion*. Washed NPs are subject to enzymatic digestion to generate peptides, which are collected, quantified, dried and ready for subsequent MS analysis.

4. *Mass Spectrometry*. The researcher prepares the digested peptides for measurement by dissolution in appropriate peptide reconstitution buffer suitable for MS injection, at a volume and concentration that meets the researcher’s MS instrument and liquid chromatography gradient requirements.

5. *Data analysis.* After data acquisition, typical MS analysis methods are employed within our Proteograph software to identify and quantify the peptides and proteins in the sample. Quality control metrics are reported for the MS sample data, sample data summaries and output files are created, and initial cross-sample analyses are provided.



Given the seven-hour run time per plate for our initial five-NP panel, our Proteograph Product Suite could process 48 samples in a 24-hour period for unbiased and deep proteomic analysis. By comparison, the workflows developed by leading proteomics labs can take as long as several days to weeks, for sample preparation for MS measurement to reach an equivalent depth of proteomic coverage.

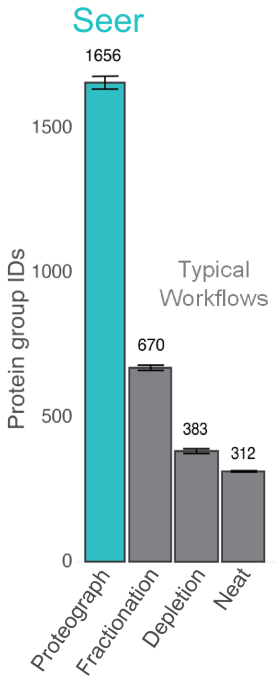


Proteograph Product Suite Performance

The four key technical attributes of our Proteograph Product Suite are its breadth of protein sampling, depth of coverage, accuracy and precision of measurement. In addition to its technical performance, our Proteograph automation instrument's rapid throughput is an important characteristic to scale the number of samples assayed. We believe that our Proteograph Product Suite is the only product to provide these technical and operational capabilities in an integrated solution to enable large-scale proteomic analysis. As described below, we discuss the performance of our first Proteograph assay relative to existing unbiased proteomics methods across the technical attributes of breadth, depth, accuracy and precision of measurement and the operational aspect of throughput.

- ***Breadth of protein sampling.*** Breadth of protein sampling refers to our Proteograph Product Suite's ability to conduct unbiased, highly parallel sampling of the proteome across its entire dynamic range, from high to

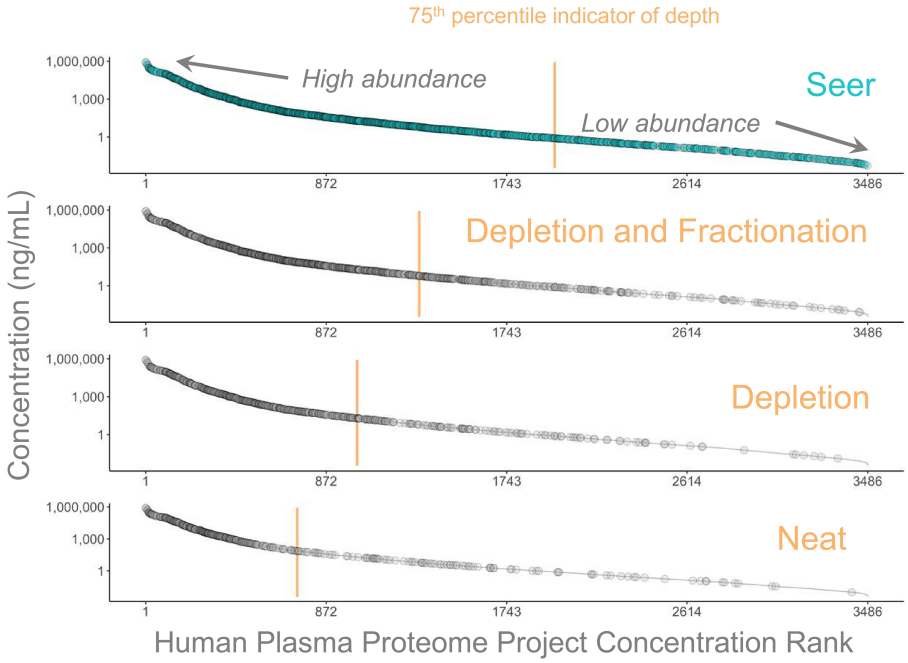
low abundant proteins. Given the unique characteristics of our NPs, our Proteograph Product Suite allows for the unbiased highly parallel sampling of the proteome, and it does this across its entire dynamic range from high to low abundant proteins. Each uniquely engineered NP selectively captures hundreds of distinct intact proteins from a biosample based on their abundance and affinity for the NP surface. Our Proteograph leverages a panel of unique NPs to capture significantly more proteins and protein variants than current methods of unbiased proteomic analysis, as shown in the figure below. This advantage of our Proteograph Product Suite is particularly strong in complex biofluids such as plasma.



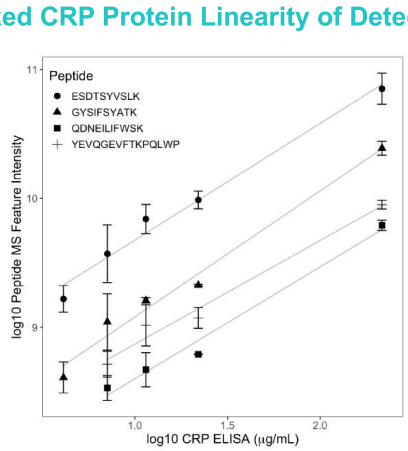
As illustrated above, we compared our Proteograph Product Suite with other unbiased proteomics methods in a head-to-head experiment using the same biological sample. Neat plasma represents the simplest form of unbiased proteomic analysis, requiring minimal processing time, and resulted in a breadth of coverage of 312 proteins. By adding processing steps such as depletion of high abundance proteins and separation of the remaining proteins into multiple fractions (a process called fractionation), the breadth of protein sampling increased to 670 proteins. However, with our Proteograph, we detected 1,656 proteins in plasma, which represents a major expansion in breadth of protein coverage.

- ***Depth of coverage.*** Depth of coverage refers to our Proteograph's ability to evaluate the proteome across the wide dynamic range of abundance of proteins. The range from the most abundant to the least abundant protein in biological samples can vary greatly. In plasma, this range is estimated to be at least ten orders of magnitude, and the rich diversity of biology resides outside the most abundant proteins. Sampling across the entire dynamic range has been one of the seminal challenges in the field of proteomics. Conventional approaches to address this challenge have employed laborious depletion and fractionation methods, which can be avoided with the automated and scalable workflow of our Proteograph Product Suite. We compared the depth of coverage of our Proteograph with other unbiased proteomic methods in a head-to-head experiment, shown in the figure below. Our Proteograph samples proteins across the entire dynamic range of the plasma proteome, as defined in the Human Plasma Proteome Project database (Schwenk et al.), with the 75th percentile point of depth of coverage shown with the orange bar. The depth of coverage for our

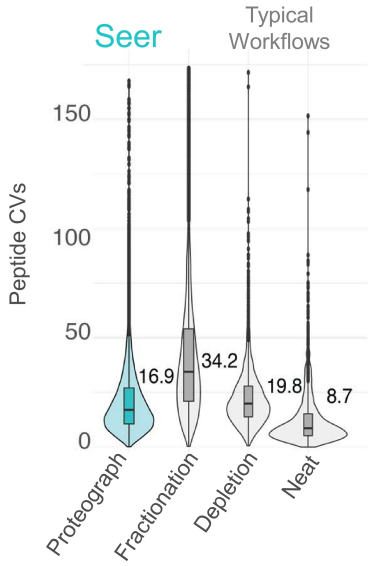
Proteograph reaches further into the low abundant proteins than the fractionation, depletion and neat plasma methods.



- ***Accuracy of measurement.*** Accuracy refers to how close the measured abundance of a protein is to the true abundance in a sample. Accuracy of protein abundance measurement can be demonstrated by MS signal intensity of the proteins sampled with our Proteograph, and comparing these values with measurements obtained directly by immuno-assay (ELISA). In the below experiment, purified C-Reactive Protein (CRP) was added or "spiked" in to plasma at levels of 2x, 5x, 10x, and 100x of the baseline measured levels for CRP in the plasma. These samples with known concentrations of CRP were then interrogated with our Proteograph Product Suite and ELISA. The figure shows the linearity of measurement of our Proteograph, as determined by MS signal intensity of four peptides within CRP when compared to the ELISA measurement of CRP. Our Proteograph assay can distinguish changes in protein abundance with significant accuracy, as demonstrated by a slope response approximately equal to one and an r-squared value greater than 0.95.



- ***Precision of measurement.*** Precision refers to how close several measurements of protein abundance in the same sample are to each other. Less precision in the measurement of a protein adds noise to an experiment, requiring a larger number of samples in the study to observe a true difference. Precision is typically measured as the coefficient of variation (CV%), or standard deviation divided by the mean times 100. Therefore, a lower CV% represents a more precise outcome. We compared the precision of our Proteograph with that of depletion, fractionation, and neat, by evaluating the same sample three times and calculating the CV% for the detected peptides and proteins. On average across the peptides, the median precision was 16.9 CV%. At this level of performance, our Proteograph has 80% statistical power to detect a 50% change in a peptide levels with only ten samples per sample group. Our Proteograph analysis shows lower CV%s than fractionation and depletion methods, which is notable since we achieve lower CV%s while concurrently sampling significantly more proteins, as shown in the figure below. In general, in unbiased assays, CV%s are expected to increase as the number of analytes detected increases. However, our Proteograph can increase the number of analytes that it detects while achieving comparatively better CV%s. Although neat plasma has a lower CV, it is limited in the breadth of protein coverage to 312 proteins compared to 1,652 proteins sampled by our Proteograph.



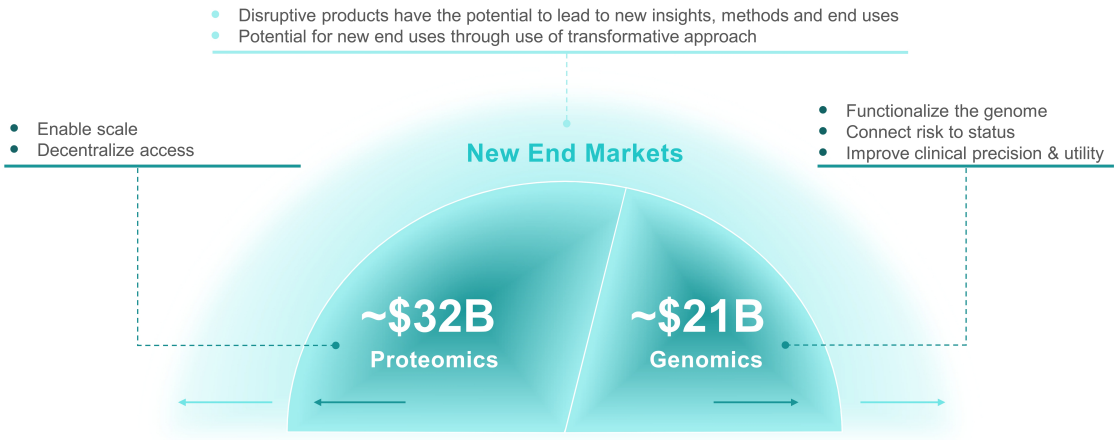
- ***Rapid and large-scale.*** Our Proteograph enables rapid and large-scale proteomic sample processing in a seven-hour workflow, compared to other unbiased solutions that can take days to weeks. We recently reviewed major published plasma and serum proteomics studies from 2016 to 2019 to compare protein coverage, throughput and sample size. We have compared the results of 14 published unbiased, deep proteomics studies with the results from our recent *Nature Communications* paper (Blume et al.). While unbiased proteomics studies are vastly different in terms of their workflows, they may be considered more comparable in the quantifiable outputs of protein coverage, the amount of MS time required for the study and number of samples in the study. We only utilize the published MS time and did not account for up-front sample processing time. We examined these three outputs from the literature review against our published study. While we do not consider this to be a head-to-head comparison, it does provide general guidance to understand the comparative performance of our assay. We observed an average protein coverage of 1,960, with an average throughput of 1.5 proteins per minute, and average study size of 15 samples. This compares to our protein coverage of 2,094, a throughput of 14.2 proteins per minute, and study size of 141 samples. This advantage in throughput reflects only the MS time and does not include the additional throughput advantages of our Proteograph automation instrument, which enables simpler and faster sample processing, which is otherwise also a lengthy part of unbiased studies.

We believe that our studies demonstrate that our Proteograph Product Suite has a unique combination of attributes spanning breadth, depth, accuracy and precision of measurement and throughput necessary for large-scale proteomics studies. We believe our Proteograph will broadly appeal to researchers seeking an easy to use, scalable approach for such studies.

Markets

The proteome comprises millions of protein variants whose expression varies by cell, tissue, organ and system, as well as across time, and whose interaction with other proteins and biomolecules are essential to driving health and disease. No commercial product has existed that enables researchers to assess the proteome deeply, broadly, rapidly and at scale across thousands of samples. Despite this limitation, researchers rely on laborious, expensive and complex methods to survey as much of the proteome as they can. While NGS transformed life sciences end-markets through massively parallel access to the genome, lack of similar unbiased, deep, rapid and large-scale capabilities has to date evaded the field of proteomics. We believe our Proteograph enables such access to the proteome, and will allow researchers to undertake the scale of studies we believe are needed to understand the complexity of the proteome, and by extension biology.

We believe the two primary near-term markets for our Proteograph are the proteomics market, which was $32 billion in 2019, according to Allied Market Research, and the genomics market, which was $21 billion in 2019, according to Technavio. Within these markets, potential applications of our Proteograph span basic research and discovery, translational research, diagnostics and applied applications. We believe that our Proteograph's unique value proposition will resonate with proteomics researchers who already value deep and unbiased proteomic information, and who desire to scale experiments to far greater sample sizes at a fraction of the time and cost of current approaches. We also believe that as more genomics investigators incorporate other -omics approaches to elucidate key genomic findings, our Proteograph will uniquely provide large-scale, unbiased and deep proteomic information to complement genomic information, and enable researchers to gain a clearer picture of biology and a deeper understanding of genomic risk factors. Longer-term, we believe that the capabilities offered by our Proteograph and future products may potentially lead to new end-markets, applications, and business models that complement existing proteomics and genomics markets.



Proteomics

Allied Market Research estimates the global proteomics market was $32 billion in 2019, and is expected to grow to $64 billion in 2024, representing a 15% compound annual growth rate. According to Allied Market Research, 61% of the proteomics market is focused on life sciences research, 35% for clinical applications and 4% other applications. Products in the proteomics market include spectrometry, microarray and chromatography instruments as well as reagents, used for both unbiased and biased proteomics. The majority of proteomic analysis to date either relies on biased or targeted methods or expensive, complex, and laborious unbiased or *de novo* deep methods that are applied only to tens of samples versus the thousands needed to power large-scale studies. Few methods are based on capture of intact proteins that enable analysis of proteome complexity at the level of amino acid variants, PTMs and PPIs, all of which have the potential to generate important biological insights. We believe the unique capabilities of our Proteograph will appeal to researchers either as a complement or substitute for current approaches, or in creating an entirely novel path to survey the proteome. We estimate that there are approximately 16,000 MS instruments with configurations typically used to perform proteomic analysis installed worldwide. Since our Proteograph can leverage most MS instruments as a detector, we believe that we can take advantage of this installed base to accelerate adoption of our Proteograph. We believe that we have an opportunity to provide a strong alternative to both unbiased and biased proteomics approaches, particularly in the discovery of new biology, and to grow the proteomics market by enabling new applications for unbiased proteomics. These applications currently span research, translational and clinical settings, and we believe that our Proteograph can address all these applications over time.

Genomics

Technavio estimates the global genomics market was $21 billion in 2019 and is expected to grow to $38 billion by 2024, representing a 13% compound annual growth rate. Over the last fifteen years, application of large-scale genomics across the population has led to discovery of approximately 695 million individual human variants and it is expected the total number of such variants will only expand as more exomes and genomes are sequenced. However, despite this impressive rate of variant discovery, fewer than 0.2% of those variants have been cataloged in the ClinVar database with a reported relationship between genetic variation and phenotype. We believe that large-scale deep, unbiased proteomics studies, such as those our Proteograph could enable, will provide important missing biological information to improve functional characterization of genomic variants. In genomics markets, complementing large-scale genomics analysis with large-scale proteomic analysis has the potential to enhance and accelerate our understanding of biology, human health and ultimately the treatment of disease. Therefore, we believe our Proteograph can appeal to an increasing number of genomics customers, especially those in translational settings, who are looking to leverage multi-omics approaches to further annotate genomic variants in terms of function and connect genotype to phenotype.

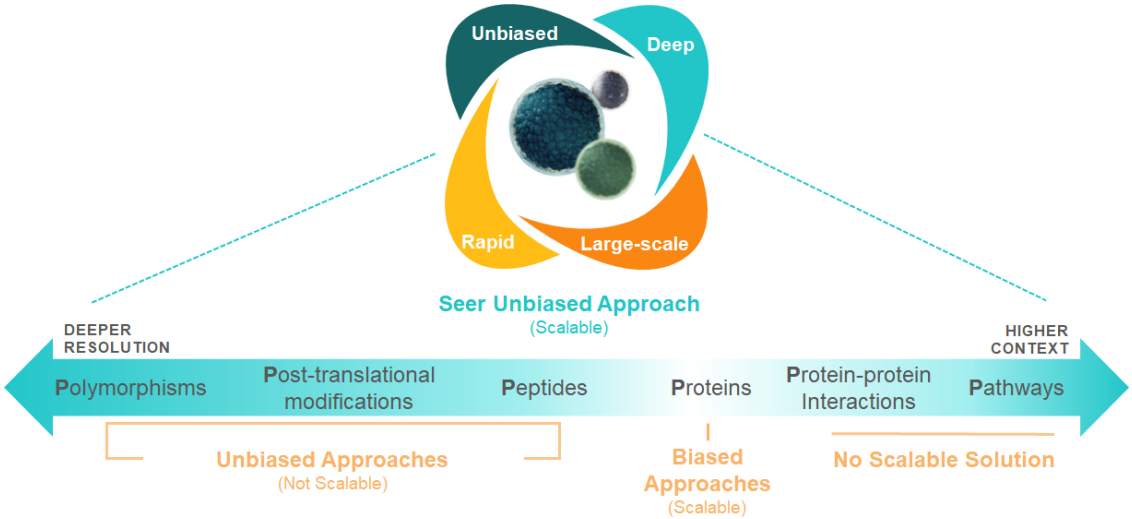
New Markets

We also believe that our Proteograph Product Suite will enable novel applications and insights leading to new end-markets, similar to the impact that broad access to genomics products have had in creating new applications, end-markets and business models. For example, non-invasive prenatal testing and precision oncology currently make up a significant part of the current $21 billion genomics market, yet we believe that it would have been difficult to anticipate these market opportunities a decade ago. We believe the same dynamic of new market creation will occur in proteomics. One such application for proteomics is early disease detection. We recently spun out a new entity, PrognomIQ, Inc. (PrognomIQ), which aims to develop and commercialize novel diagnostic tests that leverage our Proteograph, in combination with genomics and metabolomics information, and will be a participant in the existing ecosystem of early disease detection. More broadly, we believe our Proteograph has the potential to further stimulate growth of new applications and end-markets in additional ecosystems.

The Advantages of Our Proteograph Product Suite

We believe our Proteograph Product Suite and its underlying NP technology have the following advantages:

- ***Our Proteograph Product Suite is expected to be the first commercially available solution to provide the combination of unbiased, deep, rapid and large-scale access to the proteome.*** While other proteomics technologies exist today, we believe that our Proteograph is the first and only product to provide the combination of these four attributes in a single integrated solution with an easy-to-use workflow. We believe these capabilities fill a gap that to date has been one of the rate-limiting steps in unlocking the complexity of biology. This creates a unique opportunity for us to drive widespread adoption of our Proteograph, transform proteomics and biological research, and establish our Proteograph as the industry standard for generating deep, unbiased proteomic information.



- ***Our Proteograph Product Suite provides insight into protein variation and PPIs at a depth and scale that we believe sets a new standard for unbiased and deep proteomics, and is unattainable with other existing approaches.*** The ability to observe the myriad of possible protein variations, which go beyond simple total protein abundance, with the accuracy and precision necessary to extract useful insights across large numbers of subjects, is a key differentiating attribute of our Proteograph. Furthermore, capturing these variations at scale enables synergistic insights when combined with genomic variations, finally enabling the development of informative, individualized models of biology at population scale. As noted in the figure above, biased approaches can capture individual proteins at scale, but are not readily able to capture protein variants at scale. Current unbiased approaches are able to capture some protein variants at the peptide level and can capture polymorphisms and PTMs, but not at scale. Moreover, these unbiased approaches are not able to capture PPIs

and protein pathway information at scale. We believe that our Proteograph is uniquely positioned to fully capture the breadth, depth and the complexity of the proteome at scale.

- ***Our Proteograph Product Suite was designed to enable broad adoption across a wide variety of customers in both decentralized and centralized settings.*** Our Proteograph is an integrated solution comprised of consumables, an automation instrument and software, and was designed to deliver ease-of-use, efficiency, robustness and reproducibility of results and to complement existing laboratory infrastructure. Our Proteograph's simple and integrated workflow enables the customer to use their own MS instrument or leverage a widely available installed base of MS instruments . We estimate that there are approximately 16,000 MS instruments with configurations typically used to perform proteomic analysis installed worldwide. Since our Proteograph can leverage most MS instruments as a detector, we believe that we can take advantage of this installed base to accelerate adoption of our Proteograph. We believe these characteristics will facilitate broad adoption of our Proteograph across a variety of laboratories and institutions in both decentralized and centralized settings.

- ***Our proprietary engineered NPs are a core technology from which we can develop a range of products, applications and platforms.*** We have evaluated over 250 different NPs with diverse sets of physicochemical properties, from which our five NPs for our first Proteograph assay were selected. From our growing and diverse NP library, we can develop new arrays of NP consumables that address a variety of applications and customer needs. We plan to use machine learning techniques and apply large-scale data analyses of our NP binding properties to understand relationships between NP surfaces and protein binding and interactions in order to rationally design our NP panels. Our NPs are versatile and can be designed to work with different sample types from plasma to homogenized tissue and collect proteomic, molecular and other -omics information. We believe these characteristics will enable development of additional differentiated products to enable our customers to utilize applications across the life sciences industry, ranging from basic research and discovery, translational research, diagnostics and applied applications.

- ***Our NP technology inherently provides significant operational leverage in research and development, manufacturing and commercialization.*** NPs are efficient to design, develop and manufacture. We believe we will be able to rapidly increase and deploy our understanding of NP design to develop new products with our software and data analytics capabilities. In the NP manufacturing process, we use well-characterized inputs and methods, which require relatively modest capital equipment and space investments. Since our core technology resides in the NP consumables, not the instrument, new products will often involve commercializing new NP assays and software that can be run on the existing instrumentation. This capital-efficient and labor-efficient model has the potential to provide significant operating leverage to our organization.

- ***Our Proteograph Product Suite has the potential to provide sustainable differentiation.*** Our Proteograph is uniquely capable of generating robust, reproducible, deep and unbiased proteomic data, and as more of this data gets created over our time and used by more customers to generate insights, we expect to create a virtuous cycle that will fuel further adoption of our Proteograph throughout the industry. Our Proteograph was designed to fully integrate with customer workflows and provide a unique user experience, supported by our software packages, to create a sustainable solution within our customers' organizations. Our Proteograph automation instrument and NP technology are covered by five issued patents and 24 pending patent applications, worldwide, covering improvements in NPs, assay methods and ways to leverage proteomic data and information for life sciences research and clinical diagnostic and drug discovery applications.

Our Strategy

We aim to enable exceptional scientific outcomes by commercializing transformative products for researchers to unlock deep, unbiased biological information. Our growth strategy is to:

- ***Drive adoption of our Proteograph Product Suite to enable researchers to create large-scale unbiased proteomic datasets that generate transformative scientific insights.*** Our initial product, the Proteograph, uniquely enables researchers and clinicians to generate unbiased, deep proteomic information at speed and scale which are not possible today. The utility and potential applications of these capabilities are broad, spanning

across basic research and discovery, translational research, diagnostics and applied applications. We believe our first NP assay for our Proteograph is particularly well suited to address the core needs of researchers focused on basic and translational research and diagnostics. We intend to drive adoption of our Proteograph through a three phase commercial launch plan that includes an initial collaboration phase with key opinion leaders, then an early access limited availability phase in 2021 to initiate and build momentum of customer references, and finally broad commercial availability in early 2022.

- ***Invest in market development activities to increase awareness of the importance of large-scale proteomic data and the ability to access it***. In order to expand and accelerate demand for our products, particularly as new applications are created and adopted by customers, we plan to invest in market development activities to educate prospective customers, funding bodies, commercial entities, government-sponsored -omics programs, and other stakeholders of the importance and value of large-scale unbiased and deep proteomic data. These activities will likely include collaborations with key opinion leaders, generation of peer-reviewed publications, sponsorship of targeted projects, joint publications and seminars, and industry partnerships. These activities aim to establish the value of large-scale unbiased and deep proteomic data, and demonstrate the unique capabilities offered by our products.

- ***Continually innovate to develop and commercialize additional transformative products to access the proteome and accelerate our understanding of biology***. We aim to continually innovate and develop new products, applications, workflows and analysis tools that simplify and accelerate researchers and clinicians' ability to generate proteomic data and to connect proteomic data to genomic and transcriptomic data that drive novel biological insights. As leaders in NGS have demonstrated, our sustainable advantage will come from continual development and commercialization of new products and applications based on our technology, and we will drive innovation through both internal R&D projects and from collaborations with customers and partners.

- ***Rapidly build our commercial infrastructure and NP manufacturing capabilities to provide for our commercial launch in the United States and internationally.*** We are initially building our commercial infrastructure to sell and support our products directly in the United States, the European Union and United Kingdom. We expect to expand access to our products in other geographies, starting with select countries in Asia Pacific through distributors, and eventually to the rest of the world. We are also scaling our NP manufacturing capabilities in our facility in Redwood City, California, and will continually evaluate and optimize our manufacturing and supply chain footprint to meet our business objectives.

- ***Foster the creation of an ecosystem of customers, partners and collaborators whose expertise and offerings complement and enhance the power and utility of our products.*** We intend to seed and develop a new ecosystem of applications and organizations that can take advantage of large-scale proteomic analysis. This ecosystem can include areas such as disease detection, large-scale population studies, agriculture, environmental monitoring and food safety. Much as we have seen large-scale genomic analysis spur new innovations in non-invasive prenatal testing, early cancer detection and recurrence monitoring, we believe large-scale proteomics will enhance these markets and spur the development of new markets and applications. To help seed the growth of this ecosystem, we recently spun-out a new company called PrognomIQ, which plans to develop and commercialize diagnostic tests for early disease detection, leveraging our Proteograph in combination with other -omics technologies.

- ***Expand our proprietary engineered NP technology to analyze molecules beyond proteins.*** Given the inherent flexibility and ability to synthesize myriad NPs, we intend to seek over the long-term to expand the scope of our propriety engineered NP technology to analyze other biomolecules such nucleic acids, metabolites and small molecules among others. As we continue to work closely with our initial and future customers, we will better understand their needs and requirements, which will inform our product development pathway and development of our library of NPs and our software capabilities to address other -omics applications. We believe our management's knowledge and experience in both the proteomics and genomics markets will position us to take advantage of such new expansion opportunities as they arise.

The Applications of our Proteograph Product Suite

We believe the ability to generate unbiased, deep proteomic data at scale, with rich content at the protein variant level will have broad applications in proteomics, encompassing basic research and discovery, translational research, diagnostics and applied markets. We believe this data will be used in many of the same application areas as are used with genomics data, proteomics applications that are uniquely possible with unbiased proteomic data, and in new applications that the field will develop in the future.

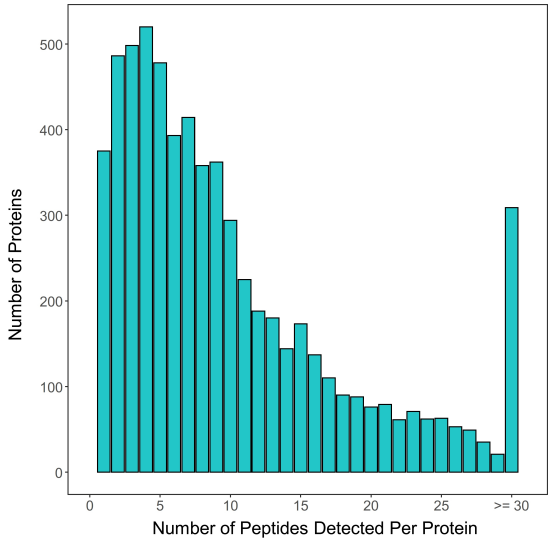
Basic Research and Discovery Applications

We believe that researchers will use our Proteograph for a variety of basic research and discovery applications, including cataloging protein diversity, proteogenomics and exploring the interactome. While researchers are pursing these applications today, the studies are either limited in scale due to the complex workflows of current unbiased methods or the limited set of ASRs that are available for biased methods. Our Proteograph is designed to enable the use of unbiased proteomic data at scale, which we believe will greatly accelerate these areas of basic research and discovery.

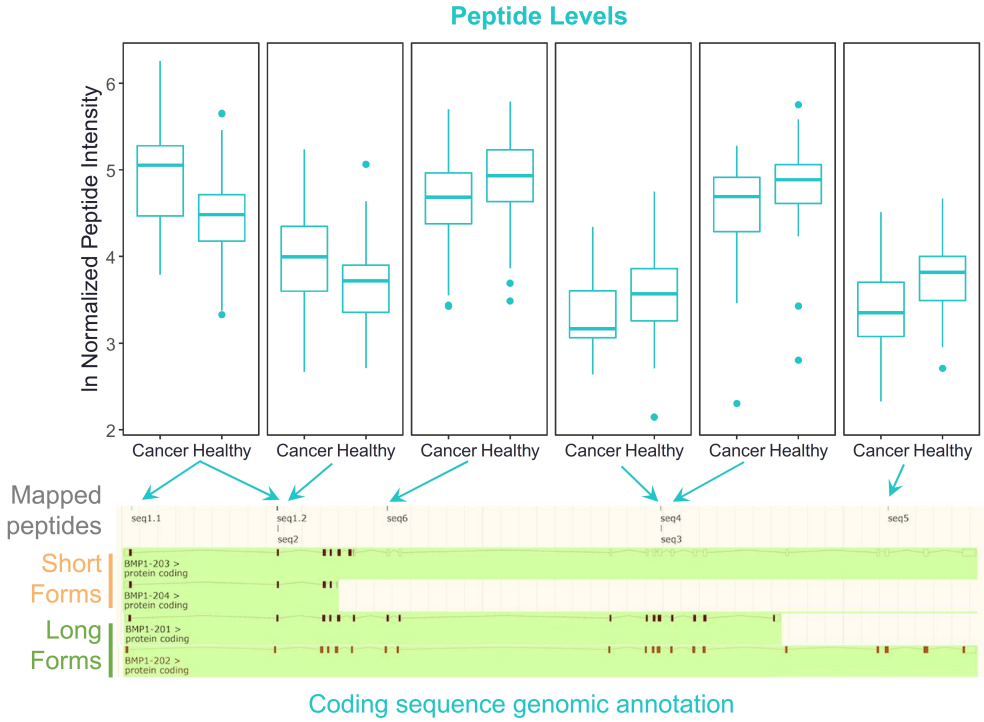
Cataloging protein diversity

Our Proteograph is designed to enable researchers to broadly explore the complexity and diversity of the proteome at the peptide and amino acid levels and discover many distinct protein variants. This is analogous to how NGS enabled genomic researchers to change their experimental focus from exploring genes to exploring exons and nucleotides, revealing approximately 695 million genetic variants to date. We expect that researchers will use our Proteograph to catalog these protein variants much like the cataloging of genetic variants that occurred over the past fifteen years, and this will uniquely provide functional context at a scale that is not accessible today with other proteomics methods. We believe the utility of these protein variants has the potential to impact a broad spectrum of the life sciences field.

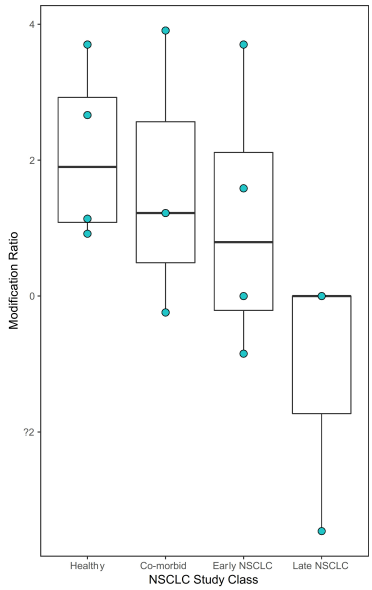
The figure below shows the type of protein cataloging possible with our Proteograph Product Suite. Interrogating the protein data from our previously published work in *Nature Communications* (Blume et al.), we illustrate below that our Proteograph can identify a range of peptides for the proteins in plasma samples from lung cancer patients and healthy controls, which is not feasible or practical using a biased method.



In the following figure, we have analyzed the Bone Morphogenic Protein 1 (BMP1) gene, which is known to have seven variants at the RNA level from alternative splicing and four variants at the protein level. Of these four variants, two are the long form and two are the short form of the BMP1 protein. Among the peptides that our Proteograph detected in this study, six specific peptides came from various parts of BMP1. Interestingly, the short form of the BMP1 protein was expressed predominantly in cancer patients, whereas the long forms of the protein were seen more often among the healthy controls. According to Pubmed, this observation has not been previously reported in the literature and may merit further investigation for the potential role of different BMP1 protein variants in health and cancer. We believe that researchers will therefore use our Proteograph to pursue large-scale proteomics studies in order to generate data that may link disease biology to protein variants produced from alternative RNA splicing, alternative transcription and from PTMs.

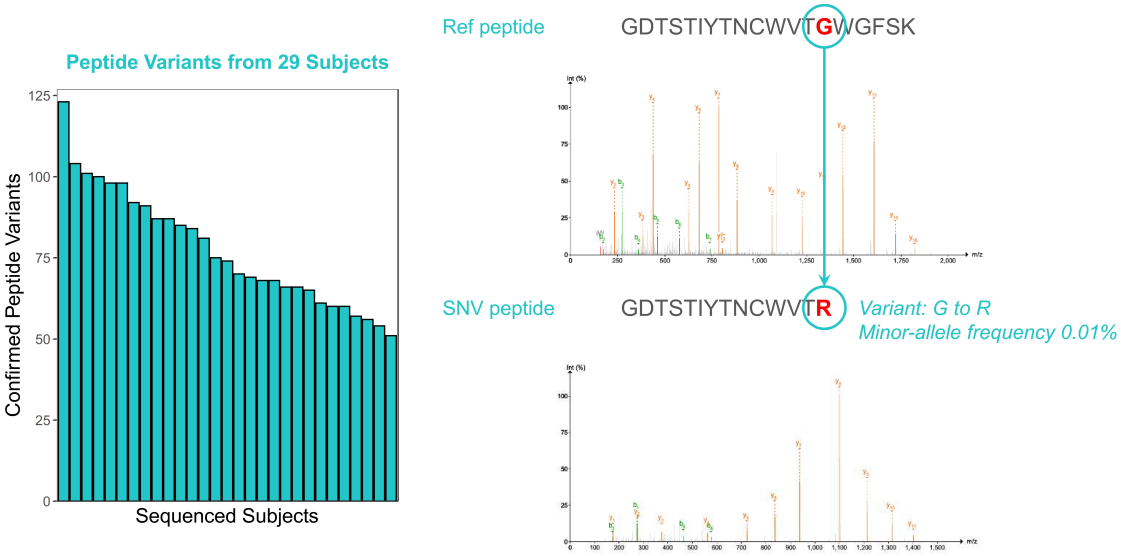


In cataloging protein variants, researchers can also gain valuable insights with PTMs, such as phosphorylation. These PTMs are dynamic and the resulting protein variants can be seen with different states of health and disease. The figure below shows the differences in the ratio of phosphorylated to unphosphorylated states of a specific peptide within Heparin Co-factor 2 across 14 samples taken from each group of early and late stage lung cancer patients, healthy and comorbid controls. We show that the phosphorylation state of this peptide may vary as the disease state varies. Heparin Co-factor 2 has been previously shown to play a role in cancer and is associated with over-expression in lung cancer (Liao et al.). The phosphorylation observations below may merit further investigation for their roles in lung cancer. We believe that as researchers pursue large-scale proteomics studies, the literature that links disease biology to protein variants produced from alternative RNA splicing and from PTMs will exponentially increase.



Proteogenomics

Proteogenomics is an emerging area of research, whereby personalized protein sequence databases are generated using genomic and transcriptomic information to help identify novel peptides. In turn, the proteomic data provides functional context to genomic information and refines gene expression models for transcriptomic information. Our Proteograph generates large-scale unbiased proteomic data, which will facilitate mapping protein variants to genomic variants, and therefore, the advancement of the emerging proteogenomics field. As an example, we performed individual exon-based sequencing on 29 patient samples from our previously published proteomics work in *Nature Communications* (Blume et al.) to enable proteogenomic analysis on these samples and evaluate additional protein variants that could be revealed with the addition of genomic information. As shown in the left panel of the figure below, the sequencing information from these 29 samples, coupled to matching unbiased and deep analyses of the samples' proteomic data using our Proteograph, yielded an average of approximately 70 predicted and confirmed peptide variations per sample. The right panel of the figure shows a subject who is heterozygous at the KLKB1 gene, which codes for the prekallikrein protein. This subject has both the reference allele for KLKB1 and a minor allele with a frequency of 0.01% in the population, resulting in a glycine to arginine amino acid change in the prekallikrein. Interestingly, we identified both prekallikrein variants in the plasma sample of this subject. Given the current level of access to genomic and transcriptomic information, as researchers conduct the large-scale proteomics studies that our Proteograph enables, we expect proteogenomic content to rapidly increase, providing functional information to existing genomics and gene expression information.

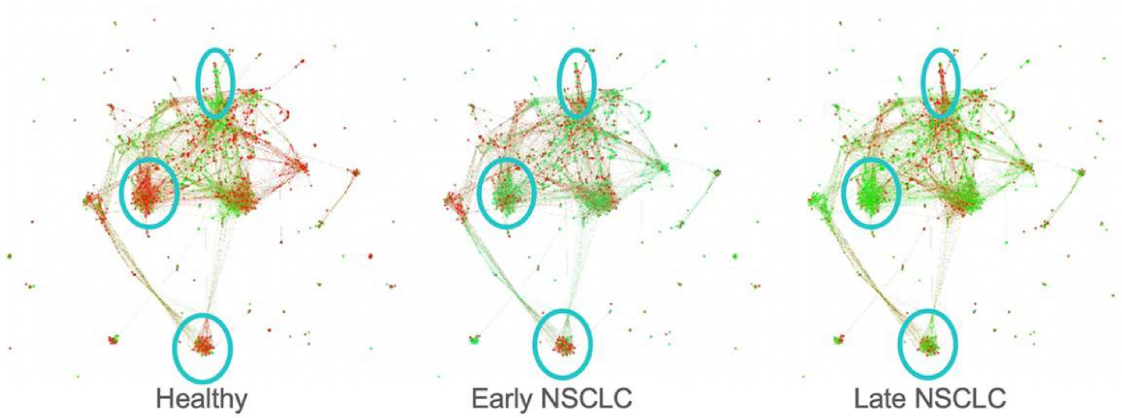


Interactome

The interactome refers to the broad set of interaction networks among molecules, such as those interactions among proteins, also referred to as protein-protein interactions, or PPIs. Protein interaction networks have been used to infer the function of proteins. Different types of interaction maps can be composed by the research community for different applications. These include physical interactions or the functional pathway implications of these interactions. PPI network maps can be constructed by pegging individual proteins as nodes and linking proteins that interact to them by a drawn line. These maps naturally cluster into hubs of proteins that fall into related pathways or have related functions.

We interrogated the plasma proteome of 276 subjects across early- and late-stage non-small-cell lung carcinoma (NSCLC), co-morbid and healthy controls. These subjects are a subset of those described in our *Nature Communications* publication (Blume et al.). Using proteins detected in these samples, we analyzed potential PPI interactions using the STRING PPI database (Szklarczyk et al.). In the figure below, we show a map of healthy versus early- and late-stage NSCLC where each protein is represented as a node and colored by its relative abundance. Green represents high abundance of proteins and red represents low abundance relative to the average abundance of the proteins across the samples. Multiple nodes can group together forming hubs with related common pathways or functions. Correlated changes in the abundance of proteins in these hubs may represent functional changes between health and disease. We highlight three hubs in the figure below with turquoise circles, and show changes depending upon health and disease state. Examination of the hubs can suggest biological hypotheses for the change in quantities. For example, the proteins in the central cluster are associated with Golgi vesicle transport, which is potentially linked to NSCLC. Access to the deep unbiased proteomic information provided by our Proteograph may enable researchers to better understand biological implications of known PPIs. Furthermore, given our highly parallel sampling of the proteome across multiple NPs and many samples, we believe researchers using

the Proteograph may be able to leverage machine learning methods on the resulting large data sets to derive novel PPIs.



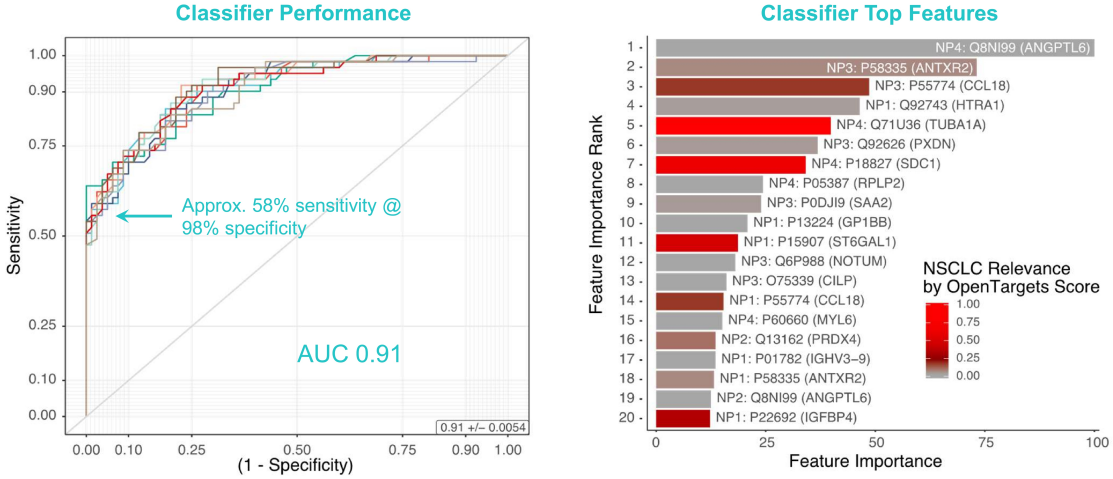
Translational Research Applications

Researchers can use our Proteograph to address translational research applications, which aim to shorten the cycle time from early discovery research to clinical application. Our Proteograph allows clinical and translational researchers to conduct unbiased, deep and large-scale proteomics studies in therapeutic and diagnostic research and clinical trials, which can allow for significant advances in biomarker discovery, target identification and exploration, and clinical trial applications.

Biomarker discovery

To date, most *de novo* biomarker discovery research is limited by the size of studies that can be done in an unbiased way, or limited to targeted studies that leverage existing knowledge. These approaches have yet to uncover the vast number of putative biomarkers that may be available as single markers or as combinations of markers for a range of clinical applications. We believe our Proteograph can greatly enable the discovery of biomarkers through large-scale, unbiased and deep proteomics studies.

The utility of our Proteograph for exploration of potential biomarkers is illustrated in a proof-of-principle study in lung-cancer, as published in *Nature Communications* (Blume et al.). In this study, approximately 2,000 proteins were quantified across 141 subjects comprising early stage lung cancer (i.e., Stages 1, 2 or 3) and age- and gender-matched non-cancer controls. Machine-learning-based classifiers were developed. Plotting the sensitivity and specificity levels of our classifiers in a receiver operating characteristic (ROC) curve, we achieved a mean Area Under the Curve (AUC) of 0.91 on a scale from 1.0 (i.e., perfect) to 0.5 (i.e., random), as shown in the left panel of the figure below. In the right panel of the figure below, we show the most important classifiers in the study, with accompanying OpenTargets scores, where a score of one represents a validated target for a drug that is on-market, and a score of zero represents a target with no known target validation data in the literature. In our study, our Proteograph identified proteins with high OpenTargets scores such as tubulin 1-alpha and syndecin 1; the former is the molecular target for paclitaxel used in first-line therapy for NSCLC, and the latter is a molecular target for an antibody-drug conjugate, indatuximab ravtansine, currently in clinical trials for different cancer types. Our Proteograph identified proteins with low OpenTargets scores, and these could represent novel biomarker candidates for therapeutics and diagnostics development. A study of this size can be completed using our Proteograph in a fraction of the time of conventional methods, thus highlighting the efficiency of our Proteograph in biomarker discovery studies.



Target Identification and Exploration

Currently FDA-approved drugs are directed to 754 separate human proteins that are directly related to the mechanism of action for the drug, and there are 4,009 genes in the UniProt database that have experimental evidence for being involved in disease. We believe that large-scale access to protein variant information that map to different states of health and disease, as enabled by our Proteograph and concurrent advances in proteogenomics, has the potential to lead to the discovery of personalized drug targets that could reach the hundred thousand range. We believe that the translational application of our Proteograph for potential biomarker development, as exemplified above in our NSCLC study, may also be applied to the identification of novel targets for therapeutic development. Components of classifiers may directly be targets themselves for drug development, or they may highlight new knowledge with respect to disease mechanism which then could help in the exploration of additional targets and/or help to elucidate the function of potential targets, particularly if these targets are discovered with genomics approaches, and lack protein functional context.

Clinical Trial Applications

Clinical researchers can use our Proteograph for deep and broad proteomic profiling for subjects in therapeutic clinical trials, including to make observations on efficacy and adverse events. Applications could include the real-time monitoring of protein-related drug effects, distribution, and metabolism. Virtually all clinical trials in drug development include monitoring of this type, but currently use biased or targeted panels of proteins. It is currently impractical to do this type of monitoring with unbiased proteomic methods given the inability of these methods to scale to the hundreds or thousands of samples that are evaluated in clinical trials.

Our Proteograph may also be used to select and group patients in clinical studies based on their proteomics profiles. As our understanding of the complexity of biology increases with new data accrued from our Proteograph as well as in adjacent -omics spaces, our ability to refine patient selection at a higher resolution may improve the ability to confirm efficacy for novel therapies, particularly in complex diseases that involve many inter-related physiological systems. Genomic approaches are widely used to select patients in cancer and rare genetic disease clinical trials, but the use of genomics-based selection for clinical trials outside of these indications has not been as widely used, given the relative lack of genetic understanding of these diseases. We believe that our Proteograph has the potential to generate useful proteomic signatures that can complement genomic and other patient selection criteria to improve how clinical researchers select and segment patients for these trials, particularly for indications outside of cancer and rare genetic diseases.

Diagnostic Applications

We see significant opportunities for researchers to use our Proteograph Product Suite for diagnostic development. Similar to the way in which NGS enabled the development of ecosystems that included genomics-based diagnostics in disease areas such as cancer and rare genetic diseases, we see the unbiased, deep and scalable proteomic information provided by our Proteograph potentially creating ecosystems, including proteomics and multi-omics based diagnostics in cancer and other complex disease areas. To help accelerate the future growth of this end-market, we recently spun-out a new company, PrognomIQ, that will leverage our Proteograph to develop multi-omics tests for health and disease. We expect that PrognomIQ will be our customer. We expect that our Proteograph will be used by other companies in the healthcare testing space, and we will support all of these customers as the ecosystem grows. We plan to enable our customers by providing our Proteograph for their basic research and translational research applications, as they develop their own diagnostic applications.

Applied Applications in Agriculture, Environmental and Food Safety

Outside of the areas related to human health, we believe there are opportunities for our Proteograph to be applied in other applied applications, including those applications where broad scale genomics is being widely applied today, and other applications where proteomics can uniquely enable the creation of end-markets. We believe that unbiased, deep and large-scale proteomic information as enabled by our Proteograph can complement and extend the value of genomics, transcriptomics, and metabolomics information in fields such as agriculture, environmental monitoring and food safety. This is exemplified in a recent plant proteomics study that identified PPIs and multi-protein complexes that likely play a role in important agronomic traits.

Pathogen monitoring is a core research area in environmental sciences. Genomics-based approaches have been applied for environmental monitoring, and we believe that unbiased proteomic data can be used to complement genomic information in monitoring environmental pathogens.

The food industry has complex supply chains where food can be subject to contamination and spoilage in the food product itself as one moves from raw material to processing to distribution, storage and consumption of the food product. We believe that unbiased proteomic data from our Proteograph could complement existing biochemical approaches for tracking signals of contamination and food spoilage.

PrognomIQ

In August 2020, we transferred certain assets related to disease testing to PrognomIQ, a wholly-owned subsidiary of the Company, in exchange for all of its outstanding equity interests. Following the transfer, we completed a pro-rata distribution to our stockholders of most of the shares of capital stock of PrognomIQ. Following the distribution and a subsequent $55.0 million financing of PrognomIQ, we hold approximately 19% of the outstanding equity in PrognomIQ.

The rationale for this transaction was to enable the growth of ecosystems around new applications that leverage unbiased, deep and large-scale proteomic information, and to focus on our core strategy, which is to be a provider of proteomics solutions to all customers across these ecosystems. Our relationship with PrognomIQ does not preclude us from selling our Proteograph to any customer in any geography, nor does it preclude our customers from using our Proteograph in any way. We believe that PrognomIQ will help us drive the adoption of our Proteograph Product Suite in disease testing applications.

Philip Ma, Ph.D., our co-Founder and Chief Business Officer, is transitioning to the role of Chief Executive Officer of PrognomIQ, and plans to enter into a consulting agreement with us for a period of twelve months. Our Chief Executive Officer and Chair of our board of directors, Omid Farokhzad, M.D., is the Chair of PrognomIQ’s board of directors.

Commercial

Commercial Strategy

Our Proteograph Product Suite is an integrated solution comprising consumables, an automation instrument and software. We have developed our Proteograph to simplify and accelerate proteomics workflow, reduce labor and capital requirements, and deliver robust and reproducible performance. We will focus on growing the installed base of our Proteograph across a wide variety of customer types and driving applications, scale of experimentation and discoveries that lead to increasing utilization of our Proteograph by our customers.

We intend to initially target potential customers who value unbiased and deep proteomic information and are performing proteomic or genomic analysis at academic institutions, translational research groups and biopharmaceutical companies. Our direct sales and marketing efforts will be focused on the principal investigators, researchers, department heads, research laboratory directors and core facility directors who control the buying decision. We expect these customers to purchase our Proteograph automation instruments and associated consumables in line with typical purchases of other life science instrumentation and consumables. We intend to price our Proteograph Product Suite within the authorization range of most researchers who can directly make the buying decision, without the need for additional levels of approval, simplifying our sales process.

We believe broad accessibility of MS instruments simplifies the adoption of our Proteograph Product Suite. We estimate that there are approximately 16,000 MS instruments with configurations typically used to perform proteomic analysis installed worldwide. We expect that many of our potential customers will have their own MS instrument, and for those who do not, will be able to outsource the MS portion of the Proteograph workflow to a third-party service provider.

The generation of publications and scientific presentations is a core pillar of our market awareness strategy and is important for establishing validity and utility of new products in the life sciences community. We plan to work closely with our customers, including key opinion leaders, to generate clear use-cases, as well as peer-reviewed publications that illustrate our product performance claims and value proposition. In addition, we plan to drive awareness by developing and deploying online and in-person training and educational tools that explain our Proteograph technology and key applications in easy-to-access, easy-to-understand, and scientifically rigorous and credible ways. We also expect to partner with select service facilities and core labs globally and certify them as Centers of Excellence for our Proteograph. We expect these sites will become our customers and potentially provide fee-for service capabilities that allow interested parties to evaluate our Proteograph using their own samples. We expect that these Centers of Excellence will actively promote our Proteograph and its capabilities and help us further raise awareness.

To service our potential Proteograph customers, we will provide multiple levels of technical service for our Proteograph automation instruments, depending upon customer need. We recognize that excellent customer support can be a critical part of a customer experience, and we will invest accordingly in our technical and application support to achieve the desired levels of service.

Proteograph Product Suite Commercial Launch Plan

We intend to follow a three phase launch plan to commercialize our Proteograph. This approach has been successfully used to introduce transformative technologies in numerous life science sectors over many years, including in genomics with the roll-out of NGS products. We believe that this phased approach allows us to introduce the product in a measured way, demonstrate clear customer use-cases, help to ensure we are scaling and expanding in a way that delivers a positive and differentiated customer experience, and builds a prospective customer pipeline to provide visibility to future demand.

- Collaboration phase: We began collaborating with two sites in the third quarter of 2020 and we expect to collaborate with additional sites as we expand and continue this phase in 2021. We are targeting key opinion leaders who are highly-skilled at evaluating novel technologies and whose feedback can help us solidify our commercialization plans and processes. We will work with these collaborators to establish

early models of impactful research and discovery that will highlight the unique capabilities and value proposition of our Proteograph.

- Early access limited release: We expect to start the second phase of our commercial roll-out in 2021 in parallel with winding down the collaboration phase. In this second phase, we will expand to selected additional potential customers across our target segments, including key opinion leaders in proteomics as well those in genomics. We will primarily target customers who can scale quickly and demonstrate the power and utility of our Proteograph across a number of applications, such as discovery research, oncology, complex diseases, and proteogenomics. We believe these customers will become important reference sites and key influencers whose adoption of the technologies gives others a clear blueprint to follow. During this phase, we expect to broaden our commercial footprint to access and support an increasing number of customers and to set the foundation for the final phase of our commercial roll out.

- Broad commercial availability: We intend to build on the momentum we expect to have created through both the collaboration and early access limited release phases of our roll-out to provide for broad commercial availability in early 2022.

Commercial Organization

We are in the process of building out our commercial organization and we expect to have direct commercial staff in marketing, sales, customer success, and technical support functions. We will scale each function within our commercial organization in anticipation of demand and with the intent to deliver exceptional customer experience. We believe that coupling exceptional customer experience with a transformative product will allow us to deliver substantial value to our customers, build long-term customer loyalty, enhance our competitive differentiation, and, importantly, use our customer relationships to gain insights that inform our product development to grow our offerings in ways that will benefit our customers.

We expect to initially target customers in North America, the European Union and United Kingdom through direct sales and customer support organizations. We expect to grow into other geographies over time, initially through distributors, starting with key countries in Asia Pacific. We expect a highly efficient sales model since our Proteograph does not have a large capital expenditure component, can leverage the existing installed base of MS instruments and complements large-scale genomics data ecosystems.

Suppliers and Manufacturing

Our overall manufacturing strategy is to continuously develop and refine our processes to achieve our objectives of continuity of supply, quality of supply and margin enhancement. Over time, this may lead to in-sourcing or outsourcing certain functions, including manufacturing, in various geographic locations in order to achieve our objectives.

Consumables

We leverage well-established unit operations to formulate and manufacture our NPs at our facilities in Redwood City, California. We procure certain components of our consumables from third-party manufacturers, which includes the commonly-available raw materials needed for manufacturing our proprietary engineered NPs. We are currently manufacturing using our pilot line and building out our manufacturing capabilities as we ramp towards broad commercial availability. We obtain some of the reagents and components used in our Proteograph workflow from third-party suppliers. While some of these reagents and components are sourced from a single supplier, these products are readily available from numerous suppliers. While we currently plan to handle filling and packaging of our Proteograph assay and the related consumables, in the future, we may have our filling and packaging outsourced

to a third-party. We conduct vendor and component qualification for components provided by third-party suppliers and quality control tests on our NPs.

Automation Instrument

We designed our Proteograph automation instrument and have outsourced the manufacturing of our Proteograph automation instrument to Hamilton Company, a leading manufacturer of automated liquid handling workstations. We have entered into a non-exclusive agreement with Hamilton that covers the manufacturing of our Proteograph automation instrument and its continued supply on a purchase order basis. The agreement has an initial term that runs three years following our commercial launch. We have the option to extend the term of the agreement with Hamilton upon written notice at the end of the initial term; provided that prices are only fixed during the initial term of the agreement. Hamilton has represented to us that it maintains ISO 9001 and ISO 13485 certification.

Competition

The life sciences technology industry is characterized by rapidly advancing technologies, intense competition and a strong emphasis on intellectual property. Today the proteomics market is served by companies that offer a variety of analytical instruments, such as chromatography and MS instruments, and associated reagents. We believe that competitors in the proteomics market are differentiated by their proprietary technologies, rapid product development capabilities, applications and intellectual property. We believe that there are currently no commercially available products that offer the capability to conduct unbiased, deep proteomics studies at the same scale and throughput as our Proteograph Product Suite. Given the potential market opportunity and scientific promise of proteomics, we expect the intensity of the competition to increase and, as a result, one or more competing products emerging in the future. Competing products may emerge from various sources, including life sciences tools, diagnostics, pharmaceutical and biotechnology companies, third-party service providers, academic research institutions, governmental agencies and public and private research institutions.

Current companies that provide proteomics products include Agilent Technologies, Bio-Rad Laboratories, Danaher, Luminex, Merck (and its subsidiary MilliporeSigma) and Thermo Fisher Scientific. There are also a number of companies that provide proteomic analysis services. In addition, a number of emerging growth companies have developed, or are developing, proteomics products, services and solutions, such as Nautilus Biotechnology, Olink Proteomics, Quanterix and SomaLogic.

Government Regulation

The development, testing, manufacturing, marketing, post-market surveillance, distribution, advertising and labeling of certain of medical devices are subject to regulation in the United States by the Center for Devices and Radiological Health of the U.S. Food and Drug Administration (FDA) under the Federal Food, Drug, and Cosmetic Act (FDC Act) and comparable state and international agencies. 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. Medical devices to be commercially distributed in the United States 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.

We intend to label and sell our products for research purposes only (RUO) and expect to sell them to academic institutions, life sciences and research laboratories that conduct research, and biopharmaceutical and biotechnology companies for non-diagnostic and non-clinical purposes. Our products are not intended or promoted for use in clinical practice in the diagnosis of disease or other conditions, and they are labeled for research use only, not for use in diagnostic procedures. Accordingly, we believe our products, as we intend to market them, are not subject to regulation by FDA. Rather, while FDA regulations require that research use only products be labeled with – “For

Research Use Only. Not for use in diagnostic procedures." – the regulations do not subject such products to the FDA's jurisdiction or the broader pre- and post-market controls for medical devices.

In November 2013, the FDA issued a final guidance on products labeled RUO, which, among other things, reaffirmed that a company may not make any clinical or diagnostic claims about an RUO product, stating that merely including a labeling statement that the product is for research purposes only will not necessarily render the device exempt from the FDA's clearance, approval, or other regulatory requirements if the totality of circumstances surrounding the distribution of the product indicates that the manufacturer knows its product is being used by customers for diagnostic uses or the manufacturer intends such a use. These circumstances may include, among other things, written or verbal marketing claims regarding a product's performance in clinical diagnostic applications and a manufacturer's provision of technical support for such activities. If 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 that will require clearance or approval prior to commercialization. Further, sales of devices for diagnostic purposes may 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.

In the future, certain of our products or related applications could become subject to regulation as medical devices by the FDA. If we wish to label and expand product lines to address the diagnosis of disease, regulation by governmental authorities in the United States and other countries will become an increasingly significant factor in development, testing, production, and marketing. Products that we may develop in the molecular diagnostic markets, depending on their intended use, may be regulated as medical devices or in vitro diagnostic products (IVDs) by the FDA and comparable agencies in other countries. In the U.S., if we market our products for use in performing clinical diagnostics, such products would be subject to regulation by the FDA under pre-market and post-market control as medical devices, unless an exemption applies, we would be required to obtain either prior 510(k) clearance or prior premarket approval from the FDA before commercializing the product.

The FDA classifies medical devices into one of three classes. Devices deemed to pose lower risk to the patient are placed in either class I or II, which, unless an exemption applies, requires the manufacturer to submit a pre-market notification requesting FDA clearance for commercial distribution pursuant to Section 510(k) of the FDC Act. This process, known as 510(k) clearance, requires that the manufacturer demonstrate that the device is substantially equivalent to a previously cleared and legally marketed 510(k) device or a "pre-amendment" class III device for which pre-market approval applications (PMAs) have not been required by the FDA. This FDA review process typically takes from four to twelve months, although it can take longer. Most class I devices are exempted from this 510(k) premarket submission requirement. If no legally marketed predicate can be identified for a new device to enable the use of the 510(k) pathway, the device is automatically classified under the FDC Act as class III, which generally requires PMA approval. However, FDA can reclassify or use "de novo classification" for a device that meets the FDC Act standards for a class II device, permitting the device to be marketed without PMA approval. To grant such a reclassification, FDA must determine that the FDC Act's general controls alone, or general controls and special controls together, are sufficient to provide a reasonable assurance of the device's safety and effectiveness. The de novo classification route is generally less burdensome than the PMA approval process.

Devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting, or implantable devices, or those deemed not substantially equivalent to a legally marketed predicate device, are placed in class III. Class III devices typically require PMA approval. To obtain PMA approval, an applicant must demonstrate the reasonable safety and effectiveness of the device based, in part, on data obtained in clinical studies. All clinical studies of investigational medical devices to determine safety and effectiveness must be conducted in accordance with FDA's investigational device exemption (IDE) regulations, including the requirement for the study sponsor to submit an IDE application to FDA, unless exempt, which must become effective prior to commencing human clinical studies. PMA reviews generally last between one and two years, although they can take longer. Both the 510(k) and the PMA processes can be expensive and lengthy and may not result in clearance or approval. If we are required to submit our products for pre-market review by the FDA, we may be required to delay marketing and commercialization while we obtain premarket clearance or approval from the FDA. There would be no assurance that we could ever obtain such clearance or approval.

All medical devices, including IVDs, that are regulated by the FDA are also subject to the quality system regulation. Obtaining the requisite regulatory approvals, including the FDA quality system inspections that are required for PMA approval, can be expensive and may involve considerable delay. The regulatory approval process for such products may be significantly delayed, may be significantly more expensive than anticipated, and may conclude without such products being approved by the FDA. Without timely regulatory approval, we will not be able to launch or successfully commercialize such diagnostic products. Changes to the current regulatory framework, including the imposition of additional or new regulations, could arise at any time during the development or marketing of our products. This may negatively affect our ability to obtain or maintain FDA or comparable regulatory clearance or approval of our products in the future. In addition, regulatory agencies may introduce new requirements that may change the regulatory requirements for us or our customers, or both.

As noted above, although our products are currently labeled and sold for research purposes only, the regulatory requirements related to marketing, selling, and supporting such products could be uncertain and depend on the totality of circumstances. This uncertainty exists even if such use by our customers occurs without our consent. 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, or results of operations could be adversely affected.

For example, in some cases, our customers may use our RUO products in their own laboratory-developed tests (LDTs) or in other FDA-regulated products for clinical diagnostic use. The FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against LDTs and LDT manufacturers. However, on October 3, 2014, the FDA issued two draft guidance documents that set forth the FDA's proposed risk-based framework for regulating LDTs, which are designed, manufactured, and used within a single laboratory. In January 2017, the FDA announced that it would not issue final guidance on the oversight of LDTs and LDT manufacturers, but would seek further public discussion on an appropriate oversight approach and give Congress an opportunity to develop a legislative solution. More recently, the FDA has issued warning letters to genomics labs for illegally marketing genetic tests that claim to predict patients' responses to specific medications, noting that the FDA has not created a legal "carve-out" for LDTs and retains discretion to take action when appropriate, such as when certain genomic tests raise significant public health concerns. As laboratories and manufacturers develop more complex genetic tests and diagnostic software, FDA may increase its regulation of LDTs. Any future legislative or administrative rule making or oversight of LDTs and LDT manufacturers, if and when finalized, may impact the sales of our products and how customers use our products, and may require us to change our business model in order to maintain compliance with these laws. We would become subject to additional FDA requirements if our products are determined to be medical devices or if we elect to seek 510(k) clearance or premarket approval. If our products become subject to FDA regulation as medical devices, we would need to invest significant time and resources to ensure ongoing compliance with FDA quality system regulations and other post-market regulatory requirements.

International sales of medical devices are subject to foreign government regulations, which vary substantially from country to country. In the future, if we decide to distribute or market our diagnostic products as IVDs in Europe, such products will be subject to regulation under the European Union (EU) IVD Directive and/or the IVD Medical Device Regulation (IVDR) European Union (EU) 2017/746. The IVDR was published in 2017, will replace the IVD Directive, is significantly more extensive than the IVD Directive, including requirements on performance data and quality system, and will become fully enforceable in 2022. Outside of the EU, regulatory approval needs to be sought on a country-by-country basis in order to market medical devices. Although there is a trend towards harmonization of quality system, standards and regulations in each country may vary substantially which can affect timelines of introduction.

In the future, to the extent we develop any clinical diagnostic assays, we may pursue payment for such products through a diverse and broad range of channels and seek coverage and reimbursement by government health insurance programs and commercial third-party payors for such products. In the United States, there is no uniform coverage for clinical laboratory tests. The extent of coverage and rate of payment for covered services or items vary from payor to payor. Obtaining coverage and reimbursement for such products can be uncertain, time-consuming, and expensive, and, even if favorable coverage and reimbursement status were attained for our tests, to the extent applicable, less favorable coverage policies and reimbursement rates may be implemented in the future. Changes in healthcare regulatory policies could also increase our costs and subject us to additional regulatory requirements that

may interrupt commercialization of our products, decrease our revenue and adversely impact sales of, and pricing of and reimbursement for, our products.

For further discussion of the risks we face relating to regulation, see the section titled "Risk factors—Risks related to our business and industry— *Our products could become subject to government regulation as medical devices by the FDA and other regulatory agencies even if we do not elect to seek regulatory clearance or approval to market our products for diagnostic purposes, which would adversely impact our ability to market and sell our products and harm our business. If our products become subject to FDA 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*."

The federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), and their implementing regulations, which impose obligations, including mandatory contractual terms, with respect to safeguarding the transmission, security and privacy of protected health information by covered entities subject to HIPAA, such as health plans, health care clearinghouses and healthcare providers, and their respective business associates that access protected health information. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates in some cases, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions.

In addition, in the U.S., numerous federal and state laws and regulations, including state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws, govern the collection, use, disclosure, and protection of health-related and other personal information. For example, in June 2018, the State of California enacted the CCPA, which came into effect on January 1, 2020 and provides new data privacy rights for consumers and new operational requirements for companies. While we are not currently subject to the CCPA, we may in the future be required to comply with the CCPA, which may increase our compliance costs and potential liability. Furthermore, the CCPA could mark the beginning of a trend toward more stringent state privacy legislation in the U.S., which could increase our potential liability and adversely affect our business.

Furthermore, the collection, use, storage, disclosure, transfer, or other processing of personal data regarding individuals in the European Economic Area (EEA), including personal health data, is subject to the GDPR, which became effective on May 25, 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EEA, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR includes restrictions on cross-border data transfers. 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. Further, the United Kingdom's decision to leave the EU, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom.

For further discussion of the risks we face relating to regulation, see the section titled "Risk factors—Risks related to our business and industry— *We are currently subject to, and may in the future become subject to additional, U.S., state and foreign 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 compliance with such laws could also impair our efforts to maintain and expand our future customer base, and thereby decrease our revenue.

Intellectual Property

Our success depends in part on our ability to obtain and maintain intellectual property protection for our products and technology. We use a variety of intellectual property protection strategies, including patents, trademarks, trade secrets and other methods of protecting proprietary information.

As of September 16, 2020, we own approximately two issued U.S. patents, eight U.S. pending patent applications and four pending Patent Cooperation Treaty (PCT) patent applications. Our owned patents and patent applications, if issued, are expected to expire between 2023 and 2041, in each case without taking into account any possible patent term adjustments or extensions and assuming payment of all appropriate maintenance, renewal, annuity, or other governmental fees.

Such patent portfolio owned by us includes:

- pending U.S. and PCT patent applications that are directed to methods for sampling a proteome at specific levels of protein coverage, methods for sampling a proteome under particular assay conditions, and nanoparticle compositions for the same;
- pending U.S. patent applications that are directed to methods for interrogating protein pathways and PPIs with the biosensors;
- an issued U.S. patent and a pending U.S. patent application directed to the classification of biological states; and
- an issued U.S. patent and a pending PCT patent application directed to methods for biomarker discovery, including an algorithm-based method that uses data sampled by the biosensor platform.

We exclusively license from The Brigham and Women's Hospital, Inc. (BWH), two issued U.S. patents, five U.S. pending patent applications, one issued ex-U.S. patent and seven ex-U.S. pending patent applications, as of September 16, 2020. These patents and patent applications are directed to methods for identifying a biological state, including classification and early detection of cancers and other diseases, using nanoparticle and biosensor compositions, as well as other nanoparticle compositions. Our in-licensed patents and patent applications, if issued, are expected to expire between 2027 and 2037, in each case without taking into account any possible patent term adjustments or extensions and assuming payment of all appropriate maintenance, renewal, annuity, or other governmental fees.

In addition to licensing patents and patent applications from BWH, we have also non-exclusively licensed certain of our patents and patent applications to PrognomIQ for use in the field of human diagnostics. Pursuant to our agreement with PrognomIQ, we also assigned a patent application related to lung cancer biomarkers to PrognomIQ. As part of the agreement, we also intend to grant PrognomIQ a non-exclusive sublicense to certain patents and patent applications that we license from BWH under our license agreement with BWH for use in the field of human diagnostics. For further information on the intellectual property transfer and license agreement with PrognomIQ and the license agreement with BWH, see the section titled *"Business — Collaboration and License Agreements."*

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, selling, offering to sell, importing or otherwise commercializing any of our patented inventions, either directly or indirectly, 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. Even if our pending patent applications are granted as issued patents, those patents may be challenged, circumvented or invalidated by third parties. Consequently, we may not obtain or maintain adequate patent protection for any of our products or technologies.

In addition to our reliance on patent protection for our inventions, products and technologies, we also rely on trade secrets, know-how, confidentiality agreements and continuing technological innovation to develop and maintain our competitive position. For example, some elements of manufacturing processes, analytics techniques and processes, as well as computational-biological algorithms, and related processes and software, are based on unpatented trade secrets and know-how that are not publicly disclosed. Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our employees, advisors and consultants, these agreements may be breached and we may not have adequate remedies for any breach. In addition, 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. For further discussion of the risks relating to intellectual property, see the section titled *"Risk factors—Risks Related to our Intellectual Property."*

Collaboration and License Agreements

The Brigham and Women's Hospital

In December 2017, we entered into an exclusive patent license agreement with BWH, pursuant to which we obtained an exclusive, royalty-bearing, sublicensable (with approval from BWH) license to certain U.S. and foreign patents and patent applications in one patent family related to methods for identifying a biological state using nanoparticle and biosensor compositions and other nanoparticle compositions to develop, manufacture, use and commercialize products and processes in all fields, including but not limited to therapeutic, diagnostic, or other uses, on a worldwide basis. In addition, we were also granted an exclusive, royalty-bearing, sublicensable (with approval from BWH) license to certain U.S. pending patent applications in another patent family to develop, manufacture, use and commercialize products and processes in all fields, including but not limited to therapeutic, diagnostic, or other uses, other than for the treatment of cancer through antigen-specific immune stimulation or the treatment of disease through immune tolerance or immune switching of lymphocyte subclasses. We may sublicense the patent rights licensed under the agreement subject to certain conditions, including obtaining the review and approval by BWH of such sublicense and any such sublicense must be consistent with and subject to the terms of the agreement.

In consideration for the licenses granted under the agreement, we must pay BWH annual license fees prior to the first commercial sale of a licensed product that range in the low- to mid-five digit figures, and a low single digit royalty on net sales of licensed products beginning with the first commercial sale of a licensed product in any country during the term of the agreement. In the event we commercialize a product in the therapeutic space, we are also required to make certain drug-approval regulatory and commercialization milestone payments to BWH of up to a low seven digit figure in the aggregate for licensed products. In the event we sublicense any of the licensed intellectual property, we must pay BWH a percentage of any sublicense income received by us, which on a going-forward basis will be in the high single digits.

Under the terms of the agreement, we are required to use commercially reasonable efforts to develop and commercialize the licensed products, including in accordance to certain developmental, funding, regulatory and commercialization milestones. BWH controls the prosecution, maintenance and enforcement of all licensed patents and patent applications under the agreement.

Unless earlier terminated, the agreement continues until the expiration of the last to expire patent right licensed under the agreement. Subject to an applicable cure period, BWH may terminate the agreement if we fail to comply with applicable payments or diligence obligations or upon a breach of our obligation under the agreement, or for certain insolvency-related events.

PrognomIQ

In August 2020, we entered into an intellectual property transfer and license agreement with PrognomIQ in connection with the spin-out of PrognomIQ. Under the agreement, we granted PrognomIQ a non-exclusive, perpetual, irrevocable (subject to termination for breach) license to certain patents and patent applications that we own and anticipate granting a non-exclusive sublicense to certain patent applications exclusively licensed from BWH, in each case, relating to our core technology to develop, manufacture and commercialize licensed products for the field of human diagnostics on a worldwide basis. PrognomIQ may extend such licensed rights to customers of licensed products.

In addition, we assigned a patent application relating to lung cancer biomarkers, and transferred certain clinical samples, contracts and other related assets to PrognomIQ. In the event we elect to grant an exclusive license to a third party in the field of human diagnostics for any of the patents and patent applications licensed to PrognomIQ under the agreement, we are required to first negotiate with PrognomIQ for a period of sixty days for a license to such rights on reasonable terms. Furthermore, for a period of two years after the effective date, we are required to negotiate in good faith with PrognomIQ for a license to any improvements to the patents and patent applications assigned or licensed under the agreement.

Neither party may assign the agreement nor any rights or obligations under the agreement without the other party's prior written consent, other than to an affiliate or pursuant to an acquisition. Unless terminated earlier, the term of the agreement continues until the expiration of the last to expire intellectual property right granted under the agreement. Either party may terminate the agreement for an uncured breach of the other party, upon which all licenses granted under the agreement to the breaching party will terminate.

Scientific Advisory Board

We have assembled a highly qualified scientific advisory board composed of advisors who have deep expertise in the fields of nanotechnology, proteomics, genomics, medicine, regulatory compliance and data science. Our scientific advisory board is composed of Robert Langer, Sc.D., Mostafa Ronaghi, Ph.D., Steve Carr, Ph.D., Vivek Farias, Ph.D., Philip Kantoff, M.D., Erwin Böttinger, M.D., Charles Cantor, Ph.D., Bradley Hyman, M.D., Mark McClellan, Ph.D., M.D., Wolfgang Parak, Ph.D. and Ralph Weissleder, M.D.

Employees

As of September 1, 2020, we had 55 employees, all based in the United States, including 43 in research and development and 12 in selling, general and administrative. None of our employees are represented by a labor union or covered under a collective bargaining agreement.

Facilities

Our corporate headquarters, research and development facilities, and manufacturing and distribution centers are located at 3800 Bridge Parkway, Redwood City, CA 94065. The facility is approximately 25,600 square feet and is compliant with all relevant stage and federal requirements. Our lease on this facility runs through February 2032. We do not own any real property and 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.

Legal Proceedings

We are not currently a party to any material legal proceedings. From time to time we may be involved in legal proceedings or investigations, which could have an adverse impact on our reputation, business and financial condition and divert the attention of our management from the operation of our business.

MANAGEMENT

Executive Officers and Directors

The following table sets forth the names, ages and positions of our executive officers and directors as of September 1, 2020:

Name	Age	Position
Executive Officers:		
Omid Farokhzad, M.D.[4]	51	Chief Executive Officer and Chair of the Board of Directors
David R. Horn	53	Chief Financial Officer
Omead Ostadan	48	President, Chief Operating Officer and Director
Non-Employee Directors:		
David Hallal[5]	54	Lead Independent Director
Catherine J. Friedman[6]	60	Director
Robert Langer, Sc.D.	72	Director
Terrance McGuire	64	Director
David Singer	58	Director

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(1) Member of the audit committee
(2) Member of the compensation committee
(3) Member of the corporate governance and nominating committee
(4) Appointed Chair of the Board of Directors on September 11, 2020
(5) Appointed Lead Independent Director on September 11, 2020
(6) Joined our board of directors on September 14, 2020

Executive Officers

Omid Farokhzad, M.D. co-founded our Company and has served as our Chief Executive Officer since February 2018 and as a member of our board of directors since March 2017, serving as the Chair since September 2020. From September 2004 to February 2018, he was a Professor at Harvard Medical School and directed the Center for Nanomedicine at Brigham and Women's Hospital. He previously co-founded BIND Therapeutics, a biotechnology company acquired by Pfizer Inc., Selecta Biosciences, Inc., a clinical-stage biotechnology company, and Tarveda Therapeutics, Inc., a clinical stage biopharmaceutical company. He currently serves as a member of the board of directors of several privately-held companies and previously served as a director of Selecta Biosciences and BIND Therapeutics. Dr. Farokhzad holds an M.A. and M.D. from Boston University and an M.B.A. from Massachusetts Institute of Technology Sloan School of Management. We believe Dr. Farokhzad is qualified to serve on our board of directors because of the perspective and experience he brings as our Chief Executive Officer, his experience in leadership positions in the biotechnology and life science industry, his educational background and his strong scientific knowledge.

David R. Horn has served as our Chief Financial Officer since May 2020. Prior to joining us, Mr. Horn was with Morgan Stanley, an investment bank and financial services company, from May 2007 to May 2020, where he served as a Managing Director in the Global Healthcare Group within the Investment Banking Department. From May 2003 to May 2007, Mr. Horn served as a Principal at Montgomery & Co., LLC, a provider of merger and acquisition and private placement services. He holds an A.B. in Politics from Princeton University and an M.B.A. from Stanford University Graduate School of Business.

Omead Ostadan has served as our President and Chief Operating Officer since July 2020 and as a member of our board of directors since March 2020. Prior to joining us, Mr. Ostadan was with Illumina, Inc., a biotechnology company, from January 2007 to June 2020 where he served in various executive roles, most recently as Senior Vice President & Chief Products and Marketing Officer from July 2019 to June 2020 and Senior Vice President, Products

& Marketing from April 2015 to June 2019. Mr. Ostadan holds a B.Sc in Biochemistry from the University of California, Davis and an M.B.A from the Wharton School of Business. We believe Mr. Ostadan is qualified to serve on our board of directors because of his extensive experience in product development at life science companies, his leadership skills, as well as his strong strategic planning and product knowledge.

Non-Employee Directors

David Hallal has served as a member of our board of directors since February 2018 and as Lead Independent Director since September 2020. Mr. Hallal has served as Chief Executive Officer of AlloVir, Inc., a biotechnology company since September 2018 and as Chief Executive Officer of ElevateBio LLC, a biotechnology company he co-founded, since December 2017. From June 2006 to December 2016, he served in various executive roles at Alexion Pharmaceuticals, Inc., a pharmaceutical company, most recently as Chief Executive Officer from April 2015 until December 2016, and as Chief Operating Officer from September 2014 until April 2015. Mr. Hallal currently serves as Chairman of the board at AlloVir, ElevateBio, Scholar Rock Holding Corp. and iTeos Therapeutics S.A. He holds a B.A. in Psychology from the University of New Hampshire. We believe Mr. Hallal is qualified to serve on our board of directors because of his extensive business experience and knowledge of company operations, and his experience working with companies in the life sciences industry.

Catherine J. Friedman has served as a member of our board of directors since September 2020. Ms. Friedman has been an independent financial consultant serving public and private companies in the life sciences industry since 2006. Ms. Friedman served in various executive roles from 1982 to 2006 at Morgan Stanley, an investment bank and financial services company, including as Manager Director from 1997 to 2006 and Head of West Coast Healthcare and Co-Head of the Biotechnology Practice from 1993 to 2006. She currently serves as Chairperson of the board at GRAIL, Inc., a cancer testing company, and on the board of directors of Altaba Inc., a closed-end management investment company (formerly Yahoo! Inc.), and Radius Health, Inc., a biopharmaceutical company. Ms. Friedman previously served on the board of directors of EnteroMedics, Inc., GSV Capital Corp., Innoviva, Inc. (formerly Theravance, Inc.), and XenoPort, Inc. She holds an A.B. in Economics from Harvard University and an M.B.A. from the University of Virginia Darden School of Business, where she serves as a member of the Darden School Foundation Board of Trustees. We believe Ms. Friedman is qualified to serve on our board of directors because of her financial expertise, 23-year tenure as an investment banker and extensive experience serving as a member on other public company boards.

Robert Langer, Sc.D. has served as a member of our board of directors since December 2017. Dr. Langer has served as a David H. Koch Institute Professor at the Massachusetts Institute of Technology since July 2005. He currently serves on the board of directors of Abpro Bio Co. Ltd., Frequency Therapeutics, Inc., Lyra Therapeutics, Inc., Moderna, Inc. and Puretech Health plc, and previously served on the board of directors of Alkermes, Inc., Kala Pharmaceuticals, Inc., Momentum Pharmaceuticals, Inc., Millipore Corp., Rubius Therapeutics and Wyeth. Dr. Langer holds a B.S. in Chemical Engineering from Cornell University and an Sc.D. in Chemical Engineering from Massachusetts Institute of Technology. We believe Dr. Langer is qualified to serve on our board of directors because of his pioneering academic work, extensive medical and scientific knowledge, and experience serving on public company boards of directors.

Terrance McGuire has served as a member of our board of directors since December 2017. Mr. McGuire serves as a General Partner of Polaris Partners, a venture capital firm he co-founded in 1996. He currently serves on the board of directors of Alector, Inc. and Cyclerion, Inc., and previously served on the board of directors of Acceleron Pharma, Inc., Arsanis, Inc., Ironwood Pharmaceuticals, Inc. and Pulmatrix, Inc. Mr. McGuire also serves as a member of the board of The David H. Koch Institute for Integrative Cancer Research at the Massachusetts Institute of Technology, The Arthur Rock Center for Entrepreneurship at Harvard Business School and The Healthcare Initiative Advisory Board and on the Board of Advisors of the Thayer School of Engineering at Dartmouth College. Mr. McGuire holds a B.S. in Physics and Economics from Hobart College, an M.S. in Engineering from the Thayer School at Dartmouth College and an M.B.A. from Harvard Business School. We believe Mr. McGuire is qualified to serve on our board of directors because of his substantial corporate development and business strategy expertise gained in the venture capital industry.

David B. Singer has served as a member of our board of directors since December 2017. Mr. Singer has held various positions at Maverick Ventures, a venture capital firm, or its affiliates, since December 2004, including Managing Partner of Maverick Ventures since February 2015. Mr. Singer currently serves on the board of directors of 1Life Healthcare, Inc. (OneMedical), Castlight Health, Inc. and several privately-held companies. Previously, Mr. Singer served on the board of four other public companies, including Pacific BioSciences of California, Inc. and Affymetrix, Inc., where he was the founding CEO. He previously served as a health commissioner of San Francisco and a member of the San Francisco General Hospital Joint Conference Committee from July 2013 to January 2017. He holds a B.A. in History from Yale University and an M.B.A. from Stanford University. We believe Mr. Singer is qualified to serve on our board of directors because of his knowledge of the healthcare industry and his substantial corporate development and business strategy expertise gained in the venture capital industry.

Board Composition

Our board of directors currently consists of seven members. After the completion of this offering, the number of directors will be fixed by our board of directors, subject to the terms of our amended and restated certificate of incorporation and amended and restated bylaws. Each of our current directors will continue to serve as a director until the election and qualification of his or her successor, or until his or her earlier death, resignation or removal.

Our amended and restated certificate of incorporation will provide that our board of directors will be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of stockholders, with the other classes continuing for the remainder of their respective three-year terms. Our current directors will be divided among the three classes as follows:

- the Class I directors will be , and their terms will expire at the annual meeting of stockholders to be held in 2021;
- the Class II directors will be , and their terms will expire at the annual meeting of stockholders to be held in 2022; and
- the Class III directors will be , and their terms will expire at the annual meeting of stockholders to be held in 2023.

At each annual meeting of stockholders, upon the expiration of the term of a class of directors, the successor to each such director in the class will be elected to serve from the time of election and qualification until the third annual meeting following his or her election and until his or her successor is duly elected and qualified, in accordance with our amended and restated certificate of incorporation. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of our directors.

This classification of our board of directors may have the effect of delaying or preventing changes in control of our company.

Director Independence

Upon the completion of this offering, we anticipate that our Class A common stock will be listed on the . Under the rules of , independent directors must comprise a majority of a listed company's board of directors within one year of the completion of this offering. In addition, the rules of require that, subject to specified exceptions, each member of a listed company's audit, compensation and corporate governance and nominating committees be independent. Audit committee members and compensation committee members must also satisfy the independence criteria set forth in Rule 10A-3 and Rule 10C-1, respectively, under the Exchange Act. Under the rules of , a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

To be considered to be independent for purposes of Rule 10A-3 and under the rules of , a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit

committee, the board of directors or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries or (2) be an affiliated person of the listed company or any of its subsidiaries.

To be considered independent for purposes of Rule 10C-1 and under the rules of , the board of directors must affirmatively determine that each member of the compensation committee is independent, including a consideration of all factors specifically relevant to determining whether the director has a relationship to the company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (1) the source of compensation of such director, including any consulting, advisory or other compensatory fee paid by the company to such director and (2) whether such director is affiliated with the company, a subsidiary of the company or an affiliate of a subsidiary of the company.

Our board of directors undertook a review of its composition, the composition of its committees and the independence of our directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors has determined that , representing a majority of our directors, do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the rules of .

In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director, and the transactions involving them described in the section titled "Certain Relationships and Related-Party Transactions." There are no family relationships among any of our directors or executive officer.

Board Leadership Structure

Our board of directors has appointed David Hallal to serve as our Lead Independent Director. As a general matter, our board of directors believes that appointing a Lead Independent Director, while our Chief Executive Officer serves as Chair, creates an environment that encourages objective oversight of management's performance and enhances the effectiveness of our board of directors as a whole. As Lead Independent Director, David Hallal will preside over periodic meetings of our independent directors, serve as a liaison between our Chair and Chief Executive Officer and our independent directors and perform such additional duties as our board of directors may otherwise determine and delegate.

Role of the Board in Risk Oversight

Our board of directors has an active role, as a whole and also at the committee level, in overseeing the management of our risks. Our board of directors is responsible for general oversight of risks and regular review of information regarding our risks, including credit risks, liquidity risks and operational risks. The compensation committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements. The audit committee is responsible for overseeing the management of risks relating to accounting matters and financial reporting. The corporate governance and nominating committee is responsible for overseeing the management of risks associated with the independence of our board of directors and potential conflicts of interest. Although each committee is responsible for evaluating certain risks and overseeing the management of such risks, our entire board of directors is regularly informed through discussions from committee members about such risks. Our board of directors believes its administration of its risk oversight function has not negatively affected the board of directors' leadership structure.

Board Committees

Our board of directors has an audit committee, a compensation committee and a corporate governance and nominating committee, each of which has the composition and the responsibilities described below.

Audit Committee

The members of our audit committee are . is the chair of our audit committee. Each of is an audit committee financial expert, as that term is defined under the SEC rules implementing Section 407 of SOX, and possesses financial sophistication, as defined under the rules of . Our audit committee oversees our corporate accounting and financial reporting process and assists our board of directors in monitoring our financial systems. Our audit committee will also:

- select and hire the independent registered public accounting firm to audit our financial statements;
- help to ensure the independence and performance of the independent registered public accounting firm;
- approve audit and non-audit services and fees;
- review financial statements and discuss with management and the independent registered public accounting firm our annual audited and quarterly financial statements, the results of the independent audit and the quarterly reviews and the reports and certifications regarding internal controls over financial reporting and disclosure controls;
- prepare the audit committee report that the SEC requires to be included in our annual proxy statement;
- review reports and communications from the independent registered public accounting firm;
- review the adequacy and effectiveness of our internal controls and disclosure controls and procedure;
- review our policies on risk assessment and risk management;
- review related-party transactions; and
- establish and oversee procedures for the receipt, retention and treatment of accounting related complaints and the confidential submission by our employees of concerns regarding questionable accounting or auditing matters.

Our audit committee will operate under a written charter, to be effective prior to the completion of this offering, which will satisfy the applicable rules of the SEC and the listing standards of .

Compensation Committee

The members of our compensation committee are . is the chair of our compensation committee. Our compensation committee oversees our compensation policies, plans and benefits programs. The compensation committee will also:

- oversee our overall compensation philosophy and compensation policies, plans and benefit programs;
- review and approve or recommend to the board of directors for approval compensation for our executive officers and directors;
- prepare the compensation committee report that the SEC will require to be included in our annual proxy statement; and
- administer our equity compensation plans.

Our compensation committee will operate under a written charter, to be effective prior to the completion of this offering, which will satisfy the applicable rules of the SEC and the listing standards of .

Corporate Governance and Nominating Committee

The members of our corporate governance and nominating committee are . is the chair of our corporate governance and nominating committee. Our corporate governance and nominating committee

oversees and assists our board of directors in reviewing and recommending nominees for election as directors. Specifically, the corporate governance and nominating committee will:

- identify, evaluate and make recommendations to our board of directors regarding nominees for election to our board of directors and its committees;
- consider and make recommendations to our board of directors regarding the composition of our board of directors and its committees;
- review developments in corporate governance practices;
- evaluate the adequacy of our corporate governance practices and reporting; and
- evaluate the performance of our board of directors and of individual directors.

Our corporate governance and nominating committee will operate under a written charter, to be effective prior to the completion of this offering, which will satisfy the applicable rules of the SEC and the listing standards of .

Scientific Advisory Board Compensation

We also reimburse each member of our scientific advisory board for all reasonable and necessary expenses in connection with the performance of his or her services. In addition, we grant each new member an option to purchase shares of our Class A common stock. In the future, we may make additional grants to our scientific advisory board members for continued service on the scientific advisory board.

Director Compensation

Our employee director, Dr. Farokhzad, did not receive any compensation for his service as a director for the year ended December 31, 2019. The compensation received by Dr. Farokhzad as an employee is set forth in the section titled "Executive Compensation—Summary Compensation Table."

The following table provides information regarding the compensation of our non-employee directors for service as directors for the year ended December 31, 2019:

Name	Option Awards ($)[1]	Total ($)
Catherine J. Friedman[2]	—	—
David Hallal	—	—
Robert Langer, Sc.D.	—	—
Mark McClellan, Ph.D.[3]	658,600	658,600
Terrance McGuire	—	—
David Singer	—	—

(1) The amount in this column represents the aggregate grant-date fair value of the award as computed as of the grant date of each option awarded in fiscal 2019 in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718, or ASC Topic 718. The assumptions used in calculating the grant-date fair value of the awards reported in this column are set forth in the notes to our financial statements included elsewhere in this prospectus.
(2) Ms. Friedman joined our board of directors in September 2020.
(3) Mr. McClellan resigned from our board of directors in September 2020.

The following table lists all outstanding equity awards held by our non-employee directors as of December 31, 2019:

Name	Grant Date	Number of Securities Underlying Unvested Stock Awards	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price Per Share ($)	Option Expiration Date
Catherine J. Friedman[1]	—	—	—	—	—
David Hallal	2/19/2018	192,031 [2]	—	—	—
	5/18/2018	125,235 [3]	—	—	—
Robert Langer, Sc.D.	9/20/2017	119,792 [4]	—	—	—
	2/19/2018	47,598 [5]	—	—	—
	5/18/2018	—	222,639 [6]	0.02	5/17/2028
Mark McClellan, Ph.D.[7]	6/27/2019	—	644,927 [8]	1.03	6/26/2029
Terrance McGuire	11/15/2017	130,209 [9]	—	—	—
	2/19/2018	47,598 [10]	—	—	—
	5/18/2018	—	222,639 [11]	0.02	5/17/2028
David Singer	—	—	—	—	—

(1) Ms. Friedman joined our board of directors in September 2020.
(2) The shares were acquired pursuant to a restricted stock award and vest in 27 equal monthly installments beginning on January 23, 2020, subject to continued service to the Company.
(3) The shares were acquired pursuant to an early option exercise and vest in 27 equal monthly installments beginning on January 23, 2020, subject to continued service to the Company.
(4) The shares were acquired pursuant to a restricted stock award and vest in 23 equal monthly installments beginning on January 31, 2020, subject to continued service to the Company.
(5) The shares were acquired pursuant to a restricted stock award and vest in 25 equal monthly installments beginning on January 31, 2020, subject to continued service to the Company.
(6) The shares underlying the option are subject to an early exercise provision and are immediately exercisable. One-fourth of the shares underlying the option vested on March 23, 2019 and 1/48th of the shares vest monthly thereafter, subject to continued service to the Company, subject to continued service to the Company.
(7) Mr. McClellan resigned from our board of directors in September 2020, subject to continued service to the Company.
(8) The shares underlying the option are subject to an early exercise provision and are immediately exercisable. One-fourth of the shares underlying the option vested on March 6, 2020 and 1/48th of the shares vest monthly thereafter, subject to continued service to the Company.
(9) The shares are held of record by Strong Bridge LLC (Strong Bridge) for which Mr. McGuire serves as an operating manager. The shares were acquired pursuant to a restricted stock award and vest in 25 equal monthly installments beginning on January 31, 2020, subject to Mr. McGuire's continued service to the Company.
(10) The shares are held of record by Strong Bridge LLC. The shares were acquired pursuant to an early exercise provision and vest in 25 equal monthly installments beginning on January 31, 2020, subject to Mr. McGuire's continued service to the Company.
(11) The option is held of record by Strong Bridge. The shares underlying the option are subject to an early exercise provision and are immediately exercisable. One-fourth of the shares underlying the option vested on March 23, 2019 and 1/48th of the shares vest monthly thereafter, subject to Mr. McGuire's continued service to the Company.

Following the completion of this offering, we expect to implement an annual cash and equity compensation program for our non-employee directors.

Outside Director Compensation Policy

Prior to this offering, we did not have a formal policy with respect to compensation payable to our non-employee directors for their service as directors. From time to time, we have granted equity awards to attract non-employee directors to join our board of directors and for their continued service on our board of directors. We also have reimbursed our directors for expenses associated with attending meetings of our board of directors and its committees.

In 2020, our compensation committee retained Radford, a third-party compensation consultant, to provide our board of directors and its compensation committee with an analysis of publicly available market data regarding practices and compensation levels at comparable companies and assistance in determining compensation to be

provided to our non-employee directors. Based on the discussions with and assistance from the compensation consultant, prior to the completion of this offering, our board of directors intends to adopt, and we expect our stockholders will approve, an Outside Director Compensation Policy that will provide for certain compensation to our non-employee directors on and after the effective date of the registration statement of which this prospectus forms a part.

Compensation Committee Interlocks and Inside Participation

None of the members of our compensation committee is or has been an officer or employee of our company. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Code of Business Conduct and Ethics

Prior to the closing of this offering, we intend to adopt a written code of business conduct and ethics that will apply to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller or, persons performing similar functions. Following this offering, the code of business conduct and ethics will be available on our website at http://seer.bio. We intend to disclose future amendments to such code, or any waivers of its requirements, applicable to any principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions, or our directors on our website identified above or in public filings. Information contained on the website is not incorporated by reference into this prospectus and should not be considered to be part of this prospectus.

EXECUTIVE COMPENSATION

Our named executive officers for the year ended December 31, 2019, which consist of our principal executive officer and our only other executive officer for that year, are:

- Omid Farokhzad, M.D., our Chief Executive Officer; and
- Philip Ma, Ph.D., our Chief Business Officer and former President.

Summary Compensation Table

The following table sets forth information regarding the compensation of our named executive officers for the year ended December 31, 2019.

Name and Principal Position	Year	Salary	Bonus	Stock Awards	Option Awards	Non-Equity Incentive Plan Compensation	All Other Compensation	Total
Omid Farokhzad, M.D. *Chief Executive Officer*	2019	$ 421,011	—	—	—	$ 214,240	$ 115,872	$ 751,123
Philip Ma, Ph.D.[1] *Chief Business Officer*	2019	$ 342,071	—	—	—	$ 130,000	$ 15,014	$ 487,085

(1) Dr. Ma will be transitioning to PrognomIQ to serve as its full-time chief executive officer by the end of October 2020.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding outstanding equity awards held by each of our named executive officers as of December 31, 2019:

		Option Awards				Stock Awards	
Name	Grant Date[1]	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)[2]
Omid Farokhzad, M.D.	9/20/2017	—	—	—	—	625,000 [3]	787,500
	2/19/2018	—	—	—	—	247,507 [4]	311,859
	5/18/2018	1,113,195 [5]	—	0.02	5/17/2028	—	—
Philip Ma, Ph.D.	9/20/2017	—	—	—	—	187,500 [3]	236,250
	2/19/2018	—	—	—	—	74,252 [4]	93,558
	5/18/2018	333,959 [5]	—	0.02	5/17/2028	—	—

(1) Each of the outstanding equity awards was granted pursuant to our 2017 Plan.
(2) This amount reflects the fair market value of our common stock of $1.26 as of December 31, 2019 (the determination of the fair market value by our board of directors as of the most proximate date) multiplied by the amount shown in the column for the number of shares or units that have not vested.
(3) The shares were acquired pursuant to a restricted stock award and vest in 24 equal monthly installments beginning on January 20, 2020, subject to continued service to the Company.
(4) The shares were acquired pursuant to a restricted stock award and vest in 26 equal monthly installments beginning on January 31, 2020, subject to continued service to the Company.
(5) The shares underlying the option are subject to an early exercise provision and are immediately exercisable. One-fourth of the shares underlying the option vested on March 23, 2019 and the remaining shares vest in 36 equal monthly installments thereafter, subject to continued service to the Company.

Employment Arrangements with Our Named Executive Officers

Each of our named executive officers has executed our standard form of confidential information, invention assignment and arbitration agreement.

Dr. Omid Farokhzad

Prior to the completion of this offering, we intend to enter into a confirmatory employment letter with Dr. Farokhzad, our chief executive officer. The confirmatory employment letter will have no specific term and will provide that Dr. Farokhzad is an at-will employee. Dr. Farokhzad's current annual base salary is $426,500 and he is eligible for an annual target cash incentive bonus for our fiscal year 2020 equal to 50% of his annual base salary.

Employee Benefit and Stock Plans

Executive Incentive Compensation Plan

Prior to the completion of this offering, our board of directors intends to adopt our Executive Incentive Compensation Plan. Our Executive Incentive Compensation Plan will be administered by our board of directors or a committee appointed by our board of directors. Unless and until our board of directors determines otherwise, our compensation committee will administer our Executive Incentive Compensation Plan. Our Executive Incentive Compensation Plan will allow us to grant incentive awards, generally payable in cash, to employees selected by the administrator, including our named executive officers, based upon any performance goals that may be established by the administrator.

Under our Executive Incentive Compensation Plan, the administrator will determine any performance goals applicable to an award, which goals may include, without limitation, goals related to . The performance goals may differ from participant to participant and from award to award. The administrator also may determine that a target award or portion of a target award will not have a performance goal associated with it but instead will be granted, if at all, as determined by the administrator.

The administrator of our Executive Incentive Compensation Plan, in its sole discretion and at any time, may increase, reduce or eliminate a participant's actual award, and/or increase, reduce or eliminate the amount allocated to any bonus pool for a particular performance period. The actual award may be below, at or above a participant's target award, in the discretion of the administrator. The administrator may determine the amount of any reduction on the basis of such factors as it deems relevant, and the administrator is not required to establish any allocation or weighting with respect to the factors it considers.

Actual awards generally will be paid in cash (or its equivalent) only after they are earned, and, unless otherwise determined by the administrator, a participant must be employed with us through the date the actual award is paid. The administrator of our Executive Incentive Compensation Plan reserves the right to settle an actual award with a grant of an equity award under our then-current equity compensation plan, which equity award may have such terms and conditions, including vesting, as determined by the administrator. Payment of awards occurs as soon as administratively practicable after they are earned, but no later than the dates set forth in our Executive Incentive Compensation Plan.

Awards under our Executive Incentive Compensation Plan are subject to any clawback policy of ours, which we may be required to adopt from time to time to comply with applicable laws. The administrator also may impose such other clawback, recovery or recoupment provisions with respect an award under our Executive Incentive Compensation Plan as the administrator determines necessary or appropriate, including for example, reduction, cancellation, forfeiture or recoupment upon a termination of a participant's employment for cause. Certain participants may be required to reimburse us for certain amounts paid under an award under our Executive Incentive Compensation Plan in connection with certain accounting restatements we may be required to prepare due to our material noncompliance with any financial reporting requirements under applicable securities laws, as a result of misconduct.

The administrator of our Executive Incentive Compensation Plan will have the authority to amend, alter, suspend or terminate our Executive Incentive Compensation Plan, provided such action does not impair the existing rights of any participant with respect to any earned awards. Our Executive Incentive Compensation Plan will remain in effect until terminated in accordance with its terms.

2020 Equity Incentive Plan

Prior to the completion of this offering, our board of directors intends to adopt, and we expect our stockholders will approve, our 2020 Equity Incentive Plan or, the 2020 Plan. We expect that the 2020 Plan will be effective on the business day immediately before the effective date of our registration statement of which this prospectus forms a part. Our 2020 Plan will provide for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, or, the Code, to our employees and any of our parent or subsidiary corporations' employees, and for the grant of non-statutory stock options, restricted stock, restricted stock units, stock appreciation rights, and performance awards to our employees, directors and consultants and any of our parent or subsidiary corporations' employees and consultants.

Authorized Shares

A total of shares of our Class A common stock will be reserved for issuance pursuant to our 2020 Plan. In addition, the shares reserved for issuance under our 2020 Plan will include shares of our Class A common stock subject to awards granted under our 2020 RSU Equity Incentive Plan or 2017 Stock Incentive Plan (each, a Prior Plan) that, on or after the date the applicable Prior Plan is terminated, are terminated, canceled, expire or otherwise terminate without having been exercised in full or are forfeited to or repurchased by us (provided that the maximum number of shares that may be added to the 2020 Plan pursuant to this sentence is shares). The number of shares available for issuance under our 2020 Plan also will include an annual increase, or the evergreen feature, on the first day of each of our fiscal years for a period of ten years, beginning with our fiscal year 2021, equal to the least of:

- shares;
- percent (%) of the outstanding shares of all classes of our common stock as of the last day of the immediately preceding fiscal year; or
- such number of shares as our board of directors may determine no later than the last day of our immediately preceding fiscal year.

Shares issuable under our 2020 Plan will be authorized, but unissued, or reacquired shares of our Class A common stock. If an award expires or becomes unexercisable without having been exercised in full, is surrendered pursuant to an exchange program (as described below), or, with respect to restricted stock, restricted stock units, or performance awards, is forfeited to or repurchased due to failure to vest, the unpurchased shares (or for awards other than stock options or stock appreciation rights, the forfeited or repurchased shares) will become available for future grant or sale under the 2020 Plan. With respect to stock appreciation rights, only the net shares actually issued will cease to be available under the 2020 Plan and all remaining shares under stock appreciation rights will remain available for future grant or sale under the 2020 Plan. Shares that actually have been issued under the 2020 Plan under any award will not be returned to the 2020 Plan; except if shares issued pursuant to awards of restricted stock, restricted stock units, or performance awards are repurchased or forfeited, such shares will become available for future grant under the 2020 Plan. Shares used to pay the exercise price of an award or satisfy the tax liabilities or withholding obligations related to an award (which withholdings may be in amounts greater than the minimum statutory amount required to be withheld as determined by the administrator of the 2020 Plan) will become available for future grant or sale under the 2020 Plan. To the extent an award is paid out in cash rather than shares, such cash payment will not result in a reduction in the number of shares available for issuance under the 2020 Plan.

Plan Administration

Our board of directors or one or more committees appointed by our board of directors will have authority to administer our 2020 Plan. We expect that the compensation committee of our board of directors initially will administer our 2020 Plan. In addition, if we determine it is desirable to qualify transactions under our 2020 Plan as exempt under Rule 16b-3 of the Exchange Act, such transactions will be structured to satisfy the requirements for exemption under Rule 16b-3. Subject to the provisions of our 2020 Plan, the administrator has the power to administer our 2020 Plan and make all determinations deemed necessary or advisable for administering the 2020 Plan, including but not limited to, the power to determine the fair market value of our Class A common stock, select

the service providers to whom awards may be granted, determine the number of shares covered by each award, approve forms of award agreements for use under the 2020 Plan, determine the terms and conditions of awards (including, but not limited to, the exercise price, the time or times at which awards may be exercised, any vesting acceleration or waiver or forfeiture restrictions and any restriction or limitation regarding any award or the shares relating thereto), construe and interpret the terms of our 2020 Plan and awards granted under it, prescribe, amend and rescind rules relating to our 2020 Plan, including creating sub-plans, modify or amend each award, and allow a participant to defer the receipt of payment of cash or the delivery of shares that otherwise would be due to such participant under an award. The administrator also has the authority to allow participants the opportunity under an exchange program to transfer outstanding awards granted under the 2020 Plan to a financial institution or other person or entity selected by the administrator, and to institute an exchange program by which outstanding awards granted under the 2020 Plan may be surrendered or cancelled in exchange for awards of the same type, which may have a higher or lower exercise price and/or different terms, awards of a different type and/or cash, or by which the exercise price of an outstanding award granted under the 2020 Plan is increased or reduced. The administrator's decisions, interpretations and other actions are final and binding on all participants and will be given the maximum deference permitted by applicable law.

Stock Options

Stock options may be granted under our 2020 Plan. The exercise price of options granted under our 2020 Plan must be equal to at least 100% of the fair market value of a share of our Class A common stock on the date of grant. The term of an option may not exceed ten years. With respect to any participant who owns more than 10% of the voting power of all classes of our (or any of our parent's or subsidiary's) outstanding stock, the term of an incentive stock option granted to such participant must not exceed five years and the per share exercise price must equal at least 110% of the fair market value of a share of our Class A common stock on the grant date. The administrator may grant incentive stock options under the 2020 Plan for a period of ten years from the earlier of the date our board of directors approves the 2020 Plan or the date that our stockholders approve the 2020 Plan. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, certain shares, cashless exercise, net exercise, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. In the absence of a specified time in an award agreement, if termination is due to death or disability, the option will remain exercisable for six months. In all other cases, in the absence of a specified time in an award agreement, the option will remain exercisable for three months following the termination of service. An option, however, may not be exercised later than the expiration of its term. Subject to the provisions of our 2020 Plan, the administrator determines the terms of options.

Stock Appreciation Rights

Stock appreciation rights may be granted under our 2020 Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our Class A common stock between the exercise date and the date of grant. The term of a stock appreciation right may not exceed ten years. After the termination of service of an employee, director or consultant, he or she may exercise his or her stock appreciation right for the period of time stated in his or her stock appreciation rights agreement. In the absence of a specified time in an award agreement, if termination is due to death or disability, the stock appreciation rights will remain exercisable for six months. In all other cases, in the absence of a specified time in an award agreement, the stock appreciation rights will remain exercisable for three months following the termination of service. However, in no event may a stock appreciation right be exercised later than the expiration of its term. Subject to the provisions of our 2020 Plan, the administrator determines the terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our Class A common stock, or a combination of both, except that the per-share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock

Restricted stock may be granted under our 2020 Plan. Restricted stock awards (RSAs) are grants of shares of our Class A common stock that may have vesting requirements under any such terms and conditions established by

the administrator. The administrator will determine the number of shares of restricted stock granted to any employee, director or consultant and, subject to the provisions of our 2020 Plan, will determine the terms and conditions of such awards. The administrator may impose whatever vesting conditions (if any) it determines to be appropriate (for example, the administrator may set restrictions based on the achievement of specific performance goals or continued service to us), and the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of RSAs generally will have voting and dividend rights with respect to such shares upon grant, unless the administrator provides otherwise. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Restricted Stock Units

Restricted stock units (RSUs) may be granted under our 2020 Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of our Class A common stock. Subject to the provisions of our 2020 Plan, the administrator determines the terms and conditions of restricted stock units, including any vesting criteria and the form and timing of payment. The administrator may set vesting criteria based upon the achievement of company-wide, divisional, business unit, or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws or any other basis determined by the administrator in its discretion. The administrator, in its sole discretion, may pay earned restricted stock units in the form of cash, shares, or a combination of both. Notwithstanding the foregoing, the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed.

Performance Awards

Performance awards may be granted under the 2020 Plan. Performance awards are awards that may be earned in whole or in part on the attainment of performance goals or other vesting criteria that the administrator may determine, and that may be denominated in cash or stock. Each performance award will have an initial value that is determined by the administrator. Subject to the terms and conditions of the 2020 Plan, the administrator determines the terms and conditions of performance awards, including any vesting criteria and form and timing of payment. The administrator may set vesting criteria based upon the achievement of company-wide, divisional, business unit, or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws or any other basis determined by the administrator in its discretion. The administrator, in its sole discretion, may pay earned performance awards in the form of cash, shares, or a combination of both. Notwithstanding the foregoing, the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed.

Non-Employee Directors

All outside (non-employee) directors will be eligible to receive all types of awards (except for incentive stock options) under our 2020 Plan. Prior to the completion of this offering, we intend to implement a formal Outside Director Compensation Policy pursuant to which our outside directors will be eligible to receive equity awards under our 2020 Plan. Our 2020 Plan will provide that in any given fiscal year, no outside director may be granted awards (the value of which will be based on their grant date fair value) under our 2020 Plan and be provided any other compensation (including without limitation any cash retainers and fees) that in the aggregate exceed $, provided that in the fiscal year of the individual's initial service as a non-employee director, such amount is increased to $. The grant date fair values of awards granted under our 2020 Plan will be determined according to U.S. Generally Accepted Accounting Principles. Any awards or other compensation provided to an individual for his or her services as an employee or a consultant (other than an outside director), or before the effective date of the registration statement of which this prospectus forms a part, will not count toward this limit. This maximum limit provision does not reflect the intended size of any potential grants or a commitment to make grants to our outside directors under our 2020 Plan in the future.

Non-Transferability of Awards

Unless the administrator provides otherwise, our 2020 Plan generally does not allow for the transfer of awards other than by will or the laws of descent and distribution, and only the recipient of an award may exercise an award

during his or her lifetime. If the administrator makes an award transferable, such award will contain such additional terms and conditions as the administrator deems appropriate.

Certain Adjustments

In the event of certain changes in our capitalization, such as a dividend or other distribution, recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase or exchange of our shares or other securities or other change in our corporate structure affecting our shares (other than ordinary dividends or other ordinary distributions), to prevent diminution or enlargement of the benefits or potential benefits available under our 2020 Plan, the administrator will adjust the number and class of shares that may be delivered under our 2020 Plan and/or the number, class and price of shares covered by each outstanding award and any numerical share limits set forth in our 2020 Plan.

Dissolution or Liquidation

In the event of our proposed liquidation or dissolution, the administrator will notify participants as soon as practicable and all awards will terminate immediately before the consummation of such proposed transaction.

Merger or Change in Control

Our 2020 Plan provides that in the event of our merger or change in control, as defined in our 2020 Plan, each outstanding award will be treated as the administrator determines, without a participant's consent. The administrator may provide that awards granted under the 2020 Plan will be assumed or substituted by substantially equivalent awards, be terminated immediately before the merger or change in control, become vested and exercisable or payable and be terminated in connection with the merger or change in control, be terminated in exchange for cash, other property or other consideration or any combination of the above. The administrator is not required to treat all awards, all awards held by a participant, all portions of awards, or all awards of the same type, similarly.

If a successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award (or a portion of such award), then such award (or its applicable portion) will fully vest, all restrictions on such award (or its applicable portion) will lapse, all performance goals or other vesting criteria applicable to such award (or its applicable portion) will be deemed achieved at 100% of target levels and such award (or its applicable portion) will become fully exercisable, if applicable, for a specified period before the transaction, unless specifically provided otherwise under the applicable award agreement or other written agreement with the participant. The award (or its applicable portion) will then terminate upon the expiration of the specified period of time. If an option or stock appreciation right is not assumed or substituted, the administrator will notify the participant that such option or stock appreciation right will be exercisable for a period of time determined by the administrator in its sole discretion and the option or stock appreciation right will terminate upon the expiration of such period.

If an outside director's awards are assumed or substituted for in our merger or change in control and the service of such outside director is terminated (other than upon his or her voluntary resignation that does not include a resignation at the request of the acquirer) on or following the merger or change in control, all such awards will fully vest, all restrictions on such awards will lapse, all performance goals or other vesting criteria applicable to such awards will be deemed achieved at 100% of target levels and such awards will become fully exercisable, if applicable, unless specifically provided otherwise under the applicable award agreement or other written agreement with the outside director.

Clawback

Awards are subject to any clawback policy of ours, which we may establish and/or amend from time to time to comply with applicable laws. The administrator also may specify in an award agreement that the participant's rights, payments and benefits with respect to an award will be subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of certain specified events. Our board of directors may require a participant to forfeit, return or reimburse us all or a portion of the award and any amounts paid under the award in order to comply with any clawback policy of ours or applicable laws.

Amendment; Termination

The administrator has the authority to amend, alter, suspend or terminate our 2020 Plan, provided such action does not materially impair the rights of any participant unless mutually agreed otherwise. Our 2020 Plan will remain in effect until terminated in accordance with its terms, provided that the evergreen feature of our 2020 Plan will have a term of 10 years from the earlier of approval of the 2020 Plan by our board of directors or by our stockholders. Additionally, no incentive stock options may be granted after 10 years from the earlier of approval of the 2020 Plan by our board of directors or by our stockholders.

2020 RSU Equity Incentive Plan

Our 2020 RSU Equity Incentive Plan, or RSU Plan, was adopted by our board of directors in April 2020, and was most recently amended and restated in July 2020. Our stockholders last approved our 2020 Plan in August 2020. It is expected that as of one business day before the effectiveness of the registration statement of which this prospectus forms a part, our RSU Plan will be terminated and we will not grant any additional awards under our RSU Plan thereafter. However, our RSU Plan will continue to govern the terms and conditions of the outstanding awards previously granted under our RSU Plan.

Our RSU Plan allows us to grant restricted stock units to employees, directors, officers and consultants of ours and any parent or subsidiary of ours.

As of September 1, 2020, an aggregate of 717,232 shares of our Class A common stock is reserved for issuance under our RSU Plan. As of September 1, 2020, restricted stock unit awards covering an aggregate of 717,232 shares of our Class A common stock were outstanding under our RSU Plan.

Plan Administration

Our board of directors or one or more committees appointed by our board of directors have the authority to administer our RSU Plan. Subject to the provisions of our RSU Plan, the administrator has the power to administer our RSU Plan and make all determinations deemed necessary or advisable for administering the RSU Plan, including but not limited to, the power to determine the fair market value of our Class A common stock, select the service providers to whom awards may be granted, determine the number of shares covered by each award, approve forms of award agreements for use under the RSU Plan, determine the terms and conditions of awards, construe and interpret the terms of our RSU Plan and awards granted under it, prescribe, amend and rescind rules relating to our RSU Plan, including creating sub-plans, modify or amend each award, and allow a participant to defer the receipt of payment of cash or the delivery of shares that otherwise would be due to such participant under an award. The administrator also has the authority to allow participants the opportunity under an exchange program to transfer outstanding awards granted under the RSU Plan to a financial institution or other person or entity selected by the administrator, and to institute an exchange program by which outstanding awards granted under the RSU Plan may be surrendered or cancelled in exchange for awards of the same type, which may have a higher or lower exercise price and/or different terms, awards of a different type and/or cash, or by which the exercise price of an outstanding award granted under the RSU Plan is increased or reduced. The administrator's decisions, interpretations and other actions are final and binding on all participants and will be given the maximum deference permitted by applicable law.

Restricted Stock Units

Restricted stock units may be granted under our RSU Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of our Class A common stock. Subject to the provisions of our RSU Plan, the administrator determines the terms and conditions of restricted stock units, including any vesting criteria and the form and timing of payment. The administrator may set vesting criteria based upon the achievement of company-wide, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the administrator in its discretion. The administrator, in its sole discretion, may pay earned restricted stock units in the form of cash, shares, or a combination of both. Notwithstanding the foregoing, the administrator, in its sole discretion, may at any time reduce or waive any vesting criteria that must be met.

Non-Transferability of Awards

Unless the administrator provides otherwise, our RSU Plan generally does not allow for the transfer of awards other than by will or the laws of descent and distribution. If the administrator makes an award transferable, such award may be transferred only by will, by the laws of descent and distribution, or as permitted by Rule 701 of the Securities Act of 1933.

Certain Adjustments

In the event of certain changes in our capitalization, such as a dividend (other than an ordinary dividend) or other distribution, recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase or exchange of our shares or other securities or other change in our corporate structure affecting our shares, to prevent diminution or enlargement of the benefits or potential benefits available under our RSU Plan, the administrator will adjust the number and class of shares that may be delivered under our RSU Plan and/or the number, class and price of shares covered by each outstanding award. Further, the administrator will make such adjustments to awards as required by Section 25102(o) of the California Corporations Code to the extent the Company is relying upon the exemption afforded thereby with respect to such awards.

Dissolution or Liquidation

In the event of our proposed liquidation or dissolution, the administrator will notify participants as soon as practicable and all awards will terminate immediately before the consummation of such proposed transaction.

Merger or Change in Control

Our RSU Plan provides that in the event of our merger or change in control, as defined in our RSU Plan, each outstanding award will be treated as the administrator determines, without a participant's consent, including, without limitation, that the administrator may provide that awards granted under the RSU Plan will be assumed or substituted by substantially equivalent awards, be terminated upon or immediately before the merger or change in control, become vested and exercisable or payable and be terminated in connection with the merger or change in control, be terminated in exchange for cash, other property or other consideration or any combination of the above. The administrator is not required to treat all awards, all awards held by a participant, or all awards of the same type, similarly.

Clawback

Awards are subject to any clawback policy of ours which we are required to adopt pursuant to comply with applicable rules or laws. The administrator also may impose such other clawback, recovery or recoupment provisions in an award agreement as the administrator determines necessary or appropriate, including but not limited to a reacquisition right regarding previously acquired Shares or other cash or property. Additionally, the administrator may specify in an award agreement that the participant's rights, payments and benefits with respect to an award will be subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of certain specified events.

Amendment; Termination

Our board of directors has the authority to amend, suspend or terminate our RSU Plan, provided such action does not materially impair the rights of any participant unless mutually agreed otherwise. Unless sooner terminated by our board of directors, the RSU Plan will continue in effect for a term of ten (10) years from the later of (a) the effective date of the RSU Plan in April 2020, or (b) the earlier of the most recent board of directors or stockholder approval of an increase in the number of shares reserved for issuance under the RSU Plan. As noted above, it is expected that as of one business day before the effectiveness of the registration statement of which this prospectus forms a part, our RSU Plan will be terminated and we will not grant any additional awards under our RSU Plan thereafter.

2017 Stock Incentive Plan

Our 2017 Stock Incentive Plan, or 2017 Plan, originally was adopted by our board of directors in September 2017 and was most recently amended and restated in May 2020. Our stockholders last approved our 2017 Plan in May 2020. It is expected that as of one business day before the effectiveness of the registration statement of which this prospectus forms a part, our 2017 Plan will be terminated and we will not grant any additional awards under our 2017 Plan thereafter. However, our 2017 Plan will continue to govern the terms and conditions of the outstanding awards previously granted under our 2017 Plan.

Our 2017 Plan allows us to provide incentive stock options, within the meaning of Section 422 of the Code, non-statutory stock options, and RSAs (each, an "award" and the recipient of such award, a "participant") to employees, directors, officers and consultants or advisors of ours and any parent or subsidiary of ours.

As of December 31, 2019, an aggregate of 19,442,199 shares of our Class A common stock, is reserved for issuance under our 2017 Plan. As of December 31, 2019, awards outstanding under our 2017 Plan consisted of stock options to purchase an aggregate of 4,656,931 shares of our Class A common stock and no RSAs .

Plan Administration

Our 2017 Plan is administered by our board of directors or a committee appointed by our board of directors, or the administrator. The administrator has the authority to make all determinations necessary or advisable to our 2017 Plan, including the authority to authorize the issuance of restricted stock grant stock options, authorize the issuance of shares upon exercise of stock options under the 2017 Plan, construe award agreements and the 2017 Plan, to prescribe, amend and rescind rules and regulations relating to the 2017 Plan, to determine the terms and provisions of awards, and to correct any defect or supply any omission or reconcile any inconsistency in the 2017 Plan or any award agreement. The administrator may accelerate the date or dates on which all or any particular stock option may be exercised or extend the period or periods of time during which all, or any particular, stock option or stock options may be exercised. The administrator's construction and interpretation of the terms and provisions of our 2017 Plan is final and conclusive.

Eligibility

Employees, officers, directors and consultants or advisors of ours or our parent or subsidiary companies are eligible to receive awards. Only our employees or employees of our parent or subsidiary companies are eligible to receive incentive stock options.

Stock Options

Stock options have been granted under our 2017 Plan. The administrator determines the exercise price of stock options granted under our 2017 Plan, which may not be less than the fair market value of our Class A common stock on the date of grant. The term of a stock option is stated in the applicable award agreement, but may not exceed ten years from the grant date. With respect to any employee who owns more than 10% of the total combined voting power of all classes of our outstanding stock, the exercise price of an incentive stock option must equal at least 110% of the fair market value on the grant date and the term of an incentive stock option granted to such employee may not exceed five years. The administrator determines the methods of payment of the exercise price of a stock option, which may include cash or check; delivery of shares of our Class A common stock; delivery of a personal recourse note with an interest rate not less than the lowest applicable federal rate; if the Class A common stock is registered under the Securities Exchange Act of 1934, by irrevocable instructions to a broker to deliver payment by cash or check; by reducing the number of shares otherwise issuable by a number of shares having fair market value equal to the aggregate exercise price of the option, or by any combination of the foregoing methods. The administrator determines the time after a participant's termination of employment or provision of services during which a participant may exercise his or her option, which except as otherwise expressly provided in the applicable award agreement, generally will be 90 days (or 180 days in the case of a participant's termination of employment or service due to death or disability). In the event a participant's employment or provision of services to the Company is terminated by the Company for Cause (as defined in our 2017 Plan), the option will terminate immediately. A stock option may not be exercised later than the expiration of its term. The administrator, in its sole discretion, may

include in stock option agreements additional provisions not inconsistent with the terms or conditions of the 2017 Plan, providing for, among other items, restrictions on transfer, rights of the Company to repurchase shares acquired upon exercise of the stock option or such other provisions determined by our board of directors.

Restricted Stock

Restricted stock awards have been granted under our 2017 Plan. Such restricted stock are shares of our Class A common stock entitling the recipient to acquire, for a purchase price (if any) and subject to such restrictions and conditions as the administrator may determine at the time of grant, including continued employment and/or achievement of pre-established performance goals and objectives. The administrator determines any purchase price of restricted stock awards at the time of authorizing the issuance of such awards. The administrator, in its sole discretion, may include in restricted stock award agreements additional provisions not inconsistent with the terms or conditions of the 2017 Plan, providing for, among other items, restrictions on transfer and the right of the Company to repurchase shares of restricted stock or such other provisions determined by our board of directors.

Non-transferability of Stock Options

Under our 2017 Plan, stock options are not assignable or transferable by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution. During the life of an optionee, an option may be exercised only by the optionee.

Certain Adjustments

If, through or as a result of any merger, consolidation, sale of all or substantially all of our assets, reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar transaction, outstanding shares of our Class A common stock are increased, decreased or exchanged for a different number or kind of securities or other non-cash assets are distributed with respect to our stock or other securities, an appropriate and proportionate adjustment will be made in the number and kind of shares reserved for issuance under the 2017 Plan, the number and kind of shares or other securities subject to any then outstanding stock options, and the price of shares covered by each outstanding stock option. Except as expressly provided in the 2017 Plan, any issuance by us of shares of stock of any class, or securities convertible into shares of stock of any class, for cash or property or for labor or services, either upon direct sale or exercise of rights or warrants, or upon conversion of shares or obligations of ours convertible into such shares or securities, will not affect or cause an adjustment to the number or price of shares subject to outstanding options under the 2017 Plan. The administrator's determination regarding such adjustments will be final, binding and conclusive.

Effect of Certain Transactions

Our 2017 Plan provides that, unless provided otherwise in an option agreement or restricted stock agreement, in the event of a Change in Control Transaction (as defined in our 2017 Plan), the administrator, or the board of directors of any corporation assuming the obligations of the Company, may, in its discretion, take any one or more of the following actions, as to some or all outstanding awards: (i) provide that stock options will be assumed or substituted for with equivalent awards, (ii) upon written notice, provide that all unexercised stock options will terminate unless exercised, to the extent exercisable, (iii) upon written notice, provide that all unvested shares of restricted stock will be repurchased at cost, (iv) make or provide for a cash payment to optionees equal to the difference between (A) the fair market value of the per share consideration the holder of a share of Class A common stock will receive upon consummation of the Change in Control Transaction (the "Per Share Transaction Price"), *multiplied by* the number of shares of Class A common stock subject to outstanding vested stock options, *less* (B) the aggregate exercise price of such outstanding vested stock options, or (v) provide that all or any outstanding stock options will become exercisable and all or any outstanding restricted stock awards will vest in part or in full immediately prior to such event. If any stock options are exercisable at a price equal to or in excess of the Per Share Transaction Price, the administrator may provide that those stock options will terminate immediately upon the consummation of the Change in Control Transaction without payment. In the event of a business combination or other transaction including a Change in Control Transaction, any securities, cash or other property received in exchange for shares of restricted stock will continue to be governed by the provisions of any restricted stock agreement pursuant to which they were granted, including any provisions regarding vesting, and such securities,

cash or other property may be held in escrow on such terms as the administrator may direct. The administrator need not take the same action with respect to all awards.

Amendment and Termination

Our board of directors may amend or terminate our 2017 Plan at any time. Amendments to our 2017 Plan not requiring shareholder approval will become effective when adopted by our board of directors. Amendments requiring shareholder approval will become effective when adopted by our board of directors, but if shareholder approval is not obtained within twelve months of such adoption, any incentive stock options granted pursuant to such amendment will be deemed to be non-statutory options, provided that such stock options are authorized by our 2017 Plan. Unless sooner terminated by action of our board of directors, the 2017 Plan will terminate upon the close of business on the day next preceding the tenth anniversary of the date of its adoption by our board of directors. As noted above, it is expected that as of one business day before the effectiveness of the registration statement of which this prospectus forms a part, our 2017 Plan will be terminated and we will not grant any additional awards under our 2017 Plan thereafter.

401(k) Plan

We maintain a 401(k) retirement savings plan, for the benefit of our employees, including our named executive officers, who satisfy certain eligibility requirements. Our 401(k) plan provides eligible employees with an opportunity to save for retirement on a tax-advantaged basis. Under our 401(k) plan, eligible employees may elect to defer a portion of their compensation, within the limits prescribed by the Code and the applicable limits under the 401(k) plan, on a pre-tax or after-tax (Roth) basis, through contributions to the 401(k) plan. All of a participant's contributions into the 401(k) plan are 100% vested when contributed. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Code. As a tax-qualified retirement plan, pre-tax contributions to the 401(k) plan and earnings on those pre-tax contributions are not taxable to the employees until distributed from the 401(k) plan, and earnings on Roth contributions are not taxable when distributed from the 401(k) plan.

Rule 10b5-1 Plan Sales

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our Class A common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or executive officer when entering into the plan, without further direction from them. The director or executive officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Without the prior written consent of the representatives of the underwriters, prior to the day following the 180th day after the date of this offering, the sale of any shares under such plan would be subject to the lock-up agreement that the director or executive officer has entered into with the underwriters.

CERTAIN RELATIONSHIPS AND RELATED-PARTY TRANSACTIONS

In addition to the compensation arrangements, including employment, termination of employment and change in control arrangements, discussed in the sections titled “Management” and “Executive Compensation,” the following is a description of each transaction since January 1, 2017 and each currently proposed transaction in which:

- we have been or are to be a participant;
- the amount involved exceeded or exceeds $120,000; and
- any of our directors, executive officers or holders of more than 5% of our outstanding capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities, had or will have a direct or indirect material interest.

PrognomIQ Transaction

As described in the section “Business—PrognomIQ,” on August 21, 2020, we consummated a transaction whereby we spun off our subsidiary PrognomIQ, Inc. through a distribution of shares of Class A common stock, Class B common stock and preferred stock of PrognomIQ to our stockholders. As a result of this transaction, those individuals who were our stockholders as of 5:00 p.m. Eastern Time on August 20, 2020, including certain of our directors and executive officers and venture capital funds that beneficially own more than 5% of our outstanding capital stock and/or are represented on our board of directors, received a distribution of shares of the relevant class of stock of PrognomIQ.

We have non-exclusively licensed our patents and patent applications to PrognomIQ for use in the field of human diagnostics. Pursuant to our agreement with PrognomIQ, we also assigned a patent application related to lung cancer biomarkers to PrognomIQ. As part of the agreement, we also intend to grant PrognomIQ a sublicense to use the BWH patents and patent applications.

Philip Ma, Ph.D., our co-Founder and Chief Business Officer, is transitioning to the role of Chief Executive Officer of PrognomIQ. We intend to enter a consulting agreement with Dr. Ma for a period of twelve months. Our Chief Executive Officer and Chair of our board of directors, Omid Farokhzad, M.D., is the Chair of PrognomIQ’s board of directors.

The following table presents the number of shares distributed and equity awards granted in connection with the PrognomIQ transaction to our directors, executive officers and 5% stockholders.

Investor	Class A Common Shares	Class B Common Shares	Preferred Shares
David Hallal	892,776	—	—
Emerson Collective Investments, LLC	—	—	5,326,807
Entities affiliated with aMoon Fund	—	—	10,772,174
Entities affiliated with Fidelity	—	—	6,666,666
Entities affiliated with Maverick Capital Ventures, LLC	—	349,999	11,396,607
Entities affiliated with T. Rowe Price	—	—	5,169,230
Invus Public Equities, L.P.	—	—	10,808,953
Omid Farokhzad, M.D. and affiliated entities	5,918,990	17,545,007	220,240
Philip Ma, Ph.D. and affiliated entity	2,152,360	1,000,000	220,240
Robert Langer, Sc.D.	1,042,150	1,000,000	440,480
Terrance McGuire and affiliated entity	907,031	8,749	110,120

Convertible Preferred Stock Financings

Series D-1 Convertible Preferred Stock Transaction

In May 2020, we issued and sold an aggregate of 14,666,662 shares of our Series D-1 convertible preferred stock at a purchase price of $3.75 per share for an aggregate purchase price of approximately $55.0 million. Purchasers of our Series D-1 convertible preferred stock included venture capital funds that beneficially owned more than 5% of our outstanding share capital and/or are represented on our board of directors. The following table presents the number of shares and the total purchase price paid by these persons.

Investor	Series D-1 Convertible Preferred Shares	Total Purchase Price
Emerson Collective Investments, LLC	373,333	$ 1,399,999
Entities affiliated with aMoon Fund[1]	2,933,333	$ 10,999,999
Entities affiliated with Fidelity[2]	6,666,666	$ 24,999,998
Entities affiliated with Maverick Capital Ventures, LLC[3]	800,000	$ 3,000,000
Entities affiliated with T. Rowe Price[4]	2,400,000	$ 9,000,000
Invus Public Equities, L.P.	533,333	$ 1,999,999

(1) Entities affiliated with aMoon Fund whose shares are aggregated for the purposes of reporting ownership information include aMoon 2 Fund, Limited Partnership and aMoon Co-Investment SPV I, L.P.
(2) Entities affiliated with Fidelity whose shares are aggregated for the purposes of reporting ownership information include Fidelity Growth Company Commingled Pool, Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund, Fidelity Mt. Vernon Street Trust: Fidelity Growth Company K6 Fund, Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund and Fidelity Select Portfolios Select Medical Technology and Devices Portfolio.
(3) Entities affiliated with Maverick Capital Ventures, LLC, whose shares are aggregated for the purpose of reporting ownership information include Maverick Advisors Fund, L.P. and Maverick Ventures Investment Fund, LP. David Singer, a member of our board of directors, is affiliated with Maverick Capital Ventures, LLC.
(4) Entities affiliated with T. Rowe Price include T. Rowe Price Health Sciences Portfolio, TD Mutual Funds - TD Health Sciences Fund, VALIC Company I - Health Sciences Fund and T. Rowe Price Health Sciences Fund, Inc.

Series D Convertible Preferred Stock Transaction

In November 2019 and December 2019, we issued and sold an aggregate of 16,923,077 shares of our Series D convertible preferred stock shares at a purchase price of $3.25 per share for an aggregate purchase price of approximately $55.0 million. Purchasers of our Series D convertible preferred stock included venture capital funds that beneficially owned more than 5% of our outstanding share capital and/or are represented on our board of directors. The following table presents the number of shares and the total purchase price paid by these persons.

Investor	Series D Convertible Preferred Shares	Total Purchase Price
Emerson Collective Investments, LLC	1,133,739	$ 3,684,652
Entities affiliated with aMoon Fund[1]	7,838,841	$ 25,476,233
Entities affiliated with Maverick Capital Ventures, LLC[2]	1,081,688	$ 3,515,486
Entities affiliated with T. Rowe Price[3]	2,769,230	$ 8,999,998
Invus Public Equities, L.P.	1,015,384	$ 3,299,998

(1) Entities affiliated with aMoon Fund whose shares are aggregated for the purposes of reporting ownership information include aMoon 2 Fund, Limited Partnership and aMoon Co-Investment SPV I, L.P.
(2) Entities affiliated with Maverick Capital Ventures, LLC, whose shares are aggregated for the purpose of reporting ownership information include Maverick Advisors Fund, L.P. and Maverick Ventures Investment Fund, LP. David Singer, a member of our board of directors, is affiliated with Maverick Capital Ventures, LLC.
(3) Entities affiliated with T. Rowe Price include T. Rowe Price Health Sciences Portfolio, TD Mutual Funds - TD Health Sciences Fund, VALIC Company I - Health Sciences Fund and T. Rowe Price Health Sciences Fund, Inc.

Series C Convertible Preferred Stock Transaction

In March and April 2019, we issued and sold an aggregate of 7,000,000 shares of our Series C convertible preferred stock at a purchase price of $2.50 per share for an aggregate purchase price of approximately $17.5 million. Purchasers of our Series C convertible preferred stock included venture capital funds that beneficially owned more than 5% of our outstanding share capital and/or are represented on our board of directors. The following table presents the number of shares and the total purchase price paid by these persons.

Investor	Series C Convertible Preferred Shares	Total Purchase Price
Emerson Collective Investments, LLC	520,000	$ 1,300,000
Entities affiliated with Maverick Capital Ventures, LLC(1)	880,000	$ 2,200,000
Invus Public Equities, L.P.	800,000	$ 2,000,000

(1) Entities affiliated with Maverick Capital Ventures, LLC, whose shares are aggregated for the purpose of reporting ownership information include Maverick Advisors Fund, L.P. and Maverick Ventures Investment Fund, LP. David Singer, a member of our board of directors, is affiliated with Maverick Capital Ventures, LLC.

Series B Convertible Preferred Stock Transaction

In March 2018, we issued and sold an aggregate of 16,920,470 shares of Series B convertible preferred stock at a purchase price of $1.773 per share for an aggregate purchase price of approximately $30.0 million. Purchasers of our Series B convertible preferred stock included venture capital funds that beneficially owned more than 5% of our outstanding share capital and/or are represented on our board of directors. The following table presents the number of shares and the total purchase price paid by these persons.

Investor	Series B Convertible Preferred Shares	Total Purchase Price
Emerson Collective Investments, LLC	3,299,735	$ 5,850,430
Entities affiliated with Maverick Capital Ventures, LLC(1)	4,230,118	$ 7,499,999
Invus Public Equities, L.P.	8,460,236	$ 14,999,998

(1) Entities affiliated with Maverick Capital Ventures, LLC, whose shares are aggregated for the purpose of reporting ownership information include Maverick Advisors Fund, L.P. and Maverick Ventures Investment Fund, LP. David Singer, a member of our board of directors, is affiliated with Maverick Capital Ventures, LLC.

Series A Convertible Preferred Stock Transaction

In December 2017, we issued and sold an aggregate of 6,607,201 shares of our Series A convertible preferred stock at a purchase price of $0.9081 per share for an aggregate purchase price of approximately $6.0 million. Purchasers of our Series A convertible preferred stock included certain of our officers and directors. The following table presents the number of shares and the total purchase price paid by these persons.

Investor	Series A Convertible Preferred Shares	Total Purchase Price
Dynamics Group LLC(1)	220,240	$ 200,000
Entities affiliated with Maverick Capital Ventures, LLC(2)	4,404,801	$ 4,000,000
Philip Ma, Ph.D.(3)	220,240	$ 200,000
Robert Langer, Sc.D.(4)	440,480	$ 400,000
Strong Bridge LLC(5)	110,120	$ 100,000

(1) Omid Farokhzad, M.D., is our Chief Executive Officer and the chair of our board of directors and is the sole member of Dynamics Group LLC.

(2) Entities affiliated with Maverick Capital Ventures, LLC, whose shares are aggregated for the purpose of reporting ownership information include Maverick Advisors Fund, L.P. and Maverick Ventures Investment Fund, LP. David Singer, a member of our board of directors, is affiliated with Maverick Capital Ventures, LLC.
(3) Philip Ma,Ph.D. is a founder, and, at the time of purchase, was the President and Chief Business Officer of the Company.
(4) Robert Langer, Sc.D. is a member of our board of directors.
(5) Terrance McGuire is a member of our board of directors and is an operating manager of Strong Bridge LLC.

Investors' Rights Agreement

We are party to an amended and restated investors' rights agreement, dated as of May 12, 2020 (IRA), which provides, among other things, that certain holders of our capital stock have the right to demand that we file a registration statement or request that their shares of our capital stock be covered by a registration statement that we are otherwise filing. David Singer, a member of our board of directors, is affiliated with Maverick Capital Ventures, LLC, which is a party to the IRA. See the section titled "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Right of First Refusal

Pursuant to certain of our bylaws, equity compensation plans and certain agreements with our stockholders, including an amended and restated right of first refusal and co-sale agreement, dated as of May 12, 2020, we or our assignees have a right to purchase shares of our capital stock which stockholders propose to sell to other parties. This right will terminate upon completion of this offering. David Singer, a member of our board of directors, is affiliated with Maverick Capital Ventures, LLC, which is a party to the right of first refusal and co-sale agreement.

Voting Agreement

We are party to a voting agreement, dated as of May 12, 2020, under which certain holders of our capital stock have agreed to vote their shares of our capital stock on certain matters, including with respect to the election of directors. Upon completion of this offering, the voting agreement will terminate and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors. David Singer, a member of our board of directors, is affiliated with Maverick Capital Ventures, LLC, which is a party to the voting agreement.

Other Transactions

We have granted stock options, RSAs and RSUs to our executive officers and certain of our directors. See the sections titled "Executive Compensation—Outstanding Equity Awards at Fiscal Year-End" and "Management—Director Compensation" for a description of these stock incentive awards.

Other than as described above under this section titled "Certain Relationships and Related Party Transactions," since January 1, 2017, we have not entered into any transactions, nor are there any currently proposed transactions, between us and a related party where the amount involved exceeds, or would exceed, $120,000, and in which any related person had or will have a direct or indirect material interest. We believe the terms of the transactions described above were comparable to terms we could have obtained in arm's-length dealings with unrelated third parties.

Limitation of Liability and Indemnification of Officers and Directors

We expect to adopt an amended and restated certificate of incorporation, which will become effective immediately prior to the completion of this offering, and which will contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by the Delaware General Corporation Law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for the following:

- any breach of their duty of loyalty to our company or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which they derived an improper personal benefit.

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. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, we expect to adopt amended and restated bylaws, which will become effective immediately prior to the completion of this offering, and which will provide that we will indemnify, to the fullest extent permitted by law, any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that they are or were one of our directors or officers or is or was serving at our request as a director or officer of another corporation, partnership, joint venture, trust or other enterprise. Our amended and restated bylaws are expected to provide that we may indemnify to the fullest extent permitted by law any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that they are or were one of our employees or agents or is or was serving at our request as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise. Our amended and restated bylaws will also provide that we must advance expenses incurred by or on behalf of a director or officer in advance of the final disposition of any action or proceeding, subject to limited exceptions.

Further, we have entered into or will enter into indemnification agreements with each of our directors and executive officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements require us, among other things, to indemnify our directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require us to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding. We believe that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

The limitation of liability and indemnification provisions that are expected to be included in our amended and restated certificate of incorporation, amended and restated bylaws and in indemnification agreements that we have entered into or will enter into with our directors and executive officers may discourage stockholders from bringing a lawsuit against our directors and executive officers for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against our directors and executive officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and executive officers as required by these indemnification provisions. At present, we are not aware of any pending litigation or proceeding involving any person who is or was one of our directors, officers, employees or other agents or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

We have obtained insurance policies under which, subject to the limitations of the policies, coverage is provided to our directors and executive officers against loss arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or executive officer, including claims relating to public securities matters, and to us with respect to payments that may be made by us to these directors and executive officers pursuant to our indemnification obligations or otherwise as a matter of law.

Certain of our non-employee directors may, through their relationships with their employers, be insured or indemnified against certain liabilities incurred in their capacity as members of our board of directors.

The underwriting agreement will provide for indemnification by the underwriters of us and our officers and directors for certain liabilities arising under the Securities Act or otherwise.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Policies and Procedures for Related Party Transactions

Following the completion of this offering, our audit committee will have the primary responsibility for reviewing and approving or disapproving "related party transactions," which are transactions between us and related persons in which the aggregate amount involved exceeds or may be expected to exceed $120,000 and in which a related person has or will have a direct or indirect material interest. Upon completion of this offering, our policy regarding transactions between us and related persons will provide that a related person is defined as a director, executive officer, nominee for director or greater than 5% beneficial owner of our common stock, in each case since the beginning of the most recently completed year, and any of their immediate family members. Our audit committee charter that will be in effect upon completion of this offering will provide that our audit committee shall review and approve or disapprove any related party transactions.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our capital stock as of August 31, 2020, and as adjusted to reflect the sale of our Class A common stock in this offering assuming no exercise of the underwriters' option to purchase additional shares of our Class A common stock, for:

- each of our named executive officers;
- each of our directors;
- all of our current directors and executive officers as a group; and
- each person known by us to be the beneficial owner of more than 5% of the outstanding shares of each of our Class A common stock and Class B common stock.

We have determined beneficial ownership in accordance with the rules of the SEC, and thus it represents sole or shared voting or investment power with respect to our securities. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares that they beneficially owned, subject to community property laws where applicable. The information does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Sections 13(d) and 13(g) of the Securities Act.

We have based our calculation of the percentage of beneficial ownership prior to this offering on 6,366,776 shares of our Class A common stock and 20,000,000 shares of our Class B common stock outstanding as of August 31, 2020, and 62,117,410 shares of our Class A common stock resulting from the automatic conversion of all outstanding shares of our convertible preferred stock into our Class A common stock immediately prior to the completion of this offering, as if this conversion had occurred as of August 31, 2020. We have based our calculation of the percentage of beneficial ownership after this offering on shares of our Class A common stock issued by us in our initial public offering and 20,000,000 shares of Class B common stock outstanding immediately after the completion of this offering, assuming that the underwriters will not exercise their option to purchase up to an additional shares of our Class A common stock from us in full. We have deemed shares of our Class A common stock subject to stock options that are currently exercisable or exercisable within 60 days of August 31, 2020, or issuable pursuant to RSAs which are subject to vesting and settlement conditions expected to occur within 60 days of August 31, 2020 to be outstanding and to be beneficially owned by the person holding the stock option or RSA for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Seer, Inc. 3800 Bridge Parkway, Suite 102, Redwood City, California 94065.

Name of Beneficial Owner	Shares Beneficially Owned				% of Total Outstanding Before Offering	% of Total Voting Power Before Offering#	% of Total Outstanding After Offering	% of Total Voting Power After Offering
	Class A Shares	%	Class B Shares†	%				
Named Executive Officers and Directors:								
Omid Farokhzad, M.D.[1]	6,139,230		17,545,007					
David Hallal[2]	892,776		—					
Catherine J. Friedman[3]	—		—					
Robert Langer, Sc.D.[4]	1,482,630		1,000,000					
Terrance McGuire[5]	1,017,151		8,749					
David Singer[6]	11,396,607		349,999					
All executive officers and directors as a group (8 persons)[7]	26,227,890		18,912,504					
5% Stockholders:								
Entities affiliated with Maverick Capital Ventures, LLC[8]	11,396,607		349,999					
Invus Public Equities, L.P.[9]	10,808,953		—					
Entities affiliated with aMoon Fund[10]	10,772,174		—					
Entities affiliated with Fidelity[11]	6,666,666		—					
Emerson Collective Investments LLC[12]	5,326,807		—					
Entities affiliated with T. Rowe Price[13]	5,169,230		—					

† The Class B common stock is convertible at any time by the holder into shares of Class A common stock on a share-for-share basis, such that each holder of Class B common stock beneficially owns an equivalent number of Class A common stock.

Percentage total voting power represents voting power with respect to all shares of our Class A and Class B common stock, as a single class. Each holder of Class B common stock shall be entitled to ten votes per share of Class B common stock and each holder of Class A common stock shall be entitled to one vote per share of Class A common stock on all matters submitted to our stockholders for a vote. The Class A common stock and Class B common stock vote together as a single class on all matters submitted to a vote of our stockholders, except as may otherwise be required by law.

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares of our common stock.

(1) Includes (i) 597,538 shares of Class A common stock held of record by Dr. Farokhzad, of which 588,018 may be repurchased by us at the original exercise price; (ii) 220,240 shares of Class A common stock and 5,545,007 shares of Class B common stock held of record by Dynamics Group LLC for which Dr. Farokhzad serves as the sole member, of which 1,097,656 may be repurchased by us at the original exercise price; (iii) 6,000,000 shares of Class B shares held of record by SAF-BND Trust for which Dr. Farokhzad's spouse serves as trustee; (iv) 1,109,397 shares of Class A common stock and 6,000,000 shares of Class B common stock held of record by OCF 2014 Trust for which Dr. Farokhzad's spouse serves as the trust advisor; and (v) 4,212,055 shares of Class A common stock subject to options exercisable within 60 days of August 31, 2020, of which 672,555 are fully vested. Dr. Farokhzad disclaims beneficial ownership of the shares held by the SAF-BND Trust and OCF 2014 Trust.

(2) Includes (i) 564,026 shares of Class A common stock held of record by Mr. Hallal, of which 223,261 may be repurchased by us at the original exercise price and (ii) 328,750 shares of Class A common stock subject to options exercisable within 60 days of August 31, 2020, of which 34,100 are fully vested.

(3) Ms. Friedman joined our board of directors on September 14, 2020.

(4) Includes (i) 781,867 shares of Class A common stock, of which 110,493 may be repurchased by us at the original exercise price and 700,000 shares of Class B common stock held of record by Dr. Langer, of which 62,500 may be repurchased by us at the original exercise price; (ii) 700,763 shares of Class A common stock subject to options exercisable within 60 days of August 31, 2020, of which 171,723 are fully vested; and (iii) 300,000 shares of Class B common stock held of record by The Langer Family 2012 Trust Under Trust Agreement dated December 7, 2012.

(5) Includes (i) 451,507 shares of Class A common stock, of which 120,909 may be repurchased by us at the original exercise price and 8,749 shares of Class B common stock held of record by Strong Bridge, LLC for which Mr. McGuire serves as an operating manager and (ii) 565,644 shares of Class A common stock subject to options exercisable within 60 days of August 31, 2020, of which 168,908 are fully vested.

(6) Includes 11,396,607 shares of Class A common stock and 349,999 shares of Class B common stock disclosed in footnote (8) below that are held of record by entities affiliated with Maverick Capital Ventures, LLC.

(7) Includes (i) 15,488,823 shares of Class A common stock and 18,912,504 shares of Class B common stock beneficially owned by our executive officers and directors and (ii) 10,739,067 shares of Class A common stock subject to options exercisable within 60 days of August 31, 2020 and held by our executive officers and directors, of which 1,128,748 are fully vested.

(8) Includes (i) 7,255,800 shares of Class A common stock and 217,769 shares of Class B common stock held of record by Maverick Ventures Investment Fund, L.P. (Maverick Ventures Fund) and (ii) 4,140,807 shares of Class A common stock and 132,230 shares of Class B

common stock held of record by Maverick Advisors Fund, L.P. (Maverick Advisors). Maverick Capital Ventures, LLC (Maverick Ventures) is the general partner of Maverick Ventures Fund and Maverick Advisors. As the Managing Partners of Maverick Ventures, Lee S. Ainslie III and David B. Singer, one of our directors, share voting and dispositive power with respect to the shares held by Maverick Ventures Fund and Maverick Advisors. The address for these entities is c/o Maverick Capital, 1900 N. Pearl Street, 20th Floor, Dallas, Texas 75201.

(9) Includes 10,808,953 shares of Class A common stock held of record by Invus Public Equities, L.P. Invus Public Equities Advisors, LLC, as the general partner of Invus Public Equities, L.P., controls Invus Public Equities, L.P. and, accordingly, may be deemed to beneficially own the shares held by Invus Public Equities, L.P. Artal Treasury Ltd., as the managing member of Invus Public Equities Advisors, LLC, controls Invus Public Equities Advisors, LLC and, accordingly, may be deemed to beneficially own the shares held by Invus Public Equities, L.P. The Geneva branch of Artal International S.C.A. is the sole stockholder of Artal Treasury Ltd. and, accordingly, may be deemed to beneficially own the shares held by Invus Public Equities, L.P. Artal International Management S.A., as the managing partner of Artal International S.C.A., controls Artal International S.C.A. and, accordingly, may be deemed to beneficially own the shares held by Invus Public Equities, L.P. Artal Group, S.A., as the parent company of Artal International Management, S.A., controls Artal International Management S.A. and, accordingly, may be deemed to beneficially own the shares held by Invus Public Equities, L.P. Westend, S.A., as the parent company of Artal Group S.A. controls Artal Group S.A., and, accordingly, may be deemed to beneficially own the shares held by Invus Public Equities, L.P. Stichting Administratiekantoor Westend, as the parent company of Westend S.A., controls Westend S.A. and, accordingly, may be deemed to beneficially own the shares held by Invus Public Equities, L.P. Mr. Pascal Minne, as the sole member of the board of Stichting Administratiekantoor Westend, controls Stichting Administratiekantoor Westend and, accordingly, may be deemed to beneficially own the shares held by Invus Public Equities, L.P. The address for Invus Public Equities, L.P. is 750 Lexington Avenue, 30th Floor, New York, NY 10022.

(10) Includes 6,666,666 shares of Class A common stock held of record by four accounts managed by direct or indirect subsidiaries of FMR LLC. Abigail P. Johnson is a Director, the Chairman, the Chief Executive Officer, and the President of FMR LLC. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B stockholders have entered into a stockholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the stockholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act of 1940 (the Fidelity Funds), advised by Fidelity Management & Research Company, a wholly owned subsidiary of FMR LLC, which power resides in the Fidelity Funds' Boards of Trustees. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees. The address for FMR LLC is 200 Seaport Boulevard V12E, Boston, Massachusetts 02210.

(11) Includes (i) 8,819,080 shares of Class A common stock held of record by aMoon 2 Fund, Limited Partnership (aMoon 2 Fund) and (ii) 1,953,094 shares of Class A common stock held of record by aMoon Co-Investment SPV I, L.P. (aMoon Co-Investment). aMoon 2 Fund G.P. Limited Partnership (aMoon 2 Fund G.P.) is the sole General Partner of aMoon 2 Fund and aMoon Co-Investment and aMoon General Partner Ltd. (aMoon General Partner) is the sole General Partner of aMoon 2 Fund G.P. Dr. Yair Schindel is the sole shareholder of aMoon General Partner. By virtue of such relationships, aMoon 2 Fund G.P., aMoon General Partner and Dr. Schindel may be deemed to have shared voting and investment power with respect to the capital stock held by aMoon 2 Fund and aMoon Co-Investment. Each of aMoon 2 Fund G.P., aMoon General Partner and Dr. Schindel disclaims beneficial ownership of the shares held by aMoon 2 Fund and aMoon General Partner, except to the extent of its or his pecuniary interest therein, if any. The address for these entities is 34 Yerushalaim Road, Beit Gamla, 6th Floor, Ra-anana, 4350110, Israel.

(12) Includes 5,326,807 shares of Class A common stock held of record by Emerson Collective Investments, LLC (ECI). The Laurene Powell Jobs Trust, for which Laurene Powell Jobs serves as trustee, is the managing member of ECI and has voting and dispositive power with respect to the shares held of record by ECI. The address for this entity is P.O. Box 61239, Palo Alto, California 94306.

(13) Includes (i) 4,429,354 shares of Class A common stock held of record by T. Rowe Price Health Sciences Fund, Inc.; (ii) 200,815 shares of Class A common stock held of record by T. Rowe Price Health Sciences Portfolio; (iii) 274,505 shares of Class A common stock held of record by TD Mutual Funds - TD Health Sciences Fund and (iv) 264,556 shares of Class A common stock held of record by VALIC Company I - Health Sciences Fund. The foregoing accounts are advised or sub-advised by T. Rowe Price Associates, Inc. (T. Rowe Price) a registered investment adviser. T. Rowe Price serves as investment adviser or subadviser, as applicable, with power to direct investments and/or sole power to vote the securities owned by the accounts (with the exception of one subadvisory fund that retains its own voting authority). Although T. Rowe Price may be deemed to be the beneficial owner of all the shares listed, T. Rowe Price expressly disclaims beneficial ownership of such securities. T. Rowe Price Investment Services, Inc., or TRPIS, a registered broker-dealer (and FINRA member), is a subsidiary of T. Rowe Price Associates, Inc., the investment adviser or subadviser, as applicable, to the accounts listed above. TRPIS was formed primarily for the limited purpose of acting as the principal underwriter and distributor of shares of the funds in the T. Rowe Price mutual fund family. TRPIS does not engage in underwriting or market-making activities involving individual securities. T. Rowe Price Associates, Inc. is the wholly owned subsidiary of T. Rowe Price Group, Inc., which is a publicly traded financial services holding company. The address for these entities is c/o T. Rowe Price Associates, Inc. 100 East Pratt Street, Baltimore, Maryland 21202, attention Andrew Baek, Vice President.

DESCRIPTION OF CAPITAL STOCK

General

The following description summarizes certain important terms of our capital stock, as they are expected to be in effect immediately prior to the completion of this offering. We expect to adopt an amended and restated certificate of incorporation and amended and restated bylaws that will become effective immediately prior to the completion of this offering, and this description summarizes the provisions that are expected to be included in such documents. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description of the matters set forth in this section titled "Description of Capital Stock," you should refer to our amended and restated certificate of incorporation, amended and restated bylaws and amended and restated investors' rights agreement, which are included as exhibits to the registration statement of which this prospectus forms a part, and to the applicable provisions of Delaware law. Immediately following the completion of this offering, our authorized capital stock will consist of shares of capital stock, $0.00001 par value per share, of which:

- shares are designated as Class A common stock;
- shares are designated as Class B common stock; and
- shares are designated as preferred stock.

As of August 31, 2020, there were 6,366,776 shares of our Class A common stock outstanding, held by 36 stockholders of record, 20,000,000 shares of our Class B common stock outstanding, held by 15 stockholders of record and no shares of our preferred stock outstanding. Pursuant to our amended and restated certificate of incorporation, our board of directors will have the authority, without stockholder approval except as required by the listing standards of , to issue additional shares of our Class A common stock.

Common Stock

We have two classes of authorized common stock, Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting and conversion.

Dividend Rights

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board of directors may determine. See the section titled "Dividend Policy" for additional information.

Voting Rights

Holders of Class A common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and holders of our Class B common stock will be entitled to ten votes for each share held, except as otherwise required by law. The holders of our Class A common stock and Class B common stock vote together as a single class, unless otherwise required by law.

Delaware law could require either holders of our Class A common stock and our Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend our amended and restated certificate of incorporation to increase or decrease the par value of a class of stock, then that class would be required to vote separately to approve the proposed amendment; and
- if we were to seek to amend our amended and restated certificate of incorporation in a manner that alters or changes the powers, preferences, or special rights of a class of stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment.

Stockholders do not have the ability to cumulate votes for the election of directors. Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect at the closing of this offering will provide for a classified board of directors consisting of three classes of approximately equal size, each serving staggered three-year terms. Only the directors in one class will be subject to election by a plurality of the votes cast at each annual meeting of stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights, and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

If we become subject to a liquidation, dissolution or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating preferred stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Conversion of Class B Common Stock

Each share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock. Following the completion of this offering, shares of Class B common stock will automatically convert into shares of Class A common stock upon sale or transfer of such shares, excluding certain transfers permitted by our amended and restated certificate of incorporation. The Class B common stock will also automatically convert into shares of Class A common stock upon the earlier of the first day following the fifth anniversary of the closing of this offering and December 31, 2025.

Fully Paid and Non-Assessable

In connection with this offering, our legal counsel will opine that the shares of our Class A common stock to be issued in this offering will be fully paid and non-assessable.

Preferred Stock

After the completion of this offering, no shares of our preferred stock will be outstanding. Pursuant to our amended and restated certificate of incorporation that will become effective immediately prior to the completion of this offering, our board of directors will have the authority, subject to limitations prescribed by Delaware law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions, in each case without further vote or action by our stockholders. Our board of directors can also increase or decrease the number of shares of any series of preferred stock, but not below the number of shares of that series then outstanding, without any further vote or action by our stockholders. 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 delaying, deferring or preventing a change in control of our company and might adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. We have no current plan to issue any shares of preferred stock.

Options

As of December 31, 2019, we had outstanding options to purchase an aggregate of 4,656,931 shares of our Class A common stock, with a weighted-average exercise price of approximately $0.39 per share, under our equity compensation plans.

Restricted Stock Units

As of December 31, 2019, we had no outstanding shares of our Class A common stock subject to RSUs under our equity compensation plans. Subsequently, as of September 1, 2020, we had 717,232 shares of our Class A common stock outstanding, subject to RSUs issued under our equity compensation plans, which will vest upon the satisfaction of a performance-based condition. The performance-based condition for the RSUs will be satisfied on the earlier of (i) the first and second year anniversaries of the effective date of this registration statement; and (ii) the date of a Change in Control (as defined in the relevant equity compensation plan), subject to continued service to the Company.

Registration Rights

After the completion of this offering, certain holders of our Class A common stock will be entitled to rights with respect to the registration of their shares under the Securities Act. These registration rights are contained in our amended and restated investor rights agreement (IRA). We and certain holders of our preferred stock are parties to the IRA. The registration rights set forth in the IRA will expire three years following the completion of this offering, or, with respect to any particular stockholder, when such stockholder is able to sell all of its shares pursuant to Rule 144 of the Securities Act during any three-month period or ceases to hold registrable shares. We will pay the registration expenses (other than underwriting discounts and commissions) of the holders of the shares registered pursuant to the registrations described below. In an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares such holders may include. We expect that our stockholders will waive their rights under the IRA (i) to receive notice of this offering and (ii) to include their registrable shares in this offering. In addition, in connection with this offering, we expect that each stockholder that has registration rights will agree not to sell or otherwise dispose of any securities without the prior written consent of us and the underwriters for a period of 180 days after the date of this prospectus, subject to certain terms and conditions. See the section titled “Shares Eligible for Future Sale—Lock-Up and Market Standoff Agreements” for additional information regarding such restrictions.

Demand Registration Rights

After the completion of this offering, the holders of up to 63,413,774 shares of our Class A common stock will be entitled to certain demand registration rights. At any time after the earlier of five years after the date of the IRA or 180 days after the effective date of this offering, the holders of at least 40% of registrable shares then outstanding may make a written request that we register the offer and sale of their shares. If we determine that it would be seriously detrimental to us and our stockholders to effect such a demand registration, we have the right to defer such registration, not more than twice in any 12-month period, for a period of up to 90 days.

Piggyback Registration Rights

After the completion of this offering, if we propose to register the offer and sale of our Class A common stock under the Securities Act, in connection with the public offering of such Class A common stock the holders of up to 63,413,774 shares of our Class A common stock 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 pursuant to any employee benefit plan, (ii) a registration relating to a corporate reorganization or other 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 public offering of our Class A common stock or (iv) a registration in which the only Class A common stock being registered is Class A common stock issuable upon conversion of debt securities that are also being registered, the holders of these shares are entitled to notice of the registration and have the right, subject to certain limitations, to include their shares in the registration.

S-3 Registration Rights

After the completion of this offering, the holders of up to 63,413,774 shares of our Class A common stock will be entitled to certain Form S-3 registration rights. The holders of at least 30% of registrable shares 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 and commissions and other selling expenses, is at least $5,000,000. 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 seriously detrimental to us and our stockholders to effect such a registration, we have the right to defer such registration, not more than twice in any 12-month period, for a period of up to 90 days.

Anti-Takeover Provisions

Certain provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws, which will become effective immediately prior to the completion of this offering, which are summarized below, may have the effect of delaying, deferring or discouraging another person from acquiring control of us. They are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Delaware Law

We will be governed by the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- the transaction was approved by the board of directors prior to the time that the stockholder became an interested stockholder;
- upon consummation of the transaction which 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 commenced, excluding shares owned by directors who are also officers of the corporation and shares owned by 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
- at or subsequent to the time the stockholder became an interested stockholder, the business combination was 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 two-thirds of the outstanding voting stock which 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 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 our company.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaw Provisions

Our amended and restated certificate of incorporation and our amended and restated bylaws, which will become effective immediately prior to the completion of this offering, will include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of our board of directors or management team, including the following:

Board of Directors Vacancies. Our amended and restated certificate of incorporation and amended and restated bylaws will authorize only our board of directors to fill vacant directorships, including newly created seats. In addition, the number of directors constituting our board of directors will be permitted to be set only by a resolution

adopted by a majority vote of our entire board of directors. These provisions would 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 its own nominees. This will make it more difficult to change the composition of our board of directors and will promote continuity of management.

Classified Board. Our amended and restated certificate of incorporation and amended and restated bylaws will provide that our board of directors is classified into three classes of directors. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors. See the section titled "Management—Board Composition."

Stockholder Action; Special Meeting of Stockholders. Our amended and restated certificate of incorporation will provide 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 bylaws. Our amended and restated bylaws will further provide 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, our Chief Executive Officer or our President, thus prohibiting a stockholder from calling a special meeting. These provisions might 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 will provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our amended and restated bylaws will also specify certain requirements regarding the form and content of a stockholder's 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 our company.

No Cumulative Voting. The Delaware General Corporation Law provides that 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 will provide that stockholders may remove directors only for cause.

Amendment of Charter Provisions. Any amendment of the above provisions in our amended and restated certificate of incorporation would require approval by holders of at least % of our then outstanding capital stock.

Issuance of Undesignated Preferred Stock. Our board of directors will have the authority, without further action by our stockholders, to issue up to shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock would enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or other means.

Exclusive Forum. Our amended and restated bylaws will provide that, unless we consent to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding under Delaware statutory or common law brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty, (iii) any action asserting a claim arising pursuant to the Delaware General Corporation Law, (iv) any action regarding our amended and restated certificate of incorporation or amended and restated bylaws, or (v) any action asserting a claim against us that is governed by the internal affairs doctrine. This exclusive forum provision will not apply to any causes of action arising under the Securities Act or the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Any person or entity

purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to this provision. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers.

Transfer Agent and Registrar

Upon the completion of this offering, the transfer agent and registrar for our Class A common stock will be . The transfer agent and registrar's address is .

Limitations of Liability and Indemnification

See the section titled "Certain Relationships and Related Party Transactions—Limitation of Liability and Indemnification of Officers and Directors."

Listing

We intend to apply for the listing of our Class A common stock on under the symbol "SEER."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our Class A common stock, and we cannot predict the effect, if any, that market sales of shares of our Class A common stock or the availability of shares of our Class A common stock for sale will have on the market price of our Class A common stock prevailing from time to time. Future sales of our Class A common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares of our Class A common stock will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our Class A common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and could impair our ability to raise equity capital in the future.

Following the completion of this offering, based on the number of shares of our capital stock outstanding as of September 1, 2020 we will have a total of shares of our Class A common stock outstanding and shares of our Class B common stock outstanding. Of these outstanding shares, all of the shares of our Class A common stock sold in this offering will be freely tradable, except that any shares purchased in this offering by our affiliates, as that term is defined in Rule 144 under the Securities Act, would only be able to be sold in compliance with the Rule 144 limitations described below.

The remaining outstanding shares of our Class A common stock will be deemed "restricted securities" as defined in Rule 144 under the Securities Act. Restricted securities may be sold in the public market only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which rules are summarized below. As a result of the lock-up and market standoff agreements described below and the provisions of our IRA described under the section titled "Description of Capital Stock—Registration Rights," and subject to the provisions of Rule 144 or Rule 701, shares of our Class A common stock will be available for sale in the public market as follows:

- beginning on the date of this prospectus, all shares of our Class A common stock sold in this offering will be immediately available for sale in the public market; and
- beginning 181 days after the date of this prospectus (subject to the terms of the lock-up and market standoff agreements described below) additional shares will become eligible for sale in the public market, of which shares will be held by affiliates and subject to the volume and other restrictions of Rule 144, as described below.

Lock-Up and Market Standoff Agreements

We will agree that we will not (i) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our capital stock or securities convertible into or exchangeable or exercisable for any shares of our capital stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, or (ii) enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any shares of capital stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of capital stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc. for a period of 180 days after the date of this prospectus, other than the shares of our Class A common stock to be sold hereunder and certain other exceptions.

Our directors, our executive officers and holders of substantially all of our capital stock and securities convertible into our capital stock have entered or will enter into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each of these persons or entities, with limited exceptions, for a period of 180 days after the date of this prospectus, may not, without the prior written consent of J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc., (1) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our

capital stock or any securities convertible into or exercisable or exchangeable for our capital stock (including, without limitation, Class A common stock or such other securities which may be deemed to be beneficially owned by such directors, executive officers and stockholders in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) or (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the capital stock or such other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of capital stock or such other securities, in cash or otherwise, or (3) make any demand for or exercise any right with respect to the registration of any shares of our capital stock or any security convertible into or exercisable or exchangeable for our capital stock. For more information, see the section titled "Underwriting."

In addition, our executive officers, directors, and holders of substantially all of our capital stock and securities convertible into or exchangeable for our capital stock have entered into market standoff agreements with us under which they have agreed that, subject to certain exceptions, for a period of 180 days after the date of this prospectus, they will not, without our prior written consent, dispose of or hedge any shares or any securities convertible into or exchangeable for shares of our capital stock.

Rule 144

In general, Rule 144 provides that once we have been subject to the public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares of our Class A common stock proposed to be sold for at least six months is entitled to sell those shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then that person would be entitled to sell those shares without complying with any of the requirements of Rule 144.

In general, Rule 144 provides that our affiliates or persons selling shares of our Class A common stock on behalf of our affiliates are entitled to sell upon expiration of the market standoff agreements and lock-up agreements described above, within any three-month period, a number of shares of our Class A common stock that does not exceed the greater of:

- 1% of the number of shares of our capital stock then outstanding, which will equal shares immediately after the completion of this offering; or
- the average weekly trading volume of our Class A common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to that sale.

Sales of our Class A common stock made in reliance upon Rule 144 by our affiliates or persons selling shares of our Class A common stock on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 generally allows a stockholder who purchased shares of our capital stock pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days to sell these shares in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the date of this prospectus before selling those shares pursuant to Rule 701.

Registration Rights

Pursuant to our IRA, after the completion of this offering, the holders of up to 63,413,774 shares of our Class A common stock, or certain transferees, will be entitled to certain rights with respect to the registration of the offer and sale of those shares under the Securities Act. See the section titled "Description of Capital Stock—Registration Rights" for a description of these registration rights. If the offer and sale of these shares of our Class A common stock are registered, the shares will be freely tradable without restriction under the Securities Act, subject to the Rule 144 limitations applicable to affiliates, and a large number of shares may be sold into the public market.

Registration Statement

We intend to file a registration statement on Form S-8 under the Securities Act promptly after the completion of this offering to register shares of our Class A common stock subject to RSUs and options outstanding, as well as reserved for future issuance, under our equity compensation plans. The registration statement on Form S-8 is expected to become effective immediately upon filing, and shares of our Class A common stock covered by the registration statement will then become eligible for sale in the public market, subject to the Rule 144 limitations applicable to affiliates, vesting restrictions and any applicable market standoff agreements and lock-up agreements. See the section titled "Executive Compensation—Employee Benefit and Stock Plans" for a description of our equity compensation plans.

MATERIAL U.S. FEDERAL INCOME AND TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF OUR COMMON STOCK

The following is a summary of material U.S. federal income tax considerations of the ownership and disposition of our Class A common stock acquired in this offering by a "non-U.S. holder" (as defined below) but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Code, Treasury Regulations promulgated thereunder and administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, so as to result in U.S. federal income tax considerations different from those set forth below. We have not sought, and do not intend to seek, any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any non-U.S., state or local jurisdiction or under U.S. federal gift and estate tax rules, or the effect, if any, of the Medicare contribution tax on net investment income. In addition, this discussion does not address tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules, including, without limitation:

- banks, insurance companies, regulated investment companies, real estate investment trusts or other financial institutions;
- persons subject to the alternative minimum tax;
- tax-exempt organizations;
- pension plans and tax-qualified retirement plans;
- controlled foreign corporations, passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax;
- entities or arrangements classified as partnerships for U.S. federal income tax purposes or other pass through entities such as subchapter S corporations (or investors in such entities or arrangements);
- brokers or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons who own, or are deemed to own, more than five percent of our capital stock (except to the extent specifically set forth below);
- certain former citizens or long-term residents of the United States;
- persons who hold our Class A common stock as a position in a hedging transaction, "straddle," "conversion transaction," or other risk reduction transaction;
- persons who hold or receive our Class A common stock pursuant to the exercise of any option or otherwise as compensation;
- persons who do not hold our Class A common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment);
- persons deemed to sell our Class A common stock under the constructive sale provisions of the Code; or
- persons that own, or are deemed to own, our Class B common stock.

In addition, if a partnership (or other entity or arrangement classified as a partnership for U.S. federal income tax purposes) holds our Class A common stock, the tax treatment of a partner in the partnership generally will depend on the status of the partner and upon the activities of the partnership. A partner in a partnership that will hold

our Class A common stock should consult his, her or its own tax advisor regarding the tax considerations of the purchase, ownership and disposition of our common stock through a partnership.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax considerations of the purchase, ownership and disposition of our Class A common stock arising under the U.S. federal gift or estate tax rules or under the laws of any state, local, non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

Non-U.S. Holder Defined

For purposes of this discussion, you are a "non-U.S. holder" if you are a beneficial owner of our common stock that, for U.S. federal income tax purposes, is neither a partnership nor:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized in the United States or under the laws of the United States or any political subdivision thereof, or otherwise treated as such for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (x) whose administration is subject to the primary supervision of a U.S. court and that has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (y) that has made a valid election under applicable Treasury Regulations to be treated as a U.S. person.

Distributions

As described in the section titled "Dividend Policy," we have never declared or paid cash dividends on our common stock, and we do not anticipate paying any dividends on our common stock following the completion of this offering. However, if we do make distributions on our Class A common stock, those payments will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, the excess will constitute a return of capital and will first reduce your basis in our Class A common stock, but not below zero, and then will be treated as gain from the sale of stock as described below under "—Gain on Disposition of Class A Common Stock."

Subject to the discussions below regarding effectively connected income, backup withholding and Foreign Account Tax Compliance Act, or FATCA, withholding, any dividend paid to you generally will be subject to U.S. federal withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty between the United States and your country of residence. In order to receive a reduced treaty rate, you must provide us or the applicable paying agent with an IRS Form W-8BEN or W-8BEN-E or other appropriate version of IRS Form W-8 certifying qualification for the reduced rate. We may withhold up to 30% of the gross amount of the entire distribution even if the amount constituting a dividend, as described above, is less than the gross amount to the extent provided for in the Treasury Regulations. A non-U.S. holder of shares of our Class A common stock may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS. If the non-U.S. holder holds our Class A common stock through a financial institution or other agent acting on the non-U.S. holder's behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through other intermediaries.

Dividends received by you that are treated as effectively connected with your conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, that are attributable to a permanent establishment or fixed base maintained by you in the United States) are generally exempt from the 30% U.S. federal withholding tax, subject to the discussions below regarding backup withholding and FATCA withholding. In order to obtain this exemption, you must provide us with a properly executed IRS Form W-8ECI or other applicable IRS Form W-8 properly certifying such exemption. Such effectively connected dividends, although not subject to U.S. federal

withholding tax, generally are taxed at the same rates applicable to U.S. persons, net of certain deductions and credits. In addition, if you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty between the United States and your country of residence. You should consult your tax advisor regarding the tax consequences of the ownership and disposition of our Class A common stock, including the application of any applicable tax treaties that may provide for different rules.

Gain on Disposition of Class A Common Stock

Subject to the discussions below regarding backup withholding and FATCA withholding, you generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our Class A common stock unless:

- the gain is effectively connected with your conduct of a U.S. trade or business (and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by you in the United States);
- you are an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met; or
- our Class A common stock constitutes a U.S. real property interest by reason of our status as a "U.S. real property holding corporation," or a USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding your disposition of, or your holding period for, our Class A common stock.

We believe that we are not currently and will not become a USRPHC for U.S. federal income tax purposes, and the remainder of this discussion so assumes. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our U.S. and worldwide real property interests plus our other assets used or held for use in a trade or business, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, as long as our Class A common stock is regularly traded on an established securities market, your Class A common stock will be treated as U.S. real property interests only if you actually (directly or indirectly) or constructively hold more than five percent of such regularly traded Class A common stock at any time during the shorter of the five-year period preceding your disposition of, or your holding period for, our Class A common stock.

If you are a non-U.S. holder described in the first bullet above, you generally will be required to pay tax on the gain derived from the sale (net of certain deductions and credits) under regular U.S. federal income tax rates applicable to U.S. persons, and a corporate non-U.S. holder described in the first bullet above also may be subject to the branch profits tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty. If you are an individual non-U.S. holder described in the second bullet above, you will be subject to tax at 30% (or such lower rate specified by an applicable income tax treaty) on the gain derived from the sale, which gain may be offset by U.S. source capital losses for the year, provided you have timely filed U.S. federal income tax returns with respect to such losses. You should consult your tax advisor regarding any applicable income tax or other treaties that may provide for different rules.

Backup Withholding and Information Reporting

Generally, we must report annually to the IRS the amount of dividends paid to you, your name and address and the amount of tax withheld, if any. A similar report will be sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence.

Payments of dividends on or of proceeds from the disposition of our Class A common stock made to you may be subject to backup withholding at the applicable statutory rate (currently, 24%) unless you establish an exemption, for example, by properly certifying your non-U.S. status on a properly completed IRS Form W-8BEN or W-8BEN-E or another appropriate version of IRS Form W-8. Notwithstanding the foregoing, backup withholding and

information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that you are a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. federal income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

Additional Withholding Requirements under the Foreign Account Tax Compliance Act

Sections 1471 through 1474 of the Code and the Treasury Regulations and other official IRS guidance issued thereunder, or collectively FATCA, generally impose a U.S. federal withholding tax of 30% on dividends on, and, subject to the discussion below regarding the proposed regulations, the gross proceeds from a sale or other disposition of, our Class A common stock, paid to a "foreign financial institution" (as specially defined under these rules), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding the U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are non-U.S. entities with U.S. owners) or otherwise establishes an exemption. FATCA also generally imposes a U.S. federal withholding tax of 30% on dividends on, and the gross proceeds from a sale or other disposition of, our Class A common stock paid to a "non-financial foreign entity" (as specially defined under these rules) unless such entity provides the withholding agent with a certification identifying the substantial direct and indirect U.S. owners of the entity, certifies that it does not have any substantial U.S. owners, or otherwise establishes an exemption.

The withholding obligations under FATCA generally apply to dividends on our Class A common stock and to the payment of gross proceeds of a sale or other disposition of our Class A common stock. However, the U.S. Treasury Department has issued proposed regulations that, if finalized in their present form, would eliminate FATCA withholding on gross proceeds of the sale or other disposition of our Class A common stock (but not on payments of dividends). The preamble of such proposed regulations state that they may be relied upon by taxpayers until final regulations are issued or until such proposed regulations are rescinded. The withholding tax will apply regardless of whether the payment otherwise would be exempt from withholding tax, including under the exemptions described above. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. An intergovernmental agreement between the United States and the non-U.S. holder's country of residence may modify the requirements described in this section. Prospective investors should consult with their own tax advisors regarding the application of FATCA withholding to their investment in, and ownership and disposition of, our Class A common stock.

The preceding discussion of U.S. federal income tax considerations is for general information only. It is not tax advice to investors in their particular circumstances. Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax considerations of purchasing, owning and disposing of our Class A common stock, including the consequences of any proposed change in applicable laws.

UNDERWRITING

We are offering the shares of Class A common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC, BofA Securities, Inc. and Cowen and Company, LLC are acting as joint book-running managers of the offering and J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc. are acting as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of Class A common stock listed next to its name in the following table:

Name	Number of Shares
J.P. Morgan Securities LLC	
Morgan Stanley & Co. LLC	
BofA Securities, Inc.	
Cowen and Company, LLC	
Total	

The underwriters are committed to purchase all the Class A common stock offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common stock directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of $ per share. After the initial offering of the shares to the public, if all of the shares of Class A common stock are not sold at the initial public offering price, the underwriters may change the offering price and the other selling terms. Sales of any shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to additional shares of Class A common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of Class A common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriters do not expect to sell more than 5% of the shares of Class A common stock in the aggregate to accounts over which they exercise discretionary authority.

The underwriting fee is equal to the public offering price per share of Class A common stock less the amount paid by the underwriters to us per share of Class A common stock. The underwriting fee is $ per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without option to purchase additional shares exercise	With full option to purchase additional shares exercise
Per Share	$	$
Total	$	$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately $. We have also agreed to reimburse the underwriters for reasonable fees and expenses of

counsel related to the review by the Financial Industry Regulatory Authority of the terms of sale of the shares of Class A common stock offered hereby in an amount not to exceed $.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with, the Securities and Exchange Commission a registration statement under the Securities Act relating to, any shares of our Class A common stock or securities convertible into or exercisable or exchangeable for any shares of our Class A common stock, or publicly disclose the intention to make any offer, sale, pledge, loan, disposition or filing, or (ii) enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any shares of Class A common stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of Class A common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc. for a period of 180 days after the date of this prospectus, other than the shares of our Class A common stock to be sold in this offering.

Our directors and executive officers, and substantially all of our stockholders (such persons, the “lock-up parties”) have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each lock-up party, with limited exceptions, for a period of 180 days after the date of this prospectus (such period, the “restricted period”), may not (and may not cause any of their direct or indirect affiliates to), without the prior written consent of J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc., (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our Class A common stock or any securities convertible into or exercisable or exchangeable for our Class A common stock (including, without limitation, Class A common stock or such other securities which may be deemed to be beneficially owned by such lock-up parties in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant (collectively with the Class A common stock, the “lock-up securities”)), (2) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the lock-up securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of lock-up securities, in cash or otherwise, (3) make any demand for or exercise any right with respect to the registration of any lock-up securities, or (4) publicly disclose the intention to do any of the foregoing. Such persons or entities have further acknowledged that these undertakings preclude them from engaging in any hedging or other transactions or arrangements (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition or transfer (by any person or entity, whether or not a signatory to such agreement) of any economic consequences of ownership, in whole or in part, directly or indirectly, of any lock-up securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of lock-up securities, in cash or otherwise.

The restrictions described in the immediately preceding paragraph and contained in the lock-up agreements between the underwriters and the lock-up parties do not apply, subject in certain cases to various conditions, to certain transactions, including (a) transfers of lock-up securities: (i) as bona fide gifts, or for bona fide estate planning purposes, (ii) by will or intestacy, (iii) to any member of the lock-up party’s immediate family or any trust for the direct or indirect benefit of the lock-up party or the immediate family of the lock-up party, (iv) to a partnership, limited liability company or other entity of which the lock-up party and the immediate family of the lock-up party are the legal and beneficial owner of all of the outstanding equity securities or similar interests, (v) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (iv), (vi) in the case of a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate of

the lock-up party, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the lock-up party or its affiliates, or (B) as part of a disposition, transfer or distribution to members, limited partners or shareholders of the lock-up party, (vii) by operation of law, such as pursuant to a qualified domestic order, divorce settlement, divorce decree or separation agreement or similar court order, (viii) to us in connection with any contractual arrangement that provides for the repurchase of lock-up securities by us upon death, disability or termination of service, in each case, of such service provider, (ix) acquired from the underwriters in this offering or in open market transactions after the closing date of this offering, (x) to us in connection with the vesting, settlement, or exercise of restricted stock units, options, warrants or other rights to purchase shares of our Class A common stock (including "net" or "cashless" exercise), including for the payment of exercise price and tax and remittance payments, or (xi) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction approved by our board of directors and made to all stockholders involving a change of control, provided that if such transaction is not completed, all such lock-up securities would remain subject to the restrictions in the immediately preceding paragraph; (b) the exercise of the options, settlement of RSUs or other equity awards, or the exercise of warrants granted pursuant to plans or agreements described in this prospectus, provided that any lock-up securities received upon such exercise, vesting or settlement would be subject to restrictions similar to those in the immediately preceding paragraph; (c) the conversion of outstanding preferred stock, warrants to acquire preferred stock or convertible securities into shares of our Class A common stock or warrants to acquire shares of our Class A common stock; provided that any Class A common stock or warrant received upon such conversion shall be subject to restrictions similar to those in the immediately preceding paragraph; and (d) the establishment by lock-up parties of trading plans under Rule 10b5-1 under the Exchange Act for the transfer of shares of lock-up securities; provided that such plan does not provide for the transfer of lock-up securities during the restricted period.

J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc., in their sole discretion, may release the securities subject to any of the lock-up agreements with the underwriters described above, in whole or in part at any time.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

We will apply to have our Class A common stock approved for listing on the under the symbol "SEER."

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of Class A common stock in the open market for the purpose of preventing or retarding a decline in the market price of the Class A common stock while this offering is in progress. These stabilizing transactions may include making short sales of Class A common stock, which involves the sale by the underwriters of a greater number of shares of Class A common stock than they are required to purchase in this offering, and purchasing shares of Class A common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the Class A common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the Class A common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase Class A common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the Class A common stock or preventing or retarding a decline in the market price of the Class A common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on , in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our Class A common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded Class A common stock of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our Class A common stock, or that the Class A common stock will trade in the public market at or above the initial public offering price.

Other Relationships

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Selling Restrictions

General

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the

Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in the European Economic Area and United Kingdom

In relation to each Member State of the European Economic Area and the United Kingdom (Relevant States), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

a. to any legal entity which is a qualified investor as defined under the Prospectus Regulation;

b. to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the underwriters; or

c. in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and us that it is a "qualified investor" within the meaning of Article 2(e) of the Prospectus Regulation. In the case of any shares being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters have been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer to the public" in relation to shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling

within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons") or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in Australia

This prospectus:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth) (Corporations Act);
- has not been, and will not be, lodged with the Australian Securities and Investments Commission (ASIC), as a disclosure document for the purposes of the Corporations Act and does not purport to include the information required of a disclosure document for the purposes of the Corporations Act; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, available under section 708 of the Corporations Act (Exempt Investors).

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares under this document will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares you undertake to us that you will not, for a period of 12 months from the date of issue of the shares, offer, transfer, assign or otherwise alienate those shares to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any "resident" of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (the "SFO") of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong) (CO) or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

Notice to Prospective Investors in Singapore

Singapore SFA Product Classification — In connection with Section 309B of the SFA and the CMP Regulations 2018, unless otherwise specified before an offer of shares, we have determined, and hereby notify all relevant persons (as defined in Section 309A(1) of the SFA), that the shares are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Each underwriter has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each underwriter has represented and agreed that it has not offered or sold any shares or caused the shares to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or cause the shares to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, whether directly or indirectly, to any person in Singapore other than:

a. to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (SFA)) pursuant to Section 274 of the SFA;

b. to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA and in accordance with the conditions specified in Section 275 of the SFA; or

c. otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

a. a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

b. a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

c. to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 276(4)(i)(B) of the SFA;

d. where no consideration is or will be given for the transfer;

e. where the transfer is by operation of law;

f. as specified in Section 276(7) of the SFA; or

g. as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Notice to Prospective Investors in China

This prospectus will not be circulated or distributed in the PRC and the shares will not be offered or sold, and will not be offered or sold to any person for re-offering or resale directly or indirectly to any residents of the PRC except pursuant to any applicable laws and regulations of the PRC. Neither this prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with applicable laws and regulations.

Notice to Prospective Investors in Korea

The shares have not been and will not be registered under the Financial Investments Services and Capital Markets Act of Korea and the decrees and regulations thereunder (FSCMA), and the shares have been and will be offered in Korea as a private placement under the FSCMA. None of the shares may be offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law of Korea and the decrees and regulations thereunder (FETL). The shares have not been listed on any of securities exchanges in the world including, without limitation, the Korea Exchange in Korea. Furthermore, the purchaser of the shares shall comply with all applicable regulatory requirements (including but not limited to requirements under the FETL) in connection with the purchase of the shares. By the purchase of the shares, the relevant holder thereof will be deemed to represent and warrant that if it is in Korea or is a resident of Korea, it purchased the shares pursuant to the applicable laws and regulations of Korea.

Notice to Prospective Investors in Taiwan

The shares have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

Notice to Prospective Investors in Saudi Arabia

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Offers of Securities Regulations as issued by the board of the Saudi Arabian Capital Market Authority (CMA) pursuant to resolution number 2-11-2004 dated 4 October 2004 as amended by resolution number 1-28-2008, as amended (CMA Regulations). The CMA does not make any representation as to the accuracy or completeness of this document and expressly disclaims any liability whatsoever for any loss arising from, or

incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial adviser.

Notice to Prospective Investors in the Dubai International Financial Centre (DIFC)

This document relates to an Exempt Offer in accordance with the Markets Rules 2012 of the Dubai Financial Services Authority (DFSA). This document is intended for distribution only to persons of a type specified in the Markets Rules 2012 of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for this document. The securities to which this document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this document you should consult an authorized financial advisor.

In relation to its use in the DIFC, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the securities may not be offered or sold directly or indirectly to the public in the DIFC.

Notice to Prospective Investors in the United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the DIFC) other than in compliance with the laws of the United Arab Emirates (and the DIFC) governing the issue, offering and sale of securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the DIFC) and is not intended to be a public offer. This prospectus has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority or the DFSA.

Notice to Prospective Investors in Bermuda

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

Notice to Prospective Investors in the British Virgin Islands

The shares are not being, and may not be offered to the public or to any person in the British Virgin Islands for purchase or subscription by or on behalf of the Company. The shares may be offered to companies incorporated under the BVI Business Companies Act, 2004 (British Virgin Islands) (BVI Companies), but only where the offer will be made to, and received by, the relevant BVI Company entirely outside of the British Virgin Islands.

Notice to Prospective Investors in South Africa

Due to restrictions under the securities laws of South Africa, no “offer to the public” (as such term is defined in the South African Companies Act, No. 71 of 2008 (as amended or re-enacted) (South African Companies Act))is being made in connection with the issue of the shares in South Africa. Accordingly, this document does not, nor is it intended to, constitute a “registered prospectus” (as that term is defined in the South African Companies Act) prepared and registered under the South African Companies Act and has not been approved by, and/or filed with, the South African Companies and Intellectual Property Commission or any other regulatory authority in South Africa. The shares are not offered, and the offer shall not be transferred, sold, renounced or delivered, in South Africa or to

a person with an address in South Africa, unless one or other of the following exemptions stipulated in section 96 (1) applies:

Section 96 (1)(a)	the offer, transfer, sale, renunciation or delivery is to: (i) persons whose ordinary business, or part of whose ordinary business, is to deal in securities, as principal or agent; (ii) the South African Public Investment Corporation; (iii) persons or entities regulated by the Reserve Bank of South Africa; (iv) authorized financial service providers under South African law; (v) financial institutions recognized as such under South African law; (vi) a wholly-owned subsidiary of any person or entity contemplated in (c), (d) or (e), acting as agent in the capacity of an authorized portfolio manager for a pension fund, or as manager for a collective investment scheme (in each case duly registered as such under South African law); or (vii) any combination of the person in (i) to (vi); or
Section 96 (1)(b)	the total contemplated acquisition cost of the securities, for any single addressee acting as principal is equal to or greater than ZAR1,000,000 or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act.

Information made available in this prospectus should not be considered as "*advice*" as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

Notice to Prospective Investors in Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, (Israeli Securities Law), and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum (the "Addendum"), to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

LEGAL MATTERS

The validity of the issuance of our Class A common stock offered in this prospectus will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. Davis Polk & Wardwell LLP, Menlo Park, California, is representing the underwriters in connection with this offering. Wilson Sonsini Goodrich & Rosati, P.C. and certain of its members are associated with WS Investment Company, LLC (2017A) and WS Investment Company, LLC (2018A). Upon the completion of the offering, WS Investment Company (2017A) and WS Investment Company (2018A) will directly or indirectly own less than 0.1% of the outstanding shares of our common stock.

EXPERTS

The financial statements of Seer, Inc. as of December 31, 2018 and 2019, and for each of the two years in the period ended December 31, 2019, have been included in this Prospectus have been audited by Deloitte & Touche LLP, independent registered public accounting firm, as stated in their report appearing elsewhere herein. Such financial statements are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of Class A common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not include all of the information contained in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. You should refer to the registration statement and its exhibits for additional information. Whenever we make references in this prospectus to any of our contracts, agreements or other documents, such references are not necessarily complete and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

You can read our SEC filings, including the registration statement and its exhibits, over the Internet at the SEC's website at www.sec.gov.

When we complete this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file annual, quarterly and special reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available at the website of the SEC referred to above. We also maintain a website at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained on our website is not a part of this prospectus.

SEER, INC.

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Seer, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Seer, Inc. (the "Company") as of December 31, 2018 and 2019, the related statements of operations and comprehensive loss, changes in stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2019, 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, 2018 and 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019, 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 and in accordance with auditing standards generally accepted in the United States of America. 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

San Francisco, California
September 25, 2020

We have served as the Company's auditor since 2018.

SEER, INC.
Balance Sheets
(in thousands, except share and per share amounts)

	December 31,	
	2018	**2019**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 30,953	$ 17,485
Investments	—	68,535
Other receivables	69	326
Prepaid expenses and other current assets	190	460
Total current assets	31,212	86,806
Property and equipment, net	2,360	5,687
Restricted cash	—	343
Other assets	124	400
Total assets	$ 33,696	$ 93,236
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,625	$ 701
Accrued expenses	905	2,119
Accrued research and development	157	650
Deferred revenue	—	175
Deferred rent, current	4	170
Total current liabilities	3,691	3,815
Deferred rent, net of current portion	—	1,673
Other noncurrent liabilities	30	69
Total liabilities	3,721	5,557
Commitments (Note 10)		
Stockholders' equity:		
Convertible preferred stock, $0.00001 par value; 23,527,671 and 47,450,748 shares authorized, issued and outstanding as of December 31, 2018 and 2019, respectively; aggregate liquidation preference of $36,000 and $108,500 as of December 31, 2018 and 2019, respectively	35,812	107,953
Class A common stock, $0.00001 par value; 60,000,000 and 91,500,000 shares authorized as of December 31, 2018 and 2019, respectively; 6,118,051 and 6,094,516 shares issued and outstanding as of December 31, 2018 and 2019, respectively	—	—
Class B common stock, $0.00001 par value; 20,000,000 shares authorized as of both December 31, 2018 and 2019, respectively; 20,000,000 shares issued and outstanding as of both December 31, 2018 and 2019, respectively	—	—
Additional paid-in capital	711	2,288
Accumulated other comprehensive income	—	24
Accumulated deficit	(6,548)	(22,586)
Total stockholders' equity	29,975	87,679
Total liabilities and stockholders' equity	$ 33,696	$ 93,236

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

SEER, INC.
Statements of Operations and Comprehensive Loss
(in thousands, except share and per share amounts)

	Year Ended December 31,	
	2018	**2019**
Revenue:		
Research revenue	$ —	$ 58
Grant revenue	—	58
Total revenue	—	116
Operating expenses:		
Research and development	3,776	12,393
General and administrative	2,982	4,606
Total operating expenses	6,758	16,999
Loss from operations	(6,758)	(16,883)
Other income (expense):		
Interest income	451	850
Interest expense	—	(5)
Total other income	451	845
Net loss	$ (6,307)	$ (16,038)
Other comprehensive income:		
Unrealized gain on available-for-sale securities	—	24
Comprehensive loss	$ (6,307)	$ (16,014)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.74)	$ (1.08)
Weighted-average common shares outstanding, basic and diluted	8,502,926	14,878,157
Pro forma net loss per common share, basic and diluted (unaudited)		$ (0.35)
Pro forma weighted-average common shares used to compute basic and diluted net loss per common share (unaudited)		45,913,238

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

SEER, INC.
Statements of Changes in Stockholders' Equity
(in thousands, except share amounts)

	Convertible Preferred Stock		Class A and Class B Common Stock		Additional Paid in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total
	Shares	Amount	Shares	Amount				
Balance at December 31, 2017	6,607,201	$ 5,918	22,387,500	$ —	$ 38	$ (241)	$ —	$ 5,715
Issuance of Class A common stock from exercise of options	—	—	1,809,821	—	—	—	—	—
Issuance of restricted Class A common stock	—	—	1,920,730	—	—	—	—	—
Vesting of early exercised stock options and restricted common stock	—	—	—	—	1	—	—	1
Issuance of Series B convertible preferred stock, net of issuance costs of $106	16,920,470	29,894	—	—	—	—	—	29,894
Stock-based compensation	—	—	—	—	672	—	—	672
Net loss	—	—	—	—	—	(6,307)	—	(6,307)
Balance at December 31, 2018	23,527,671	35,812	26,118,051	—	711	(6,548)	—	29,975
Issuance of Class A common stock from exercise of options	—	—	286,465	—	—	—	—	—
Repurchase of Class A common stock	—	—	(310,000)	—	—	—	—	—
Vesting of early exercised stock options and restricted common stock	—	—	—	—	20	—	—	20
Issuance of Series C convertible preferred stock, net of issuance costs of $153	7,000,000	17,347	—	—	—	—	—	17,347
Issuance of Series D convertible preferred stock, net of issuance costs of $206	16,798,459	54,389	—	—	—	—	—	54,389
Issuance of Series D convertible preferred stock upon extinguishment of convertible notes	124,618	405	—	—	—	—	—	405
Stock-based compensation	—	—	—	—	1,557	—	—	1,557
Other comprehensive income	—	—	—	—	—	—	24	24
Net loss	—	—	—	—	—	(16,038)	—	(16,038)
Balance at December 31, 2019	47,450,748	$ 107,953	26,094,516	$ —	$ 2,288	$ (22,586)	$ 24	$ 87,679

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

SEER, INC.
Statements of Cash Flows
(in thousands)

	Year Ended December 31,	
	2018	**2019**
OPERATING ACTIVITIES		
Net loss	$ (6,307)	$ (16,038)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	672	1,557
Depreciation and amortization	31	701
Net accretion of discount on available-for-sale securities	—	(259)
Non-cash interest expense	—	5
Changes in operating assets and liabilities:		
Other receivables	(69)	(257)
Prepaid expenses and other current assets	(190)	(270)
Other assets	(124)	(276)
Accounts payable	323	218
Deferred revenue	—	175
Deferred rent	—	66
Accrued expenses	1,013	1,255
Other noncurrent liabilities	—	50
Net cash used in operating activities	(4,651)	(13,073)
INVESTING ACTIVITIES		
Purchases of property and equipment	(168)	(4,131)
Purchase of available-for-sale securities	—	(92,002)
Proceeds from maturities of available-for-sale securities	—	23,750
Net cash used in investing activities	(168)	(72,383)
FINANCING ACTIVITIES		
Proceeds from issuance of restricted stock	51	—
Repurchase of Class A common stock	—	(6)
Proceeds from exercise of Class A common stock options including early exercised options	—	6
Proceeds from issuance of Series B convertible preferred stock, net of issuance costs	29,894	—
Proceeds from issuance of Series C convertible preferred stock, net of issuance costs	—	17,347
Proceeds from issuance of Series D convertible preferred stock, net of issuance costs	—	54,584
Proceeds from issuance of convertible notes	—	400
Net cash provided by financing activities	29,945	72,331
Net increase (decrease) in cash, cash equivalents and restricted cash	25,126	(13,125)
Cash, cash equivalents and restricted cash, beginning of year	5,827	30,953
Cash, cash equivalents and restricted cash, end of year	$ 30,953	$ 17,828
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES		
Property and equipment purchases included in accounts payable	$ 2,223	$ 81
Property and equipment purchases included in accrued expenses	$ —	$ 266
Issuance of Series D convertible preferred stock upon extinguishment of convertible notes	$ —	$ 405
Convertible preferred stock issuance costs included in accrued expenses	$ —	$ 195
Tenant improvements paid by landlord	$ —	$ 1,787

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

1. ORGANIZATION AND DESCRIPTION OF THE BUSINESS

Seer, Inc. (the Company) was incorporated in Delaware on March 16, 2017, and is based in Redwood City, California. The Company is a life sciences company focused on capturing deep molecular insights from the proteome to enable novel insights and breakthroughs in the understanding of biology and disease. Since inception, the Company has devoted its efforts principally to research and development of its technology and product candidates, recruiting management and technical staff, acquiring operating assets, and raising capital.

The Company is subject to a number of risks, similar to other early-stage life science companies, including, but not limited to, raising additional capital, development and commercialization of its products, development by its competitors of new technological innovations, protection of its intellectual property, and market acceptance of its products.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern, which contemplates the realization of assets and liabilities and commitments in the normal course of business. In the course of its development activities, the Company has incurred significant losses since inception, including a net loss of approximately $6.3 million and $16.0 million for the years ended December 31, 2018 and 2019, respectively, and expects net losses to continue for the foreseeable future. As of December 31, 2018 and 2019, the Company's accumulated deficit was approximately $6.5 million and $22.6 million, respectively. To date, the Company has funded its operations primarily through issuances of convertible preferred stock. Management believes that currently available resources will provide sufficient funds to enable the Company to meet its obligations for at least one year past the issuance date of these financial statements. Future capital requirements will depend on many factors, including the timing and extent of spending on research and development and the market acceptance of the Company's products.

The Company's ability to fund its operations will require additional capital to be raised, which may be through a combination of public equity or private offerings, debt financings, collaborations, strategic alliances, licensing arrangements, and other marketing distribution arrangements. There can be no assurance that, in the event the Company requires additional financing, such financing will be available at terms acceptable to the Company, if at all. Failure to generate sufficient cash flows from operations, raise additional capital, and reduce discretionary spending should additional capital not become available could have a material adverse effect on the Company's ability to achieve its intended business objectives and on the Company's future financial results, financial position, and cash flows.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND BASIS OF PRESENTATION

Basis of Presentation

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). The Company has issued shares of Class A common stock herein referred to as "Class A common stock" or "Class A" and Class B common stock herein referred to as "Class B common stock" or "Class B," and collectively as "common stock."

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, the Company evaluates its estimates and assumptions, including, but not limited to, those related to the fair value of common stock, stock-based compensation, accrued research and development expenses, useful lives and valuation of property and equipment, income tax uncertainties, and tax valuation allowances.

Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from those estimates.

Unaudited Pro Forma Information

Pro forma basic and diluted net loss per common share has been computed to give effect to the conversion of all outstanding convertible preferred stock into shares of Class A common stock as if the conversion had occurred on the later of the beginning of the period or the issuance date of the convertible preferred stock. The unaudited pro forma net loss per common share does not include the shares expected to be sold in, and related proceeds to be received from, its initial public offering (IPO).

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash, cash equivalents, and available-for-sale securities. The Company maintains bank deposits in federally insured financial institutions, and these deposits may exceed federally insured limits. The Company is exposed to credit risk in the event of default by the financial institutions holding its cash and cash equivalents and issuers of investments to the extent recorded in the balance sheets.

The Company is subject to a number of risks similar to other early-stage life science companies, including, but not limited to, the need to obtain adequate additional funding, its reliance on third parties to obtain its clinical samples, competitors developing new technological innovations, the need to successfully commercialize and gain market acceptance of the Company's products, protection of its proprietary technology, and the need to secure and maintain adequate manufacturing arrangements with third parties. If the Company does not successfully commercialize or partner any of its products, it will be unable to generate product revenue or achieve profitability.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents. As of December 31, 2018 and 2019, all amounts recorded as cash and cash equivalents consist of money market funds and are stated at fair value.

Restricted cash as of December 31, 2019 represents cash held by a financial institution as security for a letter of credit issued to the lessor for one of the Company's operating leases and is classified as non-current based on the term of the underlying lease.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheets that sum to the total of the same amounts shown in the statements of cash flows (in thousands):

	December 31,	
	2018	2019
Cash and cash equivalents	$ 30,953	$ 17,485
Restricted cash	—	343
Total cash, cash equivalents and restricted cash	$ 30,953	$ 17,828

Segment Information

The Company operates as a single operating segment. The Company's chief operating decision maker, its Chief Executive Officer, manages the Company's operations on a consolidated basis for the purposes of allocating resources, making operating decisions and evaluating financial performance.

Investments

The Company has designated all investments, which includes U.S. Treasury securities, as available-for-sale, and therefore, such investments are reported at fair value, with unrealized gains and losses excluded from earnings and reported as a component of other comprehensive loss. The cost of available-for-sale securities is adjusted for the amortization of premiums and accretion of discounts to expected maturity. Such amortization and accretion are included in other income (expense) on the statements of operations and comprehensive loss. Realized gains and losses and interest income on available-for-sale securities are also included in other income (expense). The cost of

securities sold is based on the specific identification method. The Company includes all of its available-for-sale securities in current assets. The Company determines the appropriate classification of its investments in debt securities at the time of purchase and reevaluates such designation at each balance sheet date. Available-for-sale securities with original maturities beyond three months at the date of purchase are classified as current based on their availability for use in current operations.

All of the Company's investments are subject to a periodic impairment review. The Company recognizes an impairment charge when a decline in the fair value of its investments below the cost basis is judged to be other than temporary. Factors considered in determining whether a loss is temporary include the length of time and extent to which an investment's fair value has been less than its cost basis, the financial condition and near-term prospects of the investee, extent of the loss related to credit of the issuer, the expected cash flows from the security, the Company's intent to sell the security and whether or not the Company will be required to sell the security before the recovery of its amortized cost. During the years ended December 31, 2018 and 2019 the Company did not recognize any impairment charges on its investments.

Property and Equipment

Property and equipment are recorded at cost, net of accumulated depreciation and amortization. Depreciation is recorded using the straight-line method over the estimated useful lives of the assets, generally three to five years. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation and amortization are removed from the balance sheet and any resulting gain or loss is included as a part of income (loss) from operations within the statements of operations and comprehensive loss. Leasehold improvements are capitalized and amortized over the shorter of the lease term or the estimated useful life of the related asset. Major replacements and improvements are capitalized, while general repairs and maintenance are expensed as incurred. Construction-in-process assets consist primarily of tools and equipment that have not yet been placed in service. These assets are stated at cost and are not depreciated. Once the assets are placed into service, assets are reclassified to the appropriate asset class on their nature and depreciated in accordance with the useful lives above.

Impairment of Long-Lived Assets

The Company evaluates the carrying amount of its long-lived assets whenever events or changes in circumstances indicate that the assets may not be recoverable. If indicators of impairment exist and the undiscounted future net cash flows expected to be generated by such assets are less than the carrying amount of the asset, an impairment loss is recorded to write the asset down to its estimated fair value based on a discounted future cash flow approach or quoted market values. There have been no such impairment losses for the periods presented.

Leases

The Company may enter into lease agreements that are classified as either operating or capital leases. The Company enters into lease agreements for its administrative and laboratory facilities, which are classified as operating leases. When lease agreements include rent abatement and rent escalation clauses, the Company records a deferred rent liability. The Company records rent expense on a straight-line basis over the term of the lease from the date that it obtains the legal right to use and control the leased space and records the difference between cash rent payments and the recognition of rent expense as a deferred rent liability.

Lease agreements may also include tenant improvement allowances from landlords. The Company recognizes these allowances as a leasehold incentive obligation included in deferred rent on the balance sheets and amortizes it on a straight-line basis over the life of the lease. Building improvements made with lease incentives or tenant allowances are capitalized as leasehold improvements and included in property and equipment on the balance sheets.

Revenue Recognition

Research Revenue

The Company recognizes revenue when control of the services is transferred to its customers in an amount that reflects the consideration it expects to receive from its 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 price to the distinct performance obligations in the contract, and recognizing revenue when the performance obligations have been satisfied. 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 it 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 Company recognizes revenue for research and development services contracts when control is transferred, which is upon completion of the services and when results of the services have been transferred to the customer. Upfront payments and fees received are recorded as deferred revenue until the Company performs its obligations under its arrangements. Amounts payable to the Company are recorded as other receivables when its right to consideration is unconditional. The Company does not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the customer and the transfer of the promised goods or services to the customer will be one year or less.

Grant Revenue

Grant revenue represents funding under cost reimbursement programs from federal foundation sources for qualified research and development activities performed by the Company and are not based on estimates that are subject to change. Grants received are assessed to determine if the agreement should be accounted for as an exchange transaction or a contribution. An agreement is accounted for as a contribution if the resource provider does not receive commensurate value in return for the assets transferred. Such amounts are recorded as revenue as grant-funded activities are performed up to the amount of expenses incurred. Any advance funding payments are recorded as deferred revenue until the activities are performed.

Research and Development Expenses

Research and development costs, which includes cost associated with performing services under research and development service contracts and research and development of the Company's technology and product candidates, are expensed as incurred. Research and development expenses primarily consist of employee compensation, including stock-based compensation, and related benefits, laboratory supplies, consulting costs, costs related to clinical studies for the collection of biological samples for research use and allocated costs, including rent, depreciation, information technology, and utilities. Advance payments for goods or services for future research and development activities are deferred as prepaid expenses and expensed as the goods are delivered or the related services are performed. Subsequent to the issuance of the December 31, 2019 financial statements, the Company identified $0.3 million and $0.5 million of legal expenses incurred during the years ended December 31, 2018 and 2019, respectively, associated with patents were classified as research and development expenses rather than general and administrative expenses. These classifications have been corrected in the accompanying statements of operations and comprehensive loss and management has concluded that this correction is not material.

Accrued Research and Development Expenses

Goods or services for research and development activities that have not yet been invoiced are recorded as liabilities within accrued research and development on the balance sheets. The Company estimates clinical discovery studies expenses based on the services performed related to clinical studies for the collection of biological samples for research use. In accruing service fees, the Company estimates the period over which services will be performed and the level of effort to be expended in each period. These estimates are based on communications with the service provider and the Company's estimates of services performed based on information available at each balance sheet date determined through analysis with internal personnel and external service providers as to the progress or stage of completion of the associated services. Although the Company does not expect its estimates to be materially different from amounts actually incurred, the Company's estimate of the status and timing of services performed relative to the actual status and timing of services performed may vary. Through December 31, 2019, there have been no material differences from the Company's estimated accrued research and development expenses to actual expenses.

General and Administrative

General and administrative expenses include employee compensation, including stock-based compensation, and related benefits for executive management, finance administration and human resources, allocated costs, including rent, depreciation, information technology, utilities, professional service fees, and other general overhead costs to support the Company's operations.

Stock-Based Compensation

The Company accounts for stock-based compensation, including from restricted common stock awards (RSAs), grants of restricted stock units (RSUs), and stock options that may be settled in shares of our common stock, based on the fair values of the equity instruments issued. The fair value is determined on the measurement date, which is generally the date of grant. The fair value for our RSAs is their intrinsic value, which is the difference between the fair value of the underlying stock at the measurement date and the purchase price. The fair value of our RSUs is the fair value of the underlying stock at the measurement date. The fair value for our stock option awards is determined at the grant date using the Black-Scholes valuation model. The fair value of share-based payment awards is recognized as expense on a straight-line basis over the requisite service period in which the awards are expected to vest. Forfeitures are accounted for in the period in which they occur. Share-based payment awards that include a service condition and a performance condition are expected to vest when the performance condition is probable of being met.

The Black-Scholes model considers several variables and assumptions in estimating the fair value of stock-based awards that require judgment, for which changes if they occur can materially affect the resulting estimates of fair value. These assumptions include the per share fair value of the underlying common stock, exercise price, expected term, risk-free interest rate, expected annual dividend yield, and the expected stock price volatility over the expected term as follows:

Fair Value of Common Stock

The grant-date fair market value of the shares of common stock underlying stock options has historically been determined by the Company's Board of Directors with assistance of third-party valuation specialists. Because there has been no public market for the Company's common stock, the Board of Directors exercises reasonable judgment and considers a number of objective and subjective factors to determine the best estimate of the fair market value, which include important developments in the Company's operations, the prices at which the Company sold shares of its convertible preferred stock, the rights, preferences and privileges of the Company's convertible preferred stock relative to those of the Company's common stock, actual operating results, financial performance, external market conditions in the life sciences industry, general U.S. market conditions, equity market conditions of comparable public companies, and the lack of marketability of the Company's common stock.

Expected Volatility

As there is no trading history for the Company's common stock, the Company has used the historical volatility of the stock price of similar publicly traded peer companies. The historical volatility is calculated based on a period of time commensurate with the expected term assumptions.

Expected Term

For stock options granted to employees and directors, the expected term is calculated using the simplified method for "plain vanilla" stock option awards.

Risk-Free Interest Rate

The risk-free interest rate is based on the yield available on U.S. Treasury zero-coupon issues similar in duration to the expected term of the equity-settled award.

Expected Dividends

The expected dividend yield is assumed to be zero as the Company has never paid dividends and has no current plans to pay dividends on its common stock.

Stock-based compensation related to awards to non-employees is recognized based on the then-current fair value at each measurement date when earned over the requisite service period of the award, which is generally the vesting term. The fair value of non-employee stock options is estimated using the Black-Scholes valuation model with assumptions generally consistent with those used for employee stock options, with the exception of the expected term, which is the remaining contractual life at each measurement date.

Deferred Offering Costs

Deferred offering costs, consisting of legal, accounting and filing fees relating to the IPO, are capitalized. The deferred offering costs will be offset against offering proceeds upon the completion of the offering. In the event the offering is terminated or delayed, deferred offering costs will be expensed. As of December 31, 2018 and 2019, there were no capitalized deferred offering costs in the balance sheets.

Income Taxes

The Company accounts for income taxes using the asset and liability method. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse.

A valuation allowance is recorded for deferred tax assets if it is more likely than not that some portion or all of the deferred tax assets will not be realized. In evaluating the ability to recover its deferred income tax assets, the Company considers all available positive and negative evidence, including its operating results, ongoing tax planning, and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. In the event the Company determines that it would be able to realize its deferred income tax assets in the future in excess of their net recorded amount, it would make an adjustment to the valuation allowance that would reduce the provision for income taxes. Conversely, in the event that all or part of the net deferred tax assets are determined not to be realizable in the future, an adjustment to the valuation allowance would increase the provision for income taxes in the period when such determination is made.

The Company records uncertain tax positions in accordance with ASC 740 on the basis of a two-step process in which (1) we determine whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, we recognize the largest amount of tax benefit that is more likely than 50 percent likely to be realized. Interest and penalties related to unrecognized tax benefits are included within the provision for income tax. At both December 31, 2018 and 2019, there were no interest and penalties.

Net Loss Per Share Attributable to Common Stockholders

Net loss per share of common stock is computed using the two-class method required for multiple classes of common stock and participating securities based upon their respective rights to receive dividends as if all income for the period has been distributed. The rights, including the liquidation and dividend rights and sharing of losses, of the Class A and Class B common stock are identical, other than voting rights. As the liquidation and dividend rights and sharing of losses are identical, the undistributed earnings are allocated on a proportionate basis and the resulting net loss per share attributed to common stockholders is therefore the same for Class A and Class B common stock on an individual or combined basis.

The Company’s participating securities include the Company’s convertible preferred stock, as the holders are entitled to receive noncumulative dividends on a pari passu basis in the event that a dividend is paid on common stock. The Company also considers any shares issued on the early exercise of stock options subject to repurchase to

be participating securities because holders of such shares have non-forfeitable dividend rights in the event a dividend is paid on common stock. The holders of convertible preferred stock, as well as the holders of early exercised shares subject to repurchase, do not have a contractual obligation to share in losses.

Basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, adjusted for outstanding shares that are subject to repurchase.

Diluted net loss per share is computed by giving effect to all potentially dilutive securities outstanding for the period using the treasury stock method or the if-converted method based on the nature of such securities. For periods in which the Company reports net losses, diluted net loss per common share attributable to common stockholders is the same as basic net loss per common share attributable to common stockholders, because potentially dilutive common shares are not assumed to have been issued if their effect is anti-dilutive.

Commitments and Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, penalties, and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. Legal costs incurred in connection with loss contingencies are expensed as incurred.

Comprehensive Loss

Comprehensive loss is comprised of net loss and changes in accumulated other comprehensive income on the Company's available-for-sale investments related to unrealized gains and losses.

Fair Value Measurement

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability, or an exit price, in the principal or most advantageous market for that asset or liability in an orderly transaction between market participants on the measurement date. Fair value measurement establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs, where available, and minimize the use of unobservable inputs when measuring fair value.

The Company determined the fair value of financial assets and liabilities using the fair value hierarchy that describes three levels of inputs that may be used to measure fair value, as follows:

Level 1—Quoted prices in active markets for identical assets and 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; and

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 the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The carrying amount of the Company's other receivables, prepaid expenses, other current assets, accounts payable, and accrued expenses approximate fair value due to their short maturities.

Recently Adopted Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. This ASU simplifies several aspects of the accounting for share-based payment award transactions, including, the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Under ASU No. 2016-09, entities are permitted to make an accounting policy election to either estimate forfeiture on share-based payment awards, as previously required, or to recognize forfeitures as they occur. The Company made an accounting policy election to account for forfeitures as they occur. The Company adopted this standard as of January 1, 2018, using the modified retrospective approach, which did not have a material impact on its financial statements as of the adoption date.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, and further updated through ASU No. 2016-12. This standard is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This standard also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The Company adopted this standard as of January 1, 2019, using the modified retrospective approach, which did not have a material impact on its financial statements as of the adoption date.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, which requires restricted cash and restricted cash equivalents to be included with cash and cash equivalents in the statements of cash flows. The Company adopted this standard as of January 1, 2019, and has applied the standard on a retrospective basis to all periods presented, which did not have a material impact on its financial statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This ASU clarifies the definition of a lease and requires a lessee to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-to-use asset representing its right to use the underlying asset for the lease term. In November 2019, the FASB issued ASU No. 2019-10 which extends the effective date of ASU No. 2016-02 for non-public business entities, including smaller reporting companies, to fiscal years beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. While the Company has not yet quantified the impact, these adjustments will increase total assets and total liabilities relative to such amounts reported prior to adoption.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which requires that financial assets measured at amortized cost be presented at the net amount expected to be collected. The measurement of expected credit losses is based on historical experience, current conditions, and reasonable and supportable forecasts that affect collectability. This standard also eliminates the concept of “other-than-temporary” impairment when evaluating available-for-sale debt securities and instead focuses on determining whether any impairment is a result of a credit loss or other factors. An entity will recognize an allowance for credit losses on available-for-sale debt securities rather than an other-than-temporary impairment that reduces the cost basis of the investment. This standard is effective for fiscal years beginning after December 15, 2022, and interim periods within those fiscal years. Early adoption is permitted. The Company is currently assessing the impact of this standard on its financial statements and related disclosures.

On June 20, 2018, the FASB issued ASU No. 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Non-employee Share-Based Payment Accounting*, to reduce cost and complexity and to improve financial reporting for share-based payments issued to non-employees. The standard is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020, with early adoption permitted, but no earlier than the adoption of Topic 606. The Company is currently evaluating the impact this standard will have on the Company’s financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*, which amends Accounting Standards Codification 820, Fair Value Measurement. This standard modifies the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosures. The effective date is the first quarter of fiscal year 2020, with early adoption permitted for the removed disclosures and delayed adoption until fiscal year 2020 permitted for the new disclosures. The removed and modified disclosures will be adopted on a retrospective basis and the new disclosures will be adopted on a prospective basis. The Company is currently assessing the impact of this standard on its financial statements and related disclosures.

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which is intended to simplify the accounting for income taxes. The standard removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing standards to improve consistent application. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. Early adoption of the amendments is permitted, including adoption in any interim period for which financial statements have not yet been issued. An entity that elects to early adopt the amendments in an interim period should reflect any adjustments as of the beginning of the annual period that includes that interim period. Additionally, an entity that elects early adoption must adopt all the amendments in the same period. The Company is currently assessing the impact of this standard on its financial statements and related disclosures.

3. FAIR VALUE MEASUREMENTS AND FAIR VALUE OF FINANCIAL INSTRUMENTS

The following tables set forth the fair value of the Company's financial assets that were measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands).

		December 31, 2018			
		Level 1	Level 2	Level 3	Total
Assets:	Classification:				
Money market funds	Cash and cash equivalents	$ 30,953	$ —	$ —	$ 30,953
Total assets measured at fair value		$ 30,953	$ —	$ —	$ 30,953

		December 31, 2019			
		Level 1	Level 2	Level 3	Total
Assets:	Classification:				
Money market funds	Cash and cash equivalents	$ 17,485	$ —	$ —	$ 17,485
U.S. Treasury securities	Investments	—	68,535	—	68,535
Total assets measured at fair value		$ 17,485	$ 68,535	$ —	$ 86,020

There were no financial liabilities measured at fair value. The Company classifies money market funds within Level 1 of the fair value hierarchy because they are valued using bank balances or quoted market prices. The Company classifies its investments in U.S. Treasury securities as Level 2 instruments and obtains fair value from an independent pricing service, which may use quoted market prices for identical or comparable instruments or model-driven valuations using observable market data or inputs corroborated by observable market data.

There were no transfers between Levels 1, 2, or 3 for the periods presented.

The following is a summary of the Company's cash equivalents and investments and the gross unrealized holding gains and losses (in thousands):

	December 31, 2019			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Assets:				
Money market funds	$ 17,485	$ —	$ —	$ 17,485
U.S. Treasury securities	68,511	27	(3)	68,535
Total	$ 85,996	$ 27	$ (3)	$ 86,020

As of December 31, 2019, unrealized losses on available-for-sale investments are not attributable to credit risk and are considered to be temporary. The Company believes it is more likely than not that investments in an unrealized loss position will be held until maturity or the recovery of the cost basis of the investment. To date, the Company has not recorded any impairment charges on marketable securities related to other-than-temporary declines in market value. As of December 31, 2018 and 2019, the weighted-average remaining maturity of the Company's investment portfolio was less than one year.

4. OTHER FINANCIAL STATEMENT INFORMATION

Other Receivables

Other receivables consist of the following (in thousands):

	December 31,	
	2018	2019
Interest receivable	$ 57	$ 313
Grant receivable	—	13
Other	12	—
Total other receivables	$ 69	$ 326

Property and Equipment, Net

Property and equipment, net consists of the following (in thousands):

	December 31,	
	2018	2019
Laboratory equipment	$ 1,304	$ 3,788
Computer equipment and software	47	113
Furniture and fixtures	12	236
Leasehold improvements	—	2,295
Construction in process	1,028	—
Property and equipment	2,391	6,432
Less: accumulated depreciation and amortization	31	745
Total property and equipment, net	$ 2,360	$ 5,687

Depreciation and amortization expense related to property and equipment was less than $0.1 million and $0.7 million for the years ended December 31, 2018 and 2019, respectively.

Accrued Expenses

Accrued expenses consist of the following (in thousands):

	December 31,	
	2018	2019
Accrued compensation	$ 722	$ 1,336
Accrued professional services	64	349
Accrued property and equipment	—	266
Other	119	168
Total accrued expenses	$ 905	$ 2,119

5. REVENUE AND DEFERRED REVENUE

As of December 31, 2019, the Company recorded $0.2 million of deferred revenue related to the following agreements.

Research Agreement

In February 2019, the Company entered into a sponsored research agreement with a biotechnology company under which the Company is required to execute certain research and development activities as well as optional research and development activities if elected by the customer for total consideration payable of $0.4 million. During the year ended December 31, 2019, the Company recognized research revenue of $0.1 million with respect to the research agreement.

NIH Grant

In August 2019, the Company received a notice of award from the National Institutes of Health, which will provide funding of approximately $1.1 million to the Company for its development of research applications. In June 2020, the Company received a notice that additional grant consideration of $0.9 million will be awarded. During the year ended December 31, 2019, the Company recognized grant revenue of $0.1 million with respect to the award.

6. CONVERTIBLE NOTES

In May 2019, the Company issued an aggregate of $0.4 million in convertible promissory notes (Notes) that accrue interest at a rate of 2.37% per annum and mature 10 years from the date of issuance. Upon the closing of the Company's Series D convertible preferred stock offering in November 2019, the Notes were redeemed whereby all of the outstanding principal and accrued interest were converted into 124,618 shares of Series D convertible preferred stock at a conversion price of $3.25 per share, which was the issuance price of the Series D convertible preferred stock. The redemption of the Notes was accounted for as a debt extinguishment, and there was no gain or loss on extinguishment recorded.

7. CAPITAL STOCK AND STOCKHOLDERS' EQUITY

As of December 31, 2019, the Company is authorized to issue 158,950,748 shares of capital stock consisting of 91,500,000 shares of Class A common stock, 20,000,000 shares of Class B common stock, and 47,450,748 shares of convertible preferred stock.

Convertible Preferred Stock

Convertible preferred stock consists of the following:

	December 31, 2018				
	Issue Price	Shares Authorized	Shares Issued and Outstanding	Net Carrying Value	Aggregate Liquidation Preference
	(in thousands, except share and per share data)				
Series A	$ 0.9081	6,607,201	6,607,201	$ 5,918	$ 6,000
Series B	1.7730	16,920,470	16,920,470	29,894	30,000
Total		23,527,671	23,527,671	$ 35,812	$ 36,000

	December 31, 2019				
	Issue Price	Shares Authorized	Shares Issued and Outstanding	Net Carrying Value	Aggregate Liquidation Preference
	(in thousands, except share and per share data)				
Series A	$ 0.9081	6,607,201	6,607,201	$ 5,918	$ 6,000
Series B	1.7730	16,920,470	16,920,470	29,894	30,000
Series C	2.5000	7,000,000	7,000,000	17,347	17,500
Series D	3.2500	16,923,077	16,923,077	54,794	55,000
Total		47,450,748	47,450,748	$ 107,953	$ 108,500

[1] Issued in March and April 2019.

[2] In November and December 2019, the Company issued 16,798,459 shares of its Series D convertible preferred stock at a price per share of $3.25 for net proceeds of $54.4 million, with such amounts not including the redemption of the Notes (see Note 6).

The holders of convertible preferred stock have various rights and preferences, including the following:

Liquidation Rights

In the event of any liquidation event, either voluntary or involuntary, the holders of convertible preferred stock shall be entitled to receive, out of the assets of the Company, the applicable liquidation preference specified for each share of convertible preferred stock then held by them before any payment shall be made or any assets distributed to the holders of common stock. Liquidation preference is $0.9081 per share for Series A convertible preferred stock, $1.7730 per share for Series B convertible preferred stock, $2.50 per share of Series C convertible preferred stock, and $3.25 per share of Series D convertible preferred stock, each adjusted for any stock splits, combinations, and reorganizations, plus all declared and unpaid dividends on each such share.

If upon the liquidation event, the assets to be distributed among the holders of the convertible preferred stock are insufficient to permit the payment to such holders of the full liquidation preference for their shares, then the holders of shares of convertible preferred stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts, which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid the full preferential amount.

After the payment to the holders of convertible preferred stock of the full preferential amount specified above, any remaining assets of the Company shall be distributed pro rata among the holders of common stock.

A liquidation event requires approval by the holders of at least a majority of the outstanding shares of convertible preferred stock.

Optional Conversion Rights

Shares of any series of convertible preferred stock shall be convertible, at the option of the holder thereof and without payment, at any time after the date of issuance of such share into that number of fully-paid and nonassessable shares of Class A common stock that is equal to the original issue price for such series divided by the conversion price for such series, as adjusted for any stock splits, combinations, reorganizations and applicable dilutive issuances, in effect on the date of the conversion. In addition, the conversion price for each series of convertible preferred stock will be reduced upon certain issuances by the Company of common stock for consideration per share that is less than the conversion price applicable to such series. The Company's convertible preferred stock is convertible into the Company's shares of Class A common stock on a one-for-one basis.

Automatic Conversion Rights

Each share of convertible preferred stock shall automatically be converted into shares of Class A common stock at the then effective conversion price for such share immediately upon (i) the affirmative vote or written consent of the holders of at least a majority of the outstanding shares of convertible preferred stock, voting together as a single class, or (ii) the closing of a firmly underwritten initial public offering with gross proceeds to the Company of at least $50,000,000.

Dividend Rights

The holders of shares of Series A convertible preferred stock, Series B convertible preferred stock, Series C convertible preferred stock, and Series D convertible preferred stock shall be entitled to receive dividends of $0.0545, $0.1064, $0.15, and $0.195, respectively, per annum on each outstanding share of Series A convertible preferred stock, Series B convertible preferred stock, Series C convertible preferred stock, and Series D convertible preferred stock, payable in cash at the election of the Board of Directors, out of any assets at the time legally available therefor, when, as and if declared by the Board of Directors, on an equal basis according to the number of shares of convertible preferred stock held by such holders, prior and in preference to the common stock and shall be noncumulative.

Voting Rights

Each holder of convertible preferred stock shall be entitled to the number of votes equal to the number of shares of common stock into which such shares of convertible preferred stock held by such holder could then be converted as of the record date.

The holders of convertible preferred stock, voting as a single class, have the right to elect one director to the Company's Board of Directors. The holders of common stock, as a separate class, have the right to elect three directors to the Board of Directors. The holders of convertible preferred stock and common stock, voting as a single class, have the right to elect one director to the Company's Board of Directors. Any remaining directors, of which there were two as of December 31, 2019, are elected by the holders of common stock and of any other class or series of voting stock, including convertible preferred stock, as a single class.

Redemption Rights

There are no redemption rights afforded to the holders of convertible preferred stock. Upon certain change in control events, including liquidation, sale, or transfer of control of the Company, the convertible preferred stock is contingently redeemable.

Common Stock

Common stock issued and outstanding is as follows:

	December 31,	
	2018	2019
Class A common stock	6,118,051	6,094,516
Class B common stock	20,000,000	20,000,000
Total common stock issued and outstanding	26,118,051	26,094,516

Class A and Class B common stock have a par value of $0.00001 per share. Holders of Class A common stock are entitled to one vote per share and holders of Class B common stock are entitled to 10 votes per share. Class B common shares are convertible to Class A common shares at any time at the option of the holder on a one-for-one basis. Holders of common stock are entitled to dividends as declared by the Board of Directors, subject to rights of holders of all classes of stock outstanding having priority rights as to dividends. There have been no dividends declared to date.

8. EQUITY INCENTIVE PLAN

In 2017, the Company adopted the 2017 Stock Incentive Plan (Plan), which provided for the granting of awards to employees, directors, and consultants of the Company. Awards issuable under the Plan include incentive stock options (ISO), nonqualified stock options (NSO), and restricted stock awards.

Stock options to purchase the Company's Class A common stock may be granted at a price not less than the fair market value of the Company's Class A common stock at the date of grant in the case of both NSOs and ISOs, except for grants of stock options to an employee or non-employee with options who owns more than 10% of the voting power of all classes of stock of the Company, in which case the exercise price shall be no less than 110% of the fair market value per Class A common stock on the grant date. The exercise price for ISO cannot be less than the fair market value of the Class A common stock on the grant date. Stock options granted under the Plan generally vest over four years and expire no later than 10 years from the date of grant. As of December 31, 2019, the Company has reserved 19,442,199 shares of Class A common stock for issuance under the Plan.

Stock option activity under the Plan is as follows:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Term (Years)	Aggregate Intrinsic Value (in thousands)
Balance - December 31, 2017	263,915	$ 0.00001		
Options granted	4,850,473	0.02		
Options exercised	(1,809,821)	0.02		
Options cancelled and forfeited	(146,540)	0.00001		
Balance - December 31, 2018	3,158,027	$ 0.02	9.46	$ 3,005
Options granted	1,786,827	0.99		
Options exercised	(286,465)	0.02		
Options cancelled and forfeited	(1,458)	0.02		
Balance - December 31, 2019	4,656,931	$ 0.39	8.86	$ 4,051
Vested and exercisable, December 31, 2019	1,448,931	$ 0.15	8.55	$ 1,600

The weighted-average grant-date fair value of stock options granted to employees during the years ended December 31, 2018 and 2019, was $0.77 and $0.75 per share, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2018 and 2019, was nil and $0.2 million, respectively.

Determination of Fair Value

The fair value of stock options granted to employees and directors is calculated using the Black-Scholes option pricing model using the following assumptions:

	Year Ended December 31,	
	2018	2019
Risk-free interest rate	2.8% - 3.1%	1.8% - 2.6%
Expected volatility	77.6% - 77.9%	74.7% - 77.5%
Expected term (in years)	6.08	5.28 - 6.08
Expected dividend yield	—	—

The fair value of the stock options granted to non-employees is calculated at each reporting date using the Black-Scholes option pricing model using the following assumptions:

	Year Ended December 31,	
	2018	2019
Risk-free interest rate	2.7%	1.8% - 1.9%
Expected volatility	77.5%	77.7%
Expected term (in years)	8.73 – 9.88	7.73 – 9.49
Expected dividend yield	—	—

Restricted Stock

Certain stock options granted under the Plan provide stock option holders the right to exercise unvested stock options in exchange for restricted shares of Class A common stock. The Company has also issued restricted shares of Class A common stock to employees and directors under the Plan. The restricted shares of Class A common stock related to early exercised stock options and restricted shares of Class A common stock awards are subject to repurchase by the Company at the original purchase price in the event that the optionee's employment is terminated prior to the shares vesting. The consideration received for early exercised stock options and for shares sold pursuant to restricted stock purchase agreements is recorded as a liability on the balance sheets and reclassified to stockholders' equity as the shares vest.

The activity of restricted shares of Class A common stock under the Plan is as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2017	2,119,792	$ —
Granted	3,619,147	0.51
Vested	(612,899)	0.04
Unvested at December 31, 2018	5,126,040	0.35
Granted	279,695	0.78
Repurchased	(310,000)	0.77
Vested	(1,886,347)	0.35
Unvested at December 31, 2019	3,209,388	0.35

The fair value of the restricted shares of Class A common stock that vested during the years ended December 31, 2018 and 2019, was $0.2 million and $0.3 million, respectively.

Stock-Based Compensation

Total stock-based compensation is as follows (in thousands):

	Year Ended December 31,	
	2018	2019
Stock options granted to employees and directors	$ 236	$ 523
Stock options granted to non-employees	194	534
Restricted shares of Class A common stock	242	500
Total stock-based compensation	$ 672	$ 1,557

The following table summarizes the components of stock-based compensation recognized in the Company's statements of operations and comprehensive loss (in thousands):

	Year Ended December 31,	
	2018	2019
Research and development	$ 287	$ 766
General and administrative	385	791
Total stock-based compensation	$ 672	$ 1,557

As of December 31, 2019, the total unrecognized stock-based compensation related to unvested stock options and restricted stock awards was $3.8 million, which the Company expects to recognize over a remaining weighted-average period of 2.71 years.

The Company granted 127,500 shares of performance-based stock options in February 2018 through June 2019, of which 7,500 shares have vested or been determined to be probable to vest as of December 31, 2019. There is $0.1 million in unrecognized stock-based compensation associated with options not determined to be probable of vesting as of December 31, 2019.

9. EMPLOYEE BENEFIT PLANS

The Company sponsors a qualified 401(k) defined contribution plan covering eligible employees. Participants may contribute a portion of their annual compensation limited to a maximum annual amount set by the Internal Revenue Service. There were no employer contributions under this plan for fiscal 2018 and 2019.

10. COMMITMENTS

Facility Lease Agreement

On March 1, 2018, the Company entered into an 18-month sublease agreement for its facility in South San Francisco, California. In March 2019, the Company extended the lease term until December 31, 2019.

On January 4, 2019, the Company entered into a new lease agreement for office and laboratory space in Redwood City, California. The lease term commenced in November 2019 and ends on September 30, 2029. As of December 31, 2019, the Company has moved into this facility and no longer occupies the facility in South San Francisco. In connection with the lease, the Company maintains a letter of credit issued to the lessor in the amount of $0.3 million, which is secured by restricted cash that is classified as non-current based on the term of the underlying lease.

Rent expense was $0.4 million and $0.6 million for the years ended December 31, 2018 and 2019, respectively. The Company is required to pay property taxes, insurance, and normal maintenance costs for the facility and will be required to pay any increases over the base year of these expenses.

As of December 31, 2019, future minimum commitments under the Company's non-cancelable facility operating lease are as follows:

Years ending December 31:	(in thousands)
2020	$ 453
2021	795
2022	814
2023	835
2024	856
Thereafter	5,035
Total	$ 8,788

Guarantees and Indemnifications

In the normal course of business, the Company enters into agreements that contain a variety of representations and provide for general indemnification. The Company's exposure under these agreements is unknown because it involves claims that may be made against the Company in the future. The Company has entered into indemnification agreements with certain directors and officers that require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of the status or service as directors or officers. To date, the Company has not paid any claims or been required to defend any action related to its indemnification obligations. As of December 31, 2018 and 2019, the Company does not have any material indemnification claims that were probable or reasonably possible and consequently has not recorded related liabilities.

Contingencies

From time to time, the Company may become involved in legal proceedings arising in the ordinary course of business. The Company is not currently a party to any material legal proceedings.

11. NET LOSS PER SHARE ATTRIBUTABLE TO COMMON STOCKHOLDERS

The following table shows the computation of basic and diluted net loss per share (in thousands, except share and per share data):

	Year Ended December 31,	
	2018	2019
Numerator:		
Net loss attributable to common stockholders	$ (6,307)	$ (16,038)
Denominator:		
Weighted-average common shares used in computing net loss per share attributable to common stockholders, basic and diluted	8,502,926	14,878,157
Net loss per share attributable to common stockholders, basic and diluted	$ (0.74)	$ (1.08)

The following outstanding shares of potentially dilutive securities were excluded from the computation of diluted net loss per share attributable to common stockholders for the periods presented, because including them would have been anti-dilutive (on an as-converted basis):

	December 31,	
	2018	2019
Convertible preferred stock	23,527,671	47,450,748
Class A common stock options issued and outstanding	3,158,027	4,656,931
Restricted common stock subject to future vesting	14,499,738	7,602,182
Total	41,185,436	59,709,861

Unaudited Pro Forma Net Loss per Share

Unaudited pro forma basic and diluted loss per share is computed as follows (in thousands, except share and per share data):

	Year Ended December 31, 2019
Numerator:	
Pro forma net loss attributable to common stockholders	$ (16,038)
Denominator:	
Weighted-average common shares used in computing net loss per share attributable to common stockholders, basic and diluted	14,878,157
Adjustment to reflect the assumed conversion of convertible preferred stock	31,035,081
Pro forma weighted-average common shares used to compute net loss per share, basic and diluted	45,913,238
Pro forma net loss per share attributable to common stockholders, basic and diluted	$ (0.35)

12. INCOME TAXES

Income tax expense differs from the amount computed by applying the statutory federal income tax rate due to the following:

	Year Ended December 31,	
	2018	2019
Federal tax benefits at statutory rate	$ (1,169)	$ (3,347)
State taxes, net of federal benefit	5	(1,264)
Change in valuation allowance	1,363	4,760
Permanent differences	29	204
Research and development credits	(243)	(246)
Other	15	(107)
Total income tax expense	$ —	$ —

Deferred income tax reflects the tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The categories that give rise to components of the deferred tax assets are as follows:

	December 31,	
	2018	2019
Deferred tax assets:		
Net operating loss carryforwards	$ 1,046	$ 4,991
Fixed assets and intangibles	36	—
Accrued expenses and reserves	108	788
Research and development credits	243	470
Stock-based compensation	1	442
Other	1	13
Gross deferred tax assets	1,435	6,704
Less valuation allowance	(1,435)	(6,195)
Net deferred tax assets	$ —	$ 509
Deferred tax liabilities:		
Fixed assets and intangibles	—	(509)
Gross deferred tax liabilities	—	(509)
Total net deferred tax assets (liabilities)	$ —	$ —

The tax benefit of net operating losses, temporary differences, and credit carryforwards are recorded as an asset to the extent that management assesses that realization is “more likely than not.” Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of existing deferred. A significant piece of objective negative evidence evaluated was the cumulative loss incurred since our incorporation in 2017. Such objective evidence limits the ability to consider other subjective evidence, such as our projections for future growth. On the basis of this evaluation, as of December 31, 2018 and 2019, a full valuation allowance has been recorded against our net deferred tax assets. The amount of the net deferred tax assets considered realizable, could be adjusted as estimates of future taxable income during the carryforward period are reduced or increased or if objective negative evidence in the form of cumulative losses is no longer present and additional weight is given to subjective evidence such as our projections for growth. As of December 31, 2018 and 2019, the Company had net deferred tax assets of $1.4 million and $6.2 million, respectively. For the years ended December 31, 2018 and 2019, the net changes in the net valuation allowance were an increase of $1.4 million and an increase of $4.8 million, respectively.

As of December 31, 2018 and 2019, the Company had federal net operating loss carryforwards of approximately $5.0 million and $18.4 million, respectively, which do not expire. At December 31, 2018 and 2019, the Company had state net operating loss carryforwards of approximately $0.3 million and $16.7 million, respectively, which will begin to expire in 2031 for state tax purposes.

As of December 31, 2018 and 2019, the Company had federal research and development credit carryforwards of approximately $0.2 million and $0.4 million, respectively, which begin to expire in 2037 and state research and development credit carryforwards of approximately $0.2 million and $0.5 million, respectively, which will carry forward indefinitely.

Utilization of the Company’s federal and state net operating loss and tax credit carryforwards may be subject to an annual limitation in the event that there is a change in ownership as provided by Section 382 of the Internal Revenue Code and similar state codes. Such limitation could result in a deferral or expiration of the utilization of the net operating loss and tax credit carryforwards. The Company has not performed a Section 382 analysis of its prior ownership changes to date.

As of December 31, 2018 and 2019, the Company had unrecognized tax benefits of approximately $0.1 million and $0.3 million, respectively. The amount of unrecognized tax benefits is not expected to significantly change over

the next 12 months. No amounts would impact the effective tax rate on continuing operations as any change would offset with a corresponding adjustment to the valuation allowance. The beginning and ending unrecognized tax benefits amounts is as follows (in thousands):

	December 31,	
	2018	2019
Beginning balance	$ —	89
Change related to prior year provisions	—	(59)
Change related to current year provisions	89	234
Ending balance	$ 89	$ 264

It is the Company's policy to include any assessed penalties and interest expense related to income taxes as a component of other expense and interest expense, respectively, as necessary. Management determined that no accrual for interest and penalties was required as of December 31, 2019.

All tax returns will remain open for examination by the federal and state taxing authorities for three and four years, respectively, from the date of utilization of any net operating loss carryforwards or research and development credits.

13. SUBSEQUENT EVENTS

The Company evaluated events subsequent from December 31, 2019 through September 25, 2020, the date at which the financial statements were available to be issued.

In March 2020, the Company entered into a sponsored research agreement with a pharmaceutical company under which the Company is required to execute certain research and development activities for total consideration of $0.5 million.

In May 2020, the Company issued 14,666,662 shares of its Series D-1 convertible preferred stock at a price per share of $3.75 for gross proceeds of $55.0 million.

COVID-19 Pandemic

In December 2019, an outbreak of a novel strain of coronavirus (COVID-19) originated in Wuhan, China, and has since spread globally. On March 11, 2020, the World Health Organization characterized COVID-19 as a pandemic and, on March 13, 2020, the United States declared a national emergency with respect to COVID-19.

As a result of COVID-19, the Company's operations experienced disruptions and restrictions on employees' ability to work, particularly as a result of preventive and precautionary measures taken by the Company and some of its suppliers and other service providers. In particular, some of the Company's laboratory material and equipment suppliers, collaborators, and service providers used in the performance of its research activities are located in the areas impacted by COVID-19, which may limit the Company's ability to achieve planned progress. COVID-19 has adversely affected the broader economy and financial markets, resulting in an economic downturn that could affect the Company's financing prospects. Continued disruptions from COVID-19 could harm the Company's operations and the Company cannot anticipate all the ways in which it could be adversely impacted by health epidemics such as COVID-19.

As of the date of the issuance of these financial statements, the COVID-19 pandemic has mainly impacted the progress of research and development activities due to the limited ability of the Company's employees to access laboratories during times of statewide quarantine and on some of its suppliers who have experienced a surge in demand for their products resulting in supply delays for critical hardware, instrumentation and medical and testing supplies used for product development. In addition, the Company temporarily suspended its recruiting and hiring activities during the second quarter of 2020 as a result of the COVID-19 pandemic. The Company continues to monitor and assess the effects of the COVID-19 pandemic on its business, financial condition, results of operations and cash flows.

Lease Amendment

In June 2020, the Company entered into an amendment to the lease agreement with respect to its facility in Redwood City, California. The amendment makes certain changes to the original lease, including (i) the addition of approximately 13,638 square feet of office and laboratory space in the same building (Expansion Premises) and (ii) an extension of the expiration date of the original lease to 127.5 months following the delivery date of the expansion premises, which is estimated to be July 1, 2021.

The amendment provides for annual base rent for the Expansion Premises of approximately $0.9 million in the first year of the lease term (subject to an abatement period of nine months), which increases on an annual basis to approximately $1.2 million in the final year of the lease term. The amendment also provides for tenant incentives in the amount of $2.4 million. The Company is required to pay property taxes, insurance, and normal maintenance costs for the Expansion Premises, on the same terms as the existing facility. Under the amendment, the Company retains its original option to renew the lease for an additional five-year term, at then-current market rates.

During the period from the lease amendment commencement until the earlier of one month after occupancy of the Expansion Premises or September 2021, the Company will be provided with approximately 12,700 square feet of temporary space located in an adjacent building. The Company is not required to pay additional rent for the temporary space, but is required to pay property taxes, insurance and normal maintenance costs with respect to the temporary space.

PrognomIQ Transaction

In August 2020, the Company transferred certain assets related to disease testing to PrognomIQ, Inc. (PrognomIQ), a new wholly-owned subsidiary, in exchange for all of its outstanding equity interests. Following the transfer, the Company completed a pro-rata distribution to its stockholders of most of the shares of capital stock of PrognomIQ. Following the distribution and a subsequent $55.0 million equity financing of PrognomIQ, the Company holds approximately 19% of the outstanding capital stock in PrognomIQ. The PrognomIQ transaction will be accounted for as a common control transaction and will, therefore, be recorded using carryover basis. The Company does not expect it to have a material impact to the financial statements.

Omid Farokhzad, Chief Executive Officer, serves as the Chair of PrognomIQ’s board of directors. Philip Ma has served as the Company’s Chief Business Officer and at the conclusion of his consulting agreement with PrognomIQ will serve as the Chief Executive Officer of PrognomIQ.

Furthermore, pursuant to the anti-dilution provisions included in the Company's stock incentive plan, certain adjustments were made to the number and exercise price of the outstanding stock-based compensation awards granted to the Company’s employees and directors to maintain the aggregate intrinsic value of the awards at the date of the spin-off. Except for these adjustments, the material terms of the awards remained unchanged, and the awards will continue to vest over their original vesting period. The Company is still evaluating the accounting for these adjustments and its impact on our results of operations and financial position.

Shares

Seer, Inc.

Class A Common Stock

PRELIMINARY PROSPECTUS

J.P. Morgan **Morgan Stanley** **BofA Securities** **Cowen**

, 2020

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the expenses to be incurred in connection with the offering described in this Registration Statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimates except the Securities and Exchange Commission's registration fee, the filing fee of the Financial Industry Regulatory Authority, Inc., or FINRA, and the listing fee.

	AMOUNT PAID OR TO BE PAID
SEC Registration Fee	$ *
FINRA filing fee	*
Stock market listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous expenses	*
Total	$ *

* To be completed by amendment.

Item 14. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law, or DGCL, empowers a corporation to indemnify its directors and officers and to purchase insurance with respect to liability arising out of their capacity or status as directors and officers, provided that the person acted in good faith and in a manner the person reasonably believed to be in our best interests, and, with respect to any criminal action, had no reasonable cause to believe the person's actions were unlawful. The DGCL further provides that the indemnification permitted thereunder shall not be deemed exclusive of any other rights to which the directors and officers may be entitled under the corporation's bylaws, any agreement, a vote of stockholders or otherwise. The certificate of incorporation of the registrant to be in effect upon the completion of this offering provides for the indemnification of the registrant's directors and officers to the fullest extent permitted under the DGCL. In addition, the bylaws of the registrant to be in effect upon the completion of this offering require the registrant to fully indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person is or was a director or officer of the registrant, or is or was a director or officer of the registrant serving at the registrant's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, to the fullest extent permitted by applicable law.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for payments of unlawful dividends or unlawful stock repurchases or redemptions or (4) for any transaction from which the director derived an improper personal benefit. The registrant's certificate of incorporation to be in effect upon the completion of this offering provides that the registrant's directors shall not be personally liable to it or its stockholders for monetary damages for breach of fiduciary duty as a director and that if the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors,

then the liability of the registrant's directors shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Section 174 of the DGCL provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption may be held liable for such actions. A director who was either absent when the unlawful actions were approved, or dissented at the time, may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

As permitted by the DGCL, the registrant intends to enter into separate indemnification agreements with each of the registrant's directors and certain of the registrant's officers which would require the registrant, among other things, to indemnify them against certain liabilities which may arise by reason of their status as directors, officers or certain other employees.

The registrant expects to obtain and maintain insurance policies under which its directors and officers are insured, within the limits and subject to the limitations of those policies, against certain expenses in connection with the defense of, and certain liabilities which might be imposed as a result of, actions, suits or proceedings to which they are parties by reason of being or having been directors or officers. The coverage provided by these policies may apply whether or not the registrant would have the power to indemnify such person against such liability under the provisions of the DGCL.

These indemnification provisions and the indemnification agreements intended to be entered into between the registrant and the registrant's officers and directors may be sufficiently broad to permit indemnification of the registrant's officers and directors for liabilities (including reimbursement of expenses incurred) arising under the Securities Act.

The underwriting agreement between the registrant and the underwriters to be filed as Exhibit 1.1 to this registration statement provides for the indemnification by the underwriters of the registrant's directors and officers and certain controlling persons against specified liabilities, including liabilities under the Securities Act with respect to information provided by the underwriters specifically for inclusion in the registration statement.

Item 15. Recent Sales of Unregistered Securities

Since January 1, 2017, we have issued the following unregistered securities:

Issuances of Convertible Preferred Stock

- On December 20, 2017, we sold 6,607,201 shares of Series A convertible preferred stock to eleven accredited investors at a price of $0.9081 per share, for aggregate proceeds of approximately $6,000,000.
- On March 23, 2018, we sold 16,920,470 shares of Series B convertible preferred stock to eleven accredited investors at a price of $1.773 per share, for aggregate proceeds of approximately $30,000,000.
- On March 7, 2019 and April 12, 2019, we sold 4,000,000 and 3,000,000 shares of Series C convertible preferred stock, respectively, to eight accredited investors at a price of $2.50 per share, for total aggregate proceeds of approximately $17,500,000.
- On May 7, 2019, we issued convertible promissory notes in the aggregate principal amount of $400,000 to two accredited investors.
- On November 15, 2019 and December 13, 2019, we sold 15,238,082 and 1,684,995 shares of Series D convertible preferred stock, respectively, to 18 accredited investors at a price of $3.25 per share, for total aggregate proceeds of approximately $55,000,000, which consideration included $400,000 in cancellation of indebtedness.

- On May 12, 2020, we sold 14,666,662 shares of Series D-1 convertible preferred stock to 21 accredited investors at a price of $3.75 per share, for aggregate proceeds of approximately $55,000,000.

Option, RSU and Common Stock Issuances

Since January 1, 2017, we have issued the following unregistered securities:

- From September 20, 2017 to July 28, 2020, we granted to our directors, officers, employees, consultants and other service providers options to purchase an aggregate of 20,146,704 shares of our Class A common stock under our equity compensation plans, at exercise prices ranging from approximately $0.01 to $1.62 per share.

- From September 20, 2017 to July 28, 2020, we issued and sold to our officers, directors, employees (including awards assumed through acquisitions), consultants and other service providers an aggregate of 2,844,160 shares of our Class A common stock upon the exercise of options under our equity compensation plans at exercise prices ranging from $0.01 to $1.62 per share, for a weighted-average exercise price of $0.22 per share.

- From April 1, 2020 to July 28, 2020, we granted to our directors, officers, employees, consultants and other service providers an aggregate of 717,232 RSUs to be settled in shares of our Class A common stock under our equity compensation plans.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. Except as set forth below, we believe the offers, sales and issuances of the above securities were exempt from registration under the Securities Act (or Regulation D or Regulation S promulgated thereunder) by virtue of Section 4(a)(2) of the Securities Act because the issuance of securities to the recipients did not involve a public offering, or in reliance on Rule 701 because the transactions were pursuant to compensatory benefit plans or contracts relating to compensation as provided under such rule. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 16. Exhibit and Financial Statement Schedules

(a) ***Exhibits.***

See the Exhibit Index immediately preceding the signature page hereto for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) ***Financial Statement Schedules.***

Schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is

asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

EXHIBIT INDEX

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect.
3.2*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect upon completion of this offering.
3.3	Amended and Restated Bylaws of the Registrant, as amended, as currently in effect.
3.4*	Form of Amended and Restated Bylaws of the Registrant, to be in effect upon completion of this offering.
4.1*	Form of common stock certificate of the Registrant.
4.2	Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain holders of its capital stock, dated as of May 12, 2020.
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati, P.C.
10.1+*	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.
10.2+*	2020 Equity Incentive Plan and related form agreements.
10.3+	2017 Equity Incentive Plan and related form agreements.
10.4+	2020 RSU Equity Incentive Plan and related form agreements.
10.5+*	Outside Director Compensation Policy.
10.6#	Umbrella Development & Supply Agreement between the Registrant and Hamilton Company, dated March 9, 2020.
10.7*	Exclusive Patent License Agreement between the Registrant and The Brigham and Women's Hospital, Inc., dated December 18, 2017.
23.1*	Consent of Deloitte & Touche LLP, independent registered public accounting firm.
23.2*	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1*	Power of Attorney (included on page II-6).

* To be filed by amendment. All other exhibits are submitted herewith.
\+ Indicates management contract or compensatory plan.
\# Confidential treatment has been requested for portions of this exhibit. These portions have been omitted and have been filed separately with the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Redwood City, State of California, on September , 2020.

SEER, INC.

By: _____

Omid Farokhzad, M.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Omid Farokhzad, M.D. and David Horn as his true and lawful attorneys-in-fact and agents, with full power of substitution and substitution, for him or her and in his or her name, place and stead, in any and all capacities (including his or her capacity as a director and/or officer of Seer, Inc.) to sign any or all amendments (including post-effective amendments) to this registration statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agents or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
Omid Farokhzad, M.D.	Chief Executive Officer and Chair of the Board of Directors (*Principal Executive Officer*)	
David R. Horn	Chief Financial Officer (*Principal Financial Officer and Accounting Officer*)	
David Hallal	Lead Independent Director	
Catherine Friedman	Director	
Robert Langer, Sc.D.	Director	
Terrance McGuire	Director	
Omead Ostadan	Director	
David Singer	Director	

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
SEER, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Seer, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "**General Corporation Law**"),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Seer, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on March 16, 2017 under the name Seer Biosciences, Inc.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation, as previously amended and restated, be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Seer, Inc. (the "**Corporation**").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, Wilmington, Delaware, 19801, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 120,000,000 shares of Class A Common Stock, $0.00001 par value per share ("**Class A Common Stock**"), (ii) 20,000,000 shares of Class B Common Stock, $0.00001 par value per share ("**Class B Common Stock**" and, together with the Class A Common Stock, "**Common Stock**") and (iii) 62,117,414 shares of Preferred Stock, $0.00001 par value per share ("**Preferred Stock**"), of which 6,607,201 shall be designated "**Series A Preferred Stock**," 16,920,470 shall be designated "**Series B Preferred Stock**," 7,000,000 shall be designated "**Series C Preferred Stock**," 16,923,077 shall be designated "**Series D Preferred Stock**" and 14,666,666 shall be designated "**Series D-1 Preferred Stock**."

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Equal Status. Except as otherwise provided in this Certificate of Incorporation or required by applicable law, shares of Class A Common Stock and Class B Common Stock shall have the same rights and powers, rank equally (including as to dividends and distributions, and upon any liquidation, dissolution or winding up of the Corporation), share ratably and be identical in all respects and as to all matters.

3. Voting Rights. Except as otherwise expressly provided by this Certificate of Incorporation or as provided by law, the holders of shares of Class A Common Stock and Class B Common Stock shall (a) at all times vote together as a single class on all matters (including the election of directors) submitted to a vote or for the consent (if action by written consent of the stockholders is permitted at such time under this Certificate of Incorporation) of the stockholders of the Corporation, (b) be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation and (c) be entitled to vote upon such matters and in such manner as may be provided by applicable law. Except as otherwise expressly provided herein or required by applicable law, each holder of Class A Common Stock shall have the right to one (1) vote per share of Class A Common Stock held of record by such holder and each holder of Class B Common Stock shall have the right to ten (10) votes per share of Class B Common Stock held of record by such holder.

4. Conversion.

4.1 Certain Definitions. As used in this Section 4, the following terms shall have the following meanings:

(i) "Affiliate" shall mean, with respect to any stockholder of the Corporation, any person, entity or firm which, directly or indirectly, controls, is controlled by or is under common control with such stockholder, including, without limitation, any entity of which the stockholder is a partner or member, any partner, officer, director, member or employee of such stockholder and any venture capital fund now or hereafter existing of which the stockholder is a partner or member which is controlled by or under common control with one or more general partners of such stockholder or shares the same management company with such stockholder.

(ii) "Class B Stockholder" shall mean any stockholder that is issued Class B Common Stock by the Corporation.

(iii) "Permitted Entity" shall mean, with respect to any Class B Stockholder, any trust, account, plan, corporation, partnership, or limited liability company specified in Section 4.3 established by or

for such Class B Stockholder, so long as such entity meets the requirements set forth in Section 4.3.

(iv) "Transfer" shall mean, with respect to a share of Class B Common Stock, any sale, assignment, transfer, conveyance, hypothecation or other transfer or disposition of such share or any legal or beneficial interest in such share, whether or not for value and whether voluntary or involuntary or by operation of law.

(v) "Voting Control" shall mean, with respect to a share of Class B Common Stock, the power (whether exclusive or shared) to vote or direct the voting of such share of Class B Common Stock by proxy, voting agreement or otherwise.

4.2 Optional Conversion. Each share of Class B Common Stock shall be convertible into one (1) fully paid and nonassessable share of Class A Common Stock at the option of the holder thereof at any time upon written notice to the transfer agent of the Corporation.

4.3 Automatic Conversion upon Transfer. Each share of Class B Common Stock shall automatically, without any further action, convert into one (1) fully paid and nonassessable share of Class A Common Stock upon the Transfer of such share; provided, however, that in the case of a Class B Stockholder that is a single member limited liability company, a Transfer of Class B Common Stock by a Class B Stockholder to the sole member of such Class B Stockholder shall not trigger such automatic conversion; provided further, however, that a Transfer by a Class B Stockholder (including a Class B Stockholder that is a transferee of Class B Common Stock by virtue of a permitted transfer from a single member limited liability company to its sole member as contemplated under this Subsection 4.3) to any of the following Permitted Entities, and from any of the following Permitted Entities back to such Class B Stockholder and/or any other Permitted Entity by or for such Class B Stockholder shall not trigger such automatic conversion:

(i) an Affiliate of such Class B Stockholder;

(ii) a trust for the benefit of such Class B Stockholder or such Class B Stockholder's spouse, parents or children, and for the benefit of no other person or persons;

(iii) a trust for the benefit of persons other than those listed in paragraph 4.3(ii) or an Individual Retirement Account, as defined in Section 408(a) of the Internal Revenue Code (the "**Code**"), or a pension, profit sharing, stock bonus or other type of plan or trust of which such Class B Stockholder is a participant or beneficiary and which satisfies the requirements for qualification under Section 401 of the Code, in each case so long as the Class B Stockholder has sole dispositive power and exclusive Voting Control with

respect to the shares of Class B Common Stock held by such trust; or

(iv) a limited liability company in which such Class B Stockholder, together with such Class B Stockholder's spouse or children, or, in the case of a Class B Stockholder that is a single member limited liability company, the sole member of such Class B Stockholder and such sole member's spouse or children, directly, or indirectly through one or more Permitted Entities, owns membership interests with sufficient Voting Control in the limited liability company, or otherwise has legally enforceable rights, such that the Class B Stockholder retains sole dispositive power and exclusive Voting Control with respect to the shares of Class B Common Stock held by such limited liability company;

provided, however, that in each case such Transfer does not involve any payment of cash, securities, property or other consideration (other than an interest in such trust) to the Class B Stockholder and, provided, further, that in the event that the requirements of such Permitted Entity as described in paragraphs 4.3(i)-4.3(iii) above are no longer met, then each share of Class B Common Stock then held by such Permitted Entity shall automatically convert into one (1) fully paid and nonassessable share of Class A Common Stock.

4.4 Automatic Conversion. Each share of Class B Common Stock held of record by a Class B Stockholder, or by such Class B Stockholder's Permitted Entities, shall automatically, without any further action, convert into one (1) fully paid and nonassessable share of Class A Common Stock upon (i) the death or permanent disability of such Class B Stockholder, or, in the case of a Class B Stockholder that is a single-member limited liability company, the death or permanent disability of the individual who is the sole member of such Class B Stockholder at the time of the original issuance of such shares of Class B Common Stock, (ii) the first day following any period of 90 consecutive days during which such Class B Stockholder does not directly, or, in the case of a Class B Stockholder that is not a natural person, through a member, nominee or designee, provide services to the Corporation as an employee, consultant or director, (iii) the written consent or agreement of holders in interest of at least fifty percent (50%) of the then outstanding shares of Class B Common Stock or (iv) the earlier of (x) the first day following the fifth anniversary of the closing of the first firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in the listing of shares of the Corporation's capital stock on a securities exchange registered with the U.S. Securities and Exchange Commission as a national securities exchange pursuant to Section 6(a) of the Exchange Act of 1934, as amended (the "**Exchange Act**") and (y) December 31, 2025.

4.5 Effect of Conversion. In the event of a conversion of shares of Class B Common Stock to shares of Class A Common Stock pursuant to this Section 4, such conversion shall be deemed to have been made at the time that the Corporation's

transfer agent receives the written notice required pursuant to Subsection 4.2, the time that the Transfer of such shares occurred or the death or permanent disability of the Class B Stockholder (or its sole member), as applicable. Upon any conversion of Class B Common Stock to Class A Common Stock, all rights of the holder of such shares of Class B Common Stock shall cease and the person or persons in whose names or names the certificate or certificates representing the shares of Class B Common Stock are to be issued, if any, shall be treated for all purposes as having become the record holder or holders of such number of shares of Class A Common Stock into which such Class B Common Stock were convertible. Shares of Class B Common Stock that are converted into shares of Class A Common Stock as provided in this Section 4 shall be retired and shall not be reissued.

5. Reservation of Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Class A Common Stock, solely for the purpose of effecting the conversion of the shares of Class B Common Stock, such number of its shares of Class A Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Class B Common Stock into shares of Class A Common Stock.

6. Adjustment in Authorized Class A Common Stock. The number of authorized shares of Class A Common Stock may be increased or decreased (but not below the number of shares of Class A Common Stock then outstanding) by an affirmative vote of the holders of a majority of the voting power of the Corporation (in addition to the affirmative vote of holders of the Preferred Stock voting as a separate class pursuant to Article Fourth, Part B, Section 3.3.8 of this Certificate of Incorporation).

7. Administration. The Corporation may, from time to time, establish such policies and procedures relating to the conversion of the Class B Common Stock to Class A Common Stock and the general administration of this dual class Common Stock structure, including the issuance of stock certificates with respect thereto, as it may deem necessary or advisable, and may request that holders of shares of Class B Common Stock furnish affidavits or other proof to the Corporation as it deems necessary to verify the ownership of Class B Common Stock and to confirm that a conversion to Class A Common Stock has not occurred.

B. PREFERRED STOCK

6,607,201 shares of the authorized and issued Preferred Stock of the Corporation are hereby designated Series A Preferred Stock, 16,920,470 shares of the authorized and issued Preferred Stock of the Corporation are hereby designated Series B Preferred Stock, 7,000,000 shares of the authorized and issued Preferred Stock of the Corporation are hereby designated Series C Preferred Stock, 16,923,077 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated Series D Preferred Stock and 14,666,666 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated Series D-1 Preferred Stock with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to “sections” or “subsections” in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

1. Dividends.

Holders of Series A Preferred Stock, in preference to the holders of Common Stock and pari passu with the holders of Series B Preferred Stock, the holders of Series C Preferred Stock, the holders of Series D Preferred Stock and the holders of Series D-1 Preferred Stock, shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at the rate of $0.0545 per annum on each outstanding share of Series A Preferred Stock. Holders of Series B Preferred Stock, in preference to the holders of Common Stock and pari passu with the holders of Series A Preferred Stock, the holders of Series C Preferred Stock, the holders of Series D Preferred Stock and the holders of Series D-1 Preferred Stock, shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at the rate of $0.1064 per annum on each outstanding share of Series B Preferred Stock. Holders of Series C Preferred Stock, in preference to the holders of Common Stock and pari passu with the holders of Series A Preferred Stock, the holders of Series B Preferred Stock, the holders of Series D Preferred Stock and the holders of Series D-1 Preferred Stock, shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at the rate of $0.15 per annum on each outstanding share of Series C Preferred Stock. Holders of Series D Preferred Stock, in preference to the holders of Common Stock and pari passu with the holders of Series A Preferred Stock, the holders of Series B Preferred Stock, the holders of Series C Preferred Stock and the holders of Series D-1 Preferred Stock, shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at the rate of $0.195 per annum on each outstanding share of Series D Preferred Stock. Holders of Series D-1 Preferred Stock, in preference to the holders of Common Stock and pari passu with the holders of Series A Preferred Stock, the holders of Series B Preferred Stock, the holders of Series C Preferred Stock and the holders of Series D Preferred Stock, shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at the rate of $0.225 per annum on each outstanding share of Series D-1 Preferred Stock. Such dividends shall be payable only when, as and if declared by the Board of Directors and shall be non-cumulative. After payment of such dividends to the holders of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock, any additional dividends or distributions shall be distributed among all holders of Common Stock and Preferred Stock in proportion to the number of shares of Common Stock that would be held by each such holder if all shares of Preferred Stock were converted to Common Stock at the then effective Series A Conversion Rate (as defined below), Series B Conversion Rate (as defined below), Series C Conversion Rate (as defined below), Series D Conversion Rate (as defined below) and Series D-1 Conversion Rate (as defined below), as applicable. A distribution to the Corporation's stockholders may be made without regard to the preferential dividends arrears amount or any preferential rights amount (each as determined under applicable law).

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the holders of shares of Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its

stockholders before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share of Preferred Stock equal to the greater of (i) the Original Issue Price of such series of Preferred Stock, plus any dividends declared but unpaid thereon and (ii) such amount per share as would have been payable had all shares of such series of Preferred Stock been converted into Class A Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence is hereinafter referred to as in the case of the Series A Preferred Stock, the "**Series A Liquidation Amount**," as in the case of the Series B Preferred Stock, the "**Series B Liquidation Amount**," as in the case of the Series C Preferred Stock, the "**Series C Liquidation Amount**," as in the case of the Series D Preferred Stock, the "**Series D Liquidation Amount**" and as in the case of the Series D-1 Preferred Stock, the "**Series D-1 Liquidation Amount**"). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full. The "**Series A Original Issue Price**" shall mean $0.9081 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock. The "**Series B Original Issue Price**" shall mean $1.7730 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock. The "**Series C Original Issue Price**" shall mean $2.50 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series C Preferred Stock. The "**Series D Original Issue Price**" shall mean $3.25 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock. The "**Series D-1 Original Issue Price**" shall mean $3.75 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D-1 Preferred Stock.

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1. Definition. Each of the following events shall be considered a "**Deemed Liquidation Event**" unless the holders of at least a majority of the outstanding shares of Preferred Stock elect otherwise by written notice sent to the Corporation prior to the effective date of any such event:

(a) a merger, reorganization or consolidation in which

(i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation 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; or

(b) the sale, lease, transfer, exclusive license (in all fields or substantially all fields such that the Corporation is unable to continue operations in its ordinary course of business) or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation 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 Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license (in all fields or substantially all fields such that the Corporation is unable to continue operations in its ordinary course of business) or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2. Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within ninety (90) days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the ninetieth (90^{th}) day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Preferred Stock, and (ii) if the holders of at least a majority of the then outstanding shares of Preferred Stock so request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days

after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation)**,** together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the "**Available Proceeds**"), on the one hundred fiftieth (150^{th}) day after such Deemed Liquidation Event, to redeem all outstanding shares of Series A Preferred Stock at a price per share equal to the Series A Liquidation Amount, all outstanding shares of Series B Preferred Stock at a price per share equal to the Series B Liquidation Amount, all outstanding shares of Series C Preferred Stock at a price per share equal to the Series C Liquidation Amount, all outstanding shares of Series D Preferred Stock at a price per share equal to the Series D Liquidation Amount and all outstanding shares of Series D-1 Preferred Stock at a price per share equal to the Series D-1 Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall ratably redeem each holder's shares of Preferred Stock to the fullest extent of such Available Proceeds, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.3.3. Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license (in all fields or substantially all fields such that the Corporation is unable to continue operations in its ordinary course of business), other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation.

2.3.4. Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the "**Additional Consideration**"), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this Subsection 2.3.4, consideration placed into escrow or retained as holdback to be available for

satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Class A Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together as a single class. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class.

3.2 Election of Directors. The holders of record of the shares of Preferred Stock, exclusively and as a separate class, shall be entitled to elect one director of the Corporation (the "**Preferred Director**"). The holders of record of the shares of Preferred Stock and Common Stock, exclusively and as a single class, shall be entitled to elect one director of the Corporation (the "**Mutual Director**"). The holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect three directors of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class on an as-converted basis, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2.

3.3 Preferred Stock Protective Provisions. At any time when any shares of Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect.

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 amend, alter, repeal or waive any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Preferred Stock;

3.3.3 create, or authorize the creation of, any additional class or series of capital stock unless the same ranks junior to the Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption;

3.3.4 (i) reclassify, alter or amend any existing security of the Corporation that is pari passu with the Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Preferred Stock in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with the Preferred Stock in respect of any such right, preference or privilege;

3.3.5 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and (iii) repurchases of stock from current or former employees, officers, directors, consultants or other persons who perform or performed services for the Corporation or any subsidiary pursuant to agreements approved by the Board of Directors pursuant to which the Corporation has the option to repurchase shares of stock upon the occurrence of specified events, including but not limited to the cessation of such employment or service, at the lower of the original purchase price or the then-current fair market value thereof;

3.3.6 permit any direct or indirect subsidiary to issue shares of its capital stock, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect

subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license (in all fields or substantially all fields such that the Corporation is unable to continue operations in its ordinary course of business) or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary;

3.3.7 increase or decrease the authorized number of directors constituting the Board of Directors;

3.3.8 increase or decrease the authorized number of shares of Common Stock or Preferred Stock;

3.3.9 create, or authorize the creation of, or issue, or authorize the issuance of any debt security or create any lien or security interest (except for purchase money liens or statutory liens of landlords, mechanics, materialmen, workmen, warehousemen and other similar persons arising or incurred in the ordinary course of business) or incur other indebtedness for borrowed money, including but not limited to obligations and contingent obligations under guarantees, or permit any subsidiary to take any such action with respect to any debt security lien, security interest or other indebtedness for borrowed money, if the aggregate indebtedness of the Corporation and its subsidiaries for borrowed money following such action would exceed $10,000,000 other than equipment leases or trade payables incurred in the ordinary course;

3.3.10 authorize or enter into any transaction between the Corporation and any related party, other than routine compensation of the Corporation's employees or other service providers that has received the prior approval of the Board of Directors, where routine compensation for purposes hereof shall mean a change in salary, bonus or employment benefits of less than or equal to 10% that is made as part of a general review as compared to former salary, bonus or employment benefits; or

3.3.11 create any new stock or option plan or increase the number of shares authorized for issuance under any existing stock or option plan in excess of an annual increase in the number of authorized shares of up to 3% of the fully diluted capitalization of the Corporation that is approved by the Board of Directors and is measured as of the date of such approval.

3.4 Series A Preferred Stock Protective Provision. At any time when any shares of Series A Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, amend, alter, repeal or waive any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Series A Preferred Stock in a manner that is differential and adverse to the other series of Preferred Stock then outstanding (it being understood that this Section shall not apply to the creation of any additional class or series of capital stock that ranks senior to or on parity with the Series A Preferred Stock with respect to rights, preferences, powers, privileges) without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series A Preferred Stock, given in writing or by vote at

a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void ab initio, and of no force or effect.

3.5 Series B Preferred Stock Protective Provision. At any time when any shares of Series B Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, amend, alter, repeal or waive any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Series B Preferred Stock in a manner that is differential and adverse to the other series of Preferred Stock then outstanding (it being understood that this Section shall not apply to the creation of any additional class or series of capital stock that ranks senior to or on parity with the Series B Preferred Stock with respect to rights, preferences, powers, privileges) without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series B Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void ab initio, and of no force or effect.

3.6 Series C Preferred Stock Protective Provision. At any time when any shares of Series C Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, amend, alter, repeal or waive any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Series C Preferred Stock in a manner that is differential and adverse to the other series of Preferred Stock then outstanding (it being understood that this Section shall not apply to the creation of any additional class or series of capital stock that ranks senior to or on parity with the Series C Preferred Stock with respect to rights, preferences, powers, privileges) without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series C Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void ab initio, and of no force or effect.

3.7 Series D Preferred Stock Protective Provision. At any time when any shares of Series D Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, amend, alter, repeal or waive any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Series D Preferred Stock in a manner that is differential and adverse to the other series of Preferred Stock then outstanding (it being understood that this Section shall not apply to the creation of any additional class or series of capital stock that ranks senior to or on parity with the Series D Preferred Stock with respect to rights, preferences, powers, privileges) without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series D Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or

transaction entered into without such consent or vote shall be null and void ab initio, and of no force or effect.

3.8 Series D-1 Preferred Stock Protective Provision. At any time when any shares of Series D-1 Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, amend, alter, repeal or waive any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or rights of the Series D-1 Preferred Stock in a manner that is differential and adverse to the other series of Preferred Stock then outstanding (it being understood that this Section shall not apply to the creation of any additional class or series of capital stock that ranks senior to or on parity with the Series D-1 Preferred Stock with respect to rights, preferences, powers, privileges) without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series D-1 Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void ab initio, and of no force or effect.

4. Optional Conversion.

The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Class A Common Stock as is determined (i) in the case of the Series A Preferred Stock by dividing the Series A Original Issue Price by the Series A Conversion Price (as defined below) in effect at the time of conversion (the "**Series A Conversion Rate**"), (ii) in the case of the Series B Preferred Stock by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below) in effect at the time of conversion (the "**Series B Conversion Rate**"), (iii) in the case of the Series C Preferred Stock by dividing the Series C Original Issue Price by the Series C Conversion Price (as defined below) in effect at the time of conversion (the "**Series C Conversion Rate**"), (iv) in the case of the Series D Preferred Stock by dividing the Series D Original Issue Price by the Series D Conversion Price (as defined below) in effect at the time of conversion (the "**Series D Conversion Rate**") or (v) in the case of the Series D-1 Preferred Stock by dividing the Series D-1 Original Issue Price by the Series D-1 Conversion Price (as defined below) in effect at the time of conversion (the "**Series D-1 Conversion Rate**"). The "**Series A Conversion Price**" shall initially be equal to $0.9081. Such initial Series A Conversion Price and the Series A Conversion Rate shall be subject to adjustment as provided below. The "**Series B Conversion Price**" shall initially be equal to $1.7730. Such initial Series B Conversion Price and the Series B Conversion Rate shall be subject to adjustment as provided below. The "**Series C Conversion Price**" shall initially be equal to $2.50. Such initial Series C Conversion Price and the Series C Conversion Rate shall be subject to adjustment as provided below. The "**Series D Conversion Price**" shall initially be equal to $3.25. Such

initial Series D Conversion Price and the Series D Conversion Rate shall be subject to adjustment as provided below. The "**Series D-1 Conversion Price**" shall initially be equal to $3.75. Such initial Series D-1 Conversion Price and the Series D-1 Conversion Rate shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

4.2 Fractional Shares. No fractional shares of Class A Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Class A Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Class A Common Stock and the aggregate number of shares of Class A Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Class A Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Preferred Stock and, if applicable, any event on which such conversion is contingent and (b) if such holder's shares are certificated, surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Class A Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the

number of full shares of Class A Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Class A Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Class A Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Class A Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Class A Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Class A Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price below the then par value of the shares of Class A Common Stock issuable upon conversion of the Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Class A Common Stock at such adjusted Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Class A Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price, as applicable to such series of Preferred Stock, shall be made for any declared but unpaid dividends on the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock or Series D-1 Preferred Stock, as applicable, surrendered for conversion or on the Class A Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Class A Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Class A Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Prices for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) "**Option**" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) "**Series D-1 Original Issue Date**" shall mean the date on which the first share of Series D-1 Preferred Stock was issued.

(c) "**Convertible Securities**" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) "**Additional Shares of Common Stock**" shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series D-1 Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, "**Exempted Securities**"):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock;

(ii) shares of Class A Common Stock issued upon conversion of Class B Common Stock;

(iii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8;

(iv) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its

subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation;'

(v) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(vi) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Corporation that do not exceed 7.5% of the Corporation issued and outstanding share capital;

(vii) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation that do not exceed 7.5% of the Corporation issued and outstanding share capital; or

(viii) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors of the Corporation;

(ix) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM,

marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Corporation that do not exceed 7.5% of the Corporation issued and outstanding share capital;

(x) shares of Common Stock, Options or Convertible Securities issued in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least $50,000,000 of gross proceeds to the Corporation and the listing of shares of the Corporation's capital stock on a securities exchange registered with the U.S. Securities and Exchange Commission as a national securities exchange pursuant to Section 6(a) of the Exchange Act (a "**Qualified Public Offering**"); or

(xi) shares of Common Stock, Options or Convertible Securities issued with the unanimous approval of the Board of Directors and the Board of Directors specifically provides that such shares of Common Stock, Options or Convertible Securities shall be Exempted Securities.

4.4.2 No Adjustment of Conversion Prices. No adjustment in the Series A Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least a majority of the then outstanding shares of Series A Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series B Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least a majority of the then outstanding shares of Series B Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series C Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least a majority of the then outstanding shares of Series C Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series D Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least a

majority of the then outstanding shares of Series D Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series D-1 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least a majority of the then outstanding shares of Series D-1 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series D-1 Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series A Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series A Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series A Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series A Conversion Price to an amount which exceeds the lower of (i) the Series A Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security or (ii) the Series A Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date. If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series B Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the

provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series B Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series B Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series B Conversion Price to an amount which exceeds the lower of (i) the Series B Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security or (ii) the Series B Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date. If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series C Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series C Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series C Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series C Conversion Price to an amount which exceeds the lower of (i) the Series C Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security or (ii) the Series C Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date. If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series D Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon

such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series D Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series D Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series D Conversion Price to an amount which exceeds the lower of (i) the Series D Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security or (ii) the Series D Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date. If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series D-1 Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series D-1 Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series D-1 Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series D-1 Conversion Price to an amount which exceeds the lower of (i) the Series D-1 Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security or (ii) the Series D-1 Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Series A Conversion Price pursuant to the terms of Subsection 4.4.4, an adjustment to the Series B Conversion Price pursuant to the terms of Subsection 4.4.4, an adjustment to the Series C Conversion Price pursuant to the terms of Subsection 4.4.4, an adjustment to the Series D Conversion Price pursuant to the terms of Subsection 4.4.4 or an adjustment to the Series D-1 Conversion Price pursuant to the terms of Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price, as applicable, then in effect, or

because such Option or Convertible Security was issued before the Series D-1 Original Issue Date), are revised after the Series D-1 Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price pursuant to the terms of Subsection 4.4.4, then such conversion price shall be readjusted to such Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Prices Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the

Series D-1 Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price in effect immediately prior to such issue, then the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price, as applicable, shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP_2" shall mean the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price, as applicable, in effect immediately after such issue of Additional Shares of Common Stock

(b) "CP_1" shall mean the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price, as applicable, in effect immediately prior to such issue of Additional Shares of Common Stock;

(c) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP_1); and

(e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by

the Corporation, excluding amounts paid or payable for accrued interest;

(ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors of the Corporation.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) The total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the

conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price pursuant to the terms of Subsection 4.4.4, then, upon the final such issuance, the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price, as applicable, shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series D-1 Original Issue Date effect a subdivision of the outstanding Common Stock, the Series A Conversion Price, the Series B Conversion Price, the Series C Conversion Price, the Series D Conversion Price and the Series D-1 Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Class A Common Stock issuable on conversion of each share of such series of Preferred Stock shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series D-1 Original Issue Date combine the outstanding shares of Common Stock, the Series A Conversion Price, the Series B Conversion Price, the Series C Conversion Price, the Series D Conversion Price and the Series D-1 Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Class A Common Stock issuable on conversion of each share of such series of Preferred Stock shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective. In no event shall the conversion of shares of Class B Common Stock into shares of Class A Common Stock in accordance with Article Fourth, Section A, Subsection 4 be considered a subdivision or combination of the outstanding shares of Common Stock for purposes of this Subsection 4.5.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series D-1 Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price and Series D-1 Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the

event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price and Series D-1 Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series A Conversion Price, the Series B Conversion Price, the Series C Conversion Price, the Series D Conversion Price and the Series D-1 Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Series A Conversion Price, the Series B Conversion Price, the Series C Conversion Price, the Series D Conversion Price and the Series D-1 Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Class A Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Class A Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series D-1 Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Class A Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Class A Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Class A Common Stock of the Corporation issuable

upon conversion of one share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Series A Conversion Price, the Series B Conversion Price, the Series C Conversion Price, the Series D Conversion Price or the Series D-1 Conversion Price, as applicable) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock. For the avoidance of doubt, nothing in this Subsection 4.8 shall be construed as preventing the holders of Preferred Stock from seeking any appraisal rights to which they are otherwise entitled under the DGCL in connection with a merger triggering an adjustment hereunder, nor shall this Subsection 4.8 be deemed conclusive evidence of the fair value of the shares of Preferred Stock in any such appraisal proceeding.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series D-1 Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten (10) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than ten (10) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price and Series D-1 Conversion Price then in effect, and (ii) the number of shares of Class A Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or 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

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Class A Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Class A Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Class A Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) a Qualified Public Offering or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least a majority of the then outstanding shares of Preferred Stock voting as a single class on an as-converted basis (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the "**Mandatory Conversion Time**"), then (i) all outstanding shares of Preferred Stock shall automatically be converted into shares of Class A Common Stock, at the then effective conversion rate as calculated pursuant to Subsection 4.1.1 (the "**Mandatory Conversion**") and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Subsection 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and

agreement) for Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Class A Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay cash as provided in Subsection 4.2 in lieu of any fraction of a share of Class A Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

6. Acquired Shares. Any shares of Preferred Stock that are acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock.

7. Waiver. Except as otherwise provided in this Amended and Restated Certificate of Incorporation (including, without limitation, Sections 3.4, 3.5, 3.6, 3.7, 3.8 and 4.4.2), any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Preferred Stock then outstanding.

8. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of

Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "**Excluded Opportunity**" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, "**Covered Persons**"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation.

TWELFTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent

to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article Twelfth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Twelfth (including, without limitation, each portion of any sentence of this Article Twelfth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 11th day of May, 2020.

SEER, INC.

By: /s/ Omid Farokhzad

Omid Farokhzad, Chief Executive Officer

Adopted March 16, 2017

BY-LAWS

OF

SEER BIOSCIENCES, INC.

Section 1 CERTIFICATE OF INCORPORATION AND BY-LAWS

1.1 These by-laws are subject to the certificate of incorporation of the corporation. In these by-laws, references to the certificate of incorporation and by-laws mean the provisions of the certificate of incorporation and the by-laws as are from time to time in effect.

Section 2 OFFICES

2.1 Registered Office. The registered office shall be in the City of Wilmington, County of New Castle, State of Delaware.

2.2 Other Offices. The corporation may also have offices at such other places both within and without the State of Delaware as the board of directors may from time to time determine or the business of the corporation may require.

Section 3 STOCKHOLDERS

3.1 Location of Meetings. All meetings of the stockholders shall be held at such place either within or without the State of Delaware as shall be designated from time to time by the board of directors, or if not so designated, at the registered office of the corporation. Notwithstanding the foregoing, the board of directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the Delaware General Corporation Law. If so authorized, and subject to such guidelines and procedures as the board of directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication, participate in a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (ii) the corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the corporation. Any adjourned session of any meeting shall be held at the place designated in the vote of adjournment.

3.2 Annual Meeting. The annual meeting of stockholders shall be held at 10:00 a.m. on the second Wednesday in May in each year, unless that day be a legal holiday at the place where the meeting is to be held, in which case the meeting shall be held at the same hour on the next succeeding day not a legal holiday, or at such other date and time as shall be designated from time to

time by the board of directors, at which they shall elect a board of directors and transact such other business as may be required by law or these by-laws or as may properly come before the meeting.

3.3 Special Meeting in Place of Annual Meeting. If the election for directors shall not be held on the day designated by these by-laws, the directors shall cause the election to be held as soon thereafter as convenient, and to that end, if the annual meeting is omitted on the day herein provided therefor or if the election of directors shall not be held thereat, a special meeting of the stockholders may be held in place of such omitted meeting or election, and any business transacted or election held at such special meeting shall have the same effect as if transacted or held at the annual meeting, and in such case all references in these by-laws to the annual meeting of the stockholders, or to the annual election of directors, shall be deemed to refer to or include such special meeting. Any such special meeting shall be called and the purposes thereof shall be specified in the call, as provided in Section 3.5.

3.4 Notice of Annual Meeting. Written notice of the annual meeting stating the place, date and hour of the meeting shall be given to each stockholder entitled to vote at such meeting not less than ten nor more than sixty days before the date of the meeting. Such notice may specify the business to be transacted and actions to be taken at such meeting. No action shall be taken at such meeting unless such notice is given or unless waiver of such notice is given in accordance with Section 5.2 by each stockholder entitled to such notice to whom such notice was not given.

3.5 Other Special Meetings. Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by law or by the certificate of incorporation, may be called by the president and shall be called by the president or secretary at the request in writing of a majority of the board of directors, or at the request in writing of the holders of at least ten percent of all capital stock of the corporation issued and outstanding and entitled to vote at such meeting. Such request shall state the purpose or purposes of the proposed meeting and business to be transacted at any special meeting of the stockholders.

3.6 Notice of Special Meeting. Written notice of a special meeting stating the place, date and hour of the meeting and the purpose or purposes for which the meeting is called, shall be given not less than ten nor more than sixty days before the date of the meeting, to each stockholder entitled to vote at such meeting. No action shall be taken at such meeting unless such notice is given or unless waiver of such notice is given in accordance with Section 5.2 by each stockholder entitled to such notice to whom such notice was not given.

3.7 Stockholder List. The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least ten days prior to the meeting, either (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be

produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to examination of any stockholder during the entire meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

3.8 Quorum of Stockholders. The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise required by law, by the certificate of incorporation or by these by-laws. Except as otherwise provided by law, no stockholder present at a meeting may withhold his shares from the quorum count by declaring his shares absent from the meeting.

3.9 Adjournment. Any meeting of stockholders may be adjourned from time to time to any other time and to any other place at which a meeting of stockholders may be held under these by-laws, which time and place shall be announced at the meeting, by a majority of votes cast upon the question, whether or not a quorum is present, or, if no stockholder is present or represented by proxy, by any officer entitled to preside at or to act as secretary of such meeting. At such adjourned meeting at which a quorum shall be present or represented any business may be transacted which might have been transacted at the original meeting. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

3.10 Proxy Representation. Every stockholder may authorize another person or persons to act for him by proxy in all matters in which a stockholder is entitled to participate, whether by waiving notice of any meeting, objecting to or voting or participating at a meeting, or expressing consent or dissent without a meeting. Every proxy must be signed by the stockholder or by his attorney-in-fact. No proxy shall be voted or acted upon after three years from its date unless such proxy provides for a longer period. Except as provided by law, a revocable proxy shall be deemed revoked if the stockholder is present at the meeting for which the proxy was given. A duly executed proxy shall be irrevocable if it states that it is irrevocable and, if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A proxy may be made irrevocable regardless of whether the interest with which it is coupled is an interest in the stock itself or an interest in the corporation generally. The authorization of a proxy may, but need not be limited to specified action, provided, however, that if a proxy limits its authorization to a meeting or meetings of stockholders, unless otherwise specifically provided such proxy shall entitle the holder thereof to vote at any adjourned session but shall not be valid after the final adjournment thereof.

3.11 Inspectors. The directors or the person presiding at the meeting may, but need not unless required by law, appoint one or more inspectors of election and any substitute inspectors to act at the meeting or any adjournment thereof. Each inspector, before entering upon the discharge of his duties, shall take and sign an oath faithfully to execute the duties of inspector at such meeting with strict impartiality and according to the best of his ability. The inspectors, if any, shall determine the number of shares of stock outstanding and the voting power of each, the shares of stock represented at the meeting, the existence of a quorum and the validity and effect of proxies, and shall receive votes, ballots or consents, hear and determine all challenges and questions arising in

connection with the right to vote, count and tabulate all votes, ballots or consents, determine the result, and do such acts as are proper to conduct the election or vote with fairness to all stockholders. On request of the person presiding at the meeting, the inspectors shall make a report in writing of any challenge, question or matter determined by them and execute a certificate of any fact found by them.

3.12 Action by Vote. When a quorum is present at any meeting, whether the same be an original or an adjourned session, a plurality of the votes properly cast for election to any office shall elect to such office and a majority of the votes properly cast upon any question other than an election to an office shall decide the question, except when a larger vote is required by law, by the certificate of incorporation or by these by-laws. No ballot shall be required for any election unless requested by a stockholder present or represented at the meeting and entitled to vote in the election.

3.13 Action Without Meetings. Unless otherwise provided in the certificate of incorporation, any action required to be taken at any annual or special meeting of stockholders of the corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing. Consent may be given by electronic transmission to the extent permitted by the Delaware General Corporation Law.

3.14 Organization. Meetings of stockholders shall be presided over by the chairperson of the board of directors, if any, or in his absence by the president, or in his absence by a vice president, or in the absence of the foregoing persons by a chairperson chosen at the meeting by the board. The secretary shall act as secretary of the meeting, but in his absence the chairperson of the meeting may appoint any person to act as secretary of the meeting. The chairperson of the meeting shall announce at the meeting of stockholders the date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote.

3.15 Conduct of Meetings. The board of directors of the corporation may adopt by resolution such rules and regulations for the conduct of the meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the board of directors, the chairperson of any meeting of stockholders shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairperson, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the board of directors or prescribed by the chairperson of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders of record of the corporation, their duly authorized and constituted proxies or such other persons as the chairperson of the meeting shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the board of directors

or the chairperson of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

Section 4 DIRECTORS

4.1 Number. The number of directors which shall constitute the whole board shall not be less than one. The first board shall consist of one (1) director. Thereafter, the stockholders at the annual meeting shall determine the number of directors, and the number of directors may be increased or decreased at any time or from time to time by the stockholders or by the directors by vote of a majority of directors then in office, except that any such decrease by vote of the directors shall only be made to eliminate vacancies existing by reason of the death, resignation or removal of one or more directors. The directors shall be elected at the annual meeting of the stockholders, except as provided in these by-laws. Directors need not be stockholders.

4.2 Tenure. Except as otherwise provided by law, by the certificate of incorporation or by these by-laws, each director shall hold office until the next annual meeting and until his successor is elected and qualified, or until he sooner dies, resigns, is removed or becomes disqualified.

4.3 Powers. The business of the corporation shall be managed by or under the direction of the board of directors which shall have and may exercise all the powers of the corporation and do all such lawful acts and things as are not by law, the certificate of incorporation or these by-laws directed or required to be exercised or done by the stockholders.

4.4 Vacancies. Vacancies and any newly created directorships resulting from any increase in the number of directors may be filled by vote of the stockholders at a meeting called for the purpose, or by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. When one or more directors shall resign from the board, effective at a future date, a majority of the directors then in office, including those who have resigned, shall have power to fill such vacancy or vacancies, the vote or action in writing thereon to take effect when such resignation or resignations shall become effective. The directors shall have and may exercise all their powers notwithstanding the existence of one or more vacancies in their number, subject to any requirements of law or of the certificate of incorporation or of these by-laws as to the number of directors required for a quorum or for any vote or other actions.

4.5 Committees. The board of directors may, by vote of a majority of the whole board, (a) designate, change the membership of or terminate the existence of any committee or committees, each committee to consist of one or more of the directors; (b) designate one or more directors as alternate members of any such committee who may replace any absent or disqualified member at any meeting of the committee; and (c) determine the extent to which each such committee shall have and may exercise the powers and authority of the board of directors in the management of the business and affairs of the corporation, including the power to authorize the seal of the corporation to be affixed to all papers which require it and the power and authority to declare dividends or to authorize the issuance of stock; excepting, however, such powers which by law, by the certificate of incorporation or by these by-laws they are prohibited from so delegating. In the absence or disqualification of any member of such committee and his alternate, if any, the member or members thereof present at any meeting and not disqualified from voting, whether or not constituting a quorum, may unanimously appoint another member of the board of directors to act at the meeting in

the place of any such absent or disqualified member. Except as the board of directors may otherwise determine, any committee may make, alter and repeal rules for the conduct of its business, but unless otherwise provided by the board or such rules, its business shall be conducted as nearly as may be in the same manner as is provided by these by-laws for the conduct of business by the board of directors. Each committee shall keep regular minutes of its meetings and report the same to the board of directors upon request.

4.6 Regular Meeting. Regular meetings of the board of directors may be held without call or notice at such place within or without the State of Delaware and at such times as the board may from time to time determine, provided that notice of the first regular meeting following any such determination shall be given to absent directors. A regular meeting of the directors may be held without call or notice immediately after and at the same place as the annual meeting of the stockholders.

4.7 Special Meetings. Special meetings of the board of directors may be held at any time and at any place within or without the State of Delaware designated in the notice of the meeting, when called by the president, or by any director, reasonable notice thereof being given to each director by the secretary or by the president or by any one of the directors calling the meeting.

4.8 Notice. It shall be reasonable and sufficient notice to a director to send notice by mail at least forty-eight hours or by telegram or telecopy or other form of electronic transmission at least twenty-four hours before the meeting, addressed to him at his usual or last known business or residence address or to give notice to him in person or by telephone at least twenty-four hours before the meeting. Notice of a meeting need not be given to any director if a written waiver of notice, executed by him before or after the meeting, is filed with the records of the meeting, or to any director who attends the meeting without protesting prior thereto or at its commencement the lack of notice to him. Neither notice of a meeting nor a waiver of a notice need specify the purposes of the meeting.

4.9 Quorum. Except as may be otherwise provided by law, by the certificate of incorporation or by these by-laws, at any meeting of the directors a majority of the directors then in office shall constitute a quorum. A quorum shall not in any case be less than a majority of the total number of directors constituting the whole board. Any meeting may be adjourned from time to time by a majority of the votes cast upon the question, whether or not a quorum is present, and the meeting may be held as adjourned without further notice.

4.10 Action by Vote. Except as may be otherwise provided by law, by the certificate of incorporation or by these by-laws, when a quorum is present at any meeting the vote of a majority of the directors present shall be the act of the board of directors.

4.11 Action Without a Meeting. Unless otherwise restricted by the certificate of incorporation or these by-laws, any action required or permitted to be taken at any meeting of the board of directors or of any committee thereof may be taken without a meeting if all the members of the board or of such committee, as the case may be, consent thereto in writing, or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board, or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in

electronic form. Such consent shall be treated for all purposes as the act of the board or of such committee, as the case may be.

4.12 Participation in Meetings by Conference Telephone. Unless otherwise restricted by the certificate of incorporation or these by-laws, members of the board of directors or of any committee thereof may participate in a meeting of such board or committee by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other. Such participation shall constitute presence in person at such meeting.

4.13 Compensation. Unless otherwise restricted by the certificate of incorporation or these by-laws, the board of directors shall have the authority to fix from time to time the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the board of directors and the performance of their responsibilities as directors and may be paid a fixed sum for attendance at each meeting of the board of directors and/or a stated salary as director. No such payment shall preclude any director from serving the corporation or its parent or subsidiary corporations in any other capacity and receiving compensation therefor. The board of directors may also allow compensation for members of special or standing committees for service on such committees.

4.14 Interested Directors and Officers.

(a) No contract or transaction between the corporation and one or more of its directors or officers, or between the corporation and any other corporation, partnership, association, or other organization in which one or more of the corporation's directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the board or committee thereof which authorizes the contract or transaction, or solely because his or their votes are counted for such purpose, if:

(1) The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the board of directors or the committee, and the board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or

(2) The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or

(3) The contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified by the board of directors, a committee thereof, or the stockholders.

(b) Common or interested directors may be counted in determining the presence of a quorum at a meeting of the board of directors or of a committee which authorizes the contract or transaction.

4.15 Resignation or Removal of Directors. Unless otherwise restricted by the certificate of incorporation or by law, any director or the entire board of directors may be removed, with or

without cause, by the holders of a majority of the stock issued and outstanding and entitled to vote at an election of directors. Any director may resign at any time by delivering his resignation in writing to the president or the secretary or to a meeting of the board of directors. Such resignation shall be effective upon receipt unless specified to be effective at some other time and without in either case the necessity of its being accepted unless the resignation shall so state. No director resigning and no director removed shall have any right to receive compensation as such director for any period following his resignation or removal, except where a right to receive compensation shall be expressly provided in a duly authorized written agreement with the corporation, or any right to damages on account of such removal, whether his compensation be by the month or by the year or otherwise; unless in the case of a resignation, the directors, or in the case of removal, the body acting on the removal, shall in their or its discretion provide for compensation.

Section 5 NOTICES

5.1 Form of Notice. Whenever, under the provisions of law, of the certificate of incorporation or of these by-laws, notice is required to be given to any director or stockholder, such notice may be given by mail, addressed to such director or stockholder, at his address as it appears on the records of the corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Unless written notice by mail is required by law, written notice may also be given by telegram, cable, telecopy, commercial delivery service, telex or similar means, addressed to such director or stockholder at his address as it appears on the records of the corporation, in which case such notice shall be deemed to be given when delivered into the control of the persons charged with effecting such transmission, the transmission charge to be paid by the corporation or the person sending such notice and not by the addressee. Notice may also be given to any stockholder and to any director by any form of electronic transmission, to the same extent that Section 232 of the Delaware General Corporation Law permits notice in such form to be given to stockholders, and will be deemed given at the time provided therein. Oral notice or other in-hand delivery (in person or by telephone) shall be deemed given at the time it is actually given.

5.2 Waiver of Notice. Whenever notice is required to be given under the provisions of law, the certificate of incorporation or these by-laws, a written waiver thereof, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any meeting of the stockholders, directors or members of a committee of the directors need be specified in any written waiver of notice.

Section 6 OFFICERS AND AGENTS

6.1 Enumeration; Qualification. The officers of the corporation shall be a president, a treasurer, a secretary and such other officers, if any, as the board of directors from time to time may in its discretion elect or appoint including without limitation a chairperson of the board of directors and one or more vice presidents. Any officer may be, but none need be, a director or stockholder. Any two or more offices may be held by the same person. Any officer may be required by the board

of directors to secure the faithful performance of his duties to the corporation by giving bond in such amount and with sureties or otherwise as the board of directors may determine.

6.2 Powers. Subject to law, to the certificate of incorporation and to the other provisions of these by-laws, each officer shall have, in addition to the duties and powers herein set forth, such duties and powers as are commonly incident to his office and such additional duties and powers as the board of directors may from time to time designate.

6.3 Election. The board of directors at its first meeting after each annual meeting of stockholders shall choose a president, a secretary and a treasurer. Other officers may be appointed by the board of directors at such meeting, at any other meeting or by written consent. At any time or from time to time, the directors may delegate to any officer their power to elect or appoint any other officer or any agents.

6.4 Tenure. Each officer shall hold office until the first meeting of the board of directors following the next annual meeting of the stockholders and until his successor is elected and qualified unless a shorter period shall have been specified in terms of his election or appointment, or in each case until he sooner dies, resigns, is removed or becomes disqualified. Each agent of the corporation shall retain his authority at the pleasure of the directors, or the officer by whom he was appointed or by the officer who then holds agent appointive power.

6.5 Chairperson of the Board of Directors. The chairperson of the board of directors, if any, shall have such duties and powers as shall be designated from time to time by the board of directors. Unless the board of directors otherwise specifies, the chairperson of the board, or if there is none the president, shall preside, or designate the person who shall preside, at all meetings of the stockholders and of the board of directors. References in these by-laws to a chairperson shall include references to persons designated by the board of directors with the title chairman, chairwoman or chair or any similar title.

6.6 President and Vice Presidents. Unless a chief executive officer has been elected by the board of directors, the president shall be the chief executive officer and shall have direct and active charge of all business operations of the corporation and shall have general supervision of the entire business of the corporation, subject to the control of the board of directors. As provided in Section 6.5, in the absence of the chairperson of the board of directors, the president shall preside at all meetings of the stockholders and of the board of directors at which the president is present, except as otherwise voted by the board of directors.

The president or treasurer shall execute bonds, mortgages and other contracts requiring a seal, under the seal of the corporation, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the board of directors to some other officer or agent of the corporation.

Any vice presidents shall have such duties and powers as shall be designated from time to time by the board of directors or by the president.

6.7 Treasurer and Assistant Treasurers. The treasurer shall be the chief financial officer of the corporation and shall be in charge of its funds and valuable papers, and shall have such other

duties and powers as may be assigned to him from time to time by the board of directors or by the president.

Any assistant treasurers shall have such duties and powers as shall be designated from time to time by the board of directors, the president or the treasurer.

6.8 Secretary and Assistant Secretaries. The secretary shall record all proceedings of the stockholders, of the board of directors and of committees of the board of directors in a book or series of books to be kept therefor and shall file therein all writings of, or related to, action by stockholder or director consent. In the absence of the secretary from any meeting, an assistant secretary, or if there is none or he is absent, a temporary secretary chosen at the meeting, shall record the proceedings thereof. Unless a transfer agent has been appointed, the secretary shall keep or cause to be kept the stock and transfer records of the corporation, which shall contain the names and record addresses of all stockholders and the number of shares registered in the name of each stockholder. The secretary shall have such other duties and powers as may from time to time be designated by the board of directors or the president.

Any assistant secretaries shall have such duties and powers as shall be designated from time to time by the board of directors, the president or the secretary.

6.9 Resignation and Removal. Any officer may resign at any time by delivering his resignation in writing to the president or the secretary or to a meeting of the board of directors. Such resignation shall be effective upon receipt unless specified to be effective at some other time, and without in any case the necessity of its being accepted unless the resignation shall so state. The board of directors may at any time remove any officer either with or without cause. The board of directors may at any time terminate or modify the authority of any agent. No officer resigning and no officer removed shall have any right to any compensation as such officer for any period following his resignation or removal, except where a right to receive compensation shall be expressly provided in a duly authorized written agreement with the corporation, or any right to damages on account of such removal, whether his compensation be by the month or by the year or otherwise; unless in the case of a resignation, the directors, or in the case of removal, the body acting on the removal, shall in their or its discretion provide for compensation.

6.10 Vacancies. If the office of the president or the treasurer or the secretary becomes vacant, the directors may elect a successor by vote of a majority of the directors then in office. If the office of any other officer becomes vacant, any person or body empowered to elect or appoint that office may choose a successor. Each such successor shall hold office for the unexpired term of his predecessor, and in the case of the president, the treasurer and the secretary until his successor is chosen and qualified, or in each case until he sooner dies, resigns, is removed or becomes disqualified.

Section 7 CAPITAL STOCK

7.1 Stock Certificates. Each stockholder shall be entitled to a certificate stating the number and the class and the designation of the series, if any, of the shares held by him, in such form as shall, in conformity to law, the certificate of incorporation and the by-laws, be prescribed from time to time by the board of directors. Such certificate shall be signed by (i) the chairperson of the

board of directors or the president or a vice-president and (ii) the treasurer or an assistant treasurer or the secretary or an assistant secretary. Any or all of the signatures on the certificate may be a facsimile. In case an officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent, or registrar at the time of its issue.

7.2 Lost Certificates. The board of directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the board of directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his legal representative, to advertise the same in such manner as it shall require and/or to give the corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

Section 8 TRANSFER OF SHARES OF STOCK

8.1 Transfer on Books. Subject to any restrictions with respect to the transfer of shares of stock, shares of stock may be transferred on the books of the corporation by the surrender to the corporation or its transfer agent of the certificate therefor properly endorsed or accompanied by a written assignment and power of attorney properly executed, with necessary transfer stamps affixed, and with such proof of the authenticity of signature as the board of directors or the transfer agent of the corporation may reasonably require. Except as may be otherwise required by law, by the certificate of incorporation or by these by-laws, the corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to receive notice and to vote or to give any consent with respect thereto and to be held liable for such calls and assessments, if any, as may lawfully be made thereon, regardless of any transfer, pledge or other disposition of such stock until the shares have been properly transferred on the books of the corporation.

It shall be the duty of each stockholder to notify the corporation of his post office address.

Section 9 GENERAL PROVISIONS

9.1 Record Date. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the board of directors may fix, in advance, a record date, which shall not be more than sixty days nor less than ten days before the date of such meeting, nor more than sixty days prior to any other action to which such record date relates. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting. If no record date is fixed,

(a) The record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held;

(b) The record date for determining stockholders entitled to express consent to corporate action in writing without a meeting, when no prior action by the board of directors is necessary, shall be the day on which the first written consent is expressed; and

(c) The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating to such purpose.

9.2 Dividends. Dividends upon the capital stock of the corporation may be declared by the board of directors at any regular or special meeting or by written consent, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the certificate of incorporation.

9.3 Payment of Dividends. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the directors shall think conducive to the interest of the corporation, and the directors may modify or abolish any such reserve in the manner in which it was created.

9.4 Checks. All checks or demands for money and notes of the corporation shall be signed by such officer or officers or such other person or persons as the board of directors may from time to time designate.

9.5 Fiscal Year. The fiscal year of the corporation shall begin on the first of January in each year and shall end on the last day of December next following, unless otherwise determined by the board of directors.

9.6 Seal. The board of directors may, by resolution, adopt a corporate seal. The corporate seal shall have inscribed thereon the name of the corporation, the year of its organization and the word “Delaware.” The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise. The seal may be altered from time to time by the board of directors.

Section 10 INDEMNIFICATION

10.1 It being the intent of the corporation to provide maximum protection available under the law to its officers and directors, the corporation shall indemnify its officers and directors to the full extent the corporation is permitted or required to do so by the Delaware General Corporation Law. In furtherance of and not in limitation of the foregoing, the corporation shall advance expenses, including attorneys’ fees, incurred by an officer or director of the corporation in defending any civil, criminal, administrative or investigative action, suit or proceeding in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or

officer to repay such advances if it shall ultimately be determined that he is not entitled to be indemnified by the corporation. The corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or who is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation has the power to indemnify such person under the Delaware General Corporation Law. Notwithstanding the foregoing, the Corporation shall not be required to indemnify or advance expenses to any person in connection with any action, suit, proceeding, claim or counterclaim initiated by or on behalf of such person.

Section 11 AMENDMENTS

11.1 These by-laws may be altered, amended or repealed or new by-laws may be adopted by the stockholders or by the board of directors when such power is conferred upon the board of directors by the certificate of incorporation, at any regular meeting of the stockholders or of the board of directors or at any special meeting of the stockholders or of the board of directors. If the power to adopt, amend or repeal by-laws is conferred upon the board of directors by the certificate of incorporation, it shall not divest or limit the power of the stockholders to adopt, amend or repeal by-laws.

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of the 12th day of May, 2020, by and among Seer, Inc., a Delaware corporation (the "**Company**"), each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**," and each of the stockholders listed on Schedule B hereto, each of whom is referred to herein as a "**Key Holder**" and any Additional Purchaser (as defined in the Purchase Agreement) that becomes a party to this Agreement in accordance with Section 6.9 hereof.

RECITALS

WHEREAS, certain of the Investors (the "**Existing Investors**") hold shares of the Company's Preferred Stock and/or shares of Common Stock issued upon conversion thereof and possess registration rights, information rights, rights of first offer and other rights pursuant to that certain Amended and Restated Investors' Rights Agreement dated as of November 15, 2019, by and among the Company and such Existing Investors (the "**Prior Agreement**");

WHEREAS, the Existing Investors are holders of at least a majority of the Registrable Securities of the Company (as defined in the Prior Agreement), and desire to amend and restate the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain of the Investors are parties to that certain Series D-1 Preferred Stock Purchase Agreement of even date herewith by and among the Company and such Investors (the "**Purchase Agreement**"), under which certain of the Company's and such Investors' obligations are conditioned upon the execution and delivery of this Agreement by such Investors, Existing Investors holding at least a majority of the Registrable Securities and the Company;

NOW, THEREFORE, the Existing Investors hereby agree that the Prior Agreement shall be amended and restated as follows and the parties to this Agreement further agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund or other investment fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company or investment adviser with, such Person.

1.2 "**Board of Directors**" means the board of directors of the Company.

1.3 "**Class A Common Stock"** means shares of the Company's Class A common stock, $0.00001 par value per share.

1.4 "**Class B Common Stock**" means shares of the Company's Class B common stock, $0.00001 par value per share.

1.5 "**Common Stock**" means, collectively, shares of Class A Common Stock and Class B Common Stock.

1.6 "**Competitor**" means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in proteomics measurement combined with a data platform to draw inference, but shall not include any financial investment firm or collective investment vehicle that, together with its Affiliates, holds less than twenty percent (20)% of the outstanding equity of any Competitor and does not, nor do any of its Affiliates, have a right to designate any members of the Board of Directors of any Competitor.

1.7 "**Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.8 "**Derivative Securities**" means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly)**,** Common Stock, including options and warrants.

1.9 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.10 "**Excluded Registration**" means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.11 "**FOIA Party**" means a Person that, in the reasonable determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 ("**FOIA**"), any state public records access law, any state or other jurisdiction's laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.12 "**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.13 "**Form S-3**" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.14 "**Fully Diluted Capitalization**" means the sum of (i) the outstanding shares of Common Stock; (ii) the shares of Common Stock directly or indirectly issuable upon conversion or exchange of all outstanding securities directly or indirectly convertible into or exchangeable for Common Stock and the exercise of all outstanding options and warrants; and (iii) the shares of Common Stock reserved, but neither issued nor the subject of outstanding awards, under any equity incentive or similar plan of the Company.

1.15 "**GAAP**" means generally accepted accounting principles in the United States.

1.16 "**Holder**" means any holder of Registrable Securities who is a party to this Agreement.

1.17 "**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law, including, adoptive relationships, of a natural person referred to herein.

1.18 "**Initiating Holders**" means, collectively, Holders who properly initiate a registration request under this Agreement.

1.19 "**IPO**" means the Company's first underwritten public offering of its Common Stock under the Securities Act.

1.20 "**Key Employee**" means any executive-level employee (including, division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs or designs any Company Intellectual Property (as defined in the Purchase Agreement).

1.21 "**Major Investor**" means any Investor that, individually or together with such Investor's Affiliates, holds (i) at least 2,000,000 shares of Registrable Securities or (ii) shares of Registrable Securities representing at least 2.5% of the Fully Diluted Capitalization (in each case, as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.22 "**New Securities**" means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.23 "**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.24 "**Preferred Stock**" means, collectively, shares of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series D-1 Preferred Stock.

1.25 "**Registrable Securities**" means (i) the Class A Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, acquired by the Investors after the date hereof; and (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) and (ii) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.26 "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.27 "**Restricted Securities**" means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(b) hereof.

1.28 "**SEC**" means the Securities and Exchange Commission.

1.29 "**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

1.30 "**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

1.31 "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.32 "**Selling Expenses**" means all underwriting discounts, selling commissions and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

1.33 "**Preferred Director**" means any director of the Company that the holders of record of the Preferred Stock are entitled to elect pursuant to the Company's Certificate of Incorporation.

1.34 "**Series A Preferred Stock**" means shares of the Company's Series A Preferred Stock, par value $0.00001 per share.

1.35 "**Series B Preferred Stock**" means shares of the Company's Series B Preferred Stock, par value $0.00001 per share.

1.36 "**Series C Preferred Stock**" means shares of the Company's Series C Preferred Stock, par value $0.00001 per share.

1.37 "**Series D Preferred Stock**" means shares of the Company's Series D Preferred Stock, par value $0.00001 per share.

1.38 "**Series D-1 Preferred Stock**" means shares of the Company's Series D-1 Preferred Stock, par value $0.00001 per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) five (5) years after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of a majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to at least forty percent (40%) of the Registrable Securities then outstanding (or lesser percent if the anticipated aggregate offering price, net of Selling Expenses, would exceed $10,000,000), then the Company shall (x) within ten (10) days after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least thirty percent (30%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least $5,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the

Company's Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than ninety (90) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than twice in any twelve (12) month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such ninety (90) day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a) (i) during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected one registration pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Subsection 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d); provided, that if such withdrawal is during a period the Company has deferred taking action pursuant to Subsection 2.1(c), then the Initiating Holders may withdraw their request for registration and such registration will not be counted as "effected" for purposes of this Subsection 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Class A Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at

such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the

Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering or (ii) the number of Registrable Securities included in the offering be reduced below twenty percent (20%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company or corporation, the partners, members, retired partners, retired members, stockholders and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended for up to thirty (30) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration

statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall

have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed $35,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b), as the case may be; provided further, that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsection 2.1(a) or 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors and stockholders of each such Holder; legal counsel, accountants and investment advisers for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or

proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this

Subsection 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions or other actions that resulted in such loss, claim, damage, liability or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder (i) to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included; or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Subsection 6.9.

2.11 "Market Stand-off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO, and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto), (i) lend; offer; pledge; sell; contract to sell; sell any option or

contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for the IPO (for the avoidance of doubt, such agreement shall not apply to shares of Common Stock acquired by the Holder in the IPO or in the open market following the IPO) or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers and directors of the Company and all stockholders individually owning more than one percent (1%) of the Company's outstanding Common Stock (after giving effect to conversion into Class A Common Stock of all outstanding Preferred Stock) enter into similar agreements. The underwriters in connection with such registration are intended third-party beneficiaries of this Subsection 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements (or any Holder, officer, director or greater than 1% stockholder) by the Company or the underwriters shall apply to all Holders subject to such agreements to the same extent and with respect to the same percentage of securities as the highest percentage of securities released from any such agreements.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement. Notwithstanding the foregoing, the Company shall not require any transferee of shares pursuant to an effective registration statement or, following the IPO, SEC Rule 144 to be bound by the terms of this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend,

recapitalization, merger, consolidation or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be notated with a legend substantially in the following form:

> THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.
>
> THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction or, following the IPO, the transfer is made pursuant to SEC Rule 144, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that, other than in connection with a transaction in compliance with SEC Rule 144 following the IPO, each transferee agrees in writing to be subject to the terms of this Subsection 2.12, and provided further that in each case, the Holder shall provide the Company or its counsel with such certificates or other representations regarding such transaction as the Company or its counsel may reasonably request. Each certificate, instrument or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made

pursuant to SEC Rule 144 or pursuant to an effective registration statement, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate, instrument or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsections 2.1 or 2.2 shall terminate upon the earliest to occur of:

(a) the closing of a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation;

(b) following the IPO, such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration; and

(c) the third anniversary of the IPO.

3. Information and Observer Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor, provided that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company:

(a) as soon as practicable, but in any event not later than the first day of August of each calendar year (i) a balance sheet as of the end of the immediately preceding year, (ii) statements of income and of cash flows for such year, and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants of regionally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each year, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP); and

(c) upon request, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding as of the date of such request, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct;

(d) as soon as practicable, but in any event thirty (30) days before the end of each year, a budget and business plan for the next year (collectively, the "**Budget**"), prepared on a monthly basis, including balance sheets, income statements and statements of cash flow for such months and, promptly after prepared and approved by the Board of Directors, any other budgets or revised budgets prepared by the Company;

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date sixty (60) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Major Investor (provided that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company), at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Observer Rights.

(a) As long as Artal International S.C.A. (together with its affiliates, "**Artal**") owns not less than fifty percent (50%) of the shares of the Series B Preferred Stock it purchased under the Series B Preferred Stock Purchase Agreement dated March 23, 2018 (or an equivalent amount of Common Stock issued upon conversion thereof), the Company shall invite a representative of Artal to attend all meetings of the Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that such representative shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; provided further, that such representative may be excluded from attending any closed executive sessions of the Board of Directors if the Board of Directors reasonably determines that having such representative at such closed executive session would be detrimental to the Company; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such

information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a Competitor.

(b) As long as Aju Life Science 3.0 Venture Fund and Aju Good Venture Fund (together with their affiliates, "**Aju IB**") own in the aggregate not less than fifty percent (50%) of the shares of the Series C Preferred Stock purchased by Aju IB under the Series C Preferred Stock Purchase Agreement dated March 7, 2019 (or an equivalent amount of Common Stock issued upon conversion thereof), the Company shall invite a representative of Aju IB to attend all meetings of the Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that such representative shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; provided further, that such representative may be excluded from attending any closed executive sessions of the Board of Directors if the Board of Directors reasonably determines that having such representative at such closed executive session would be detrimental to the Company; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a Competitor.

(c) As long as aMoon 2 Fund, Limited Partnership (together with its affiliates, "**aMoon**") owns in the aggregate not less than fifty percent (50%) of the shares of the Series D Preferred Stock it is purchasing under the Purchase Agreement (or an equivalent amount of Common Stock issued upon conversion thereof), the Company shall invite a representative of aMoon to attend all meetings of the Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents and other materials that it provides to its directors at the same time and in the same manner as provided to such directors; provided, however, that such representative shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; provided further, that such representative may be excluded from attending any closed executive sessions of the Board of Directors if the Board of Directors reasonably determines that having such representative at such closed executive session would be detrimental to the Company; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a Competitor.

3.4 Termination of Information and Observer Rights. The covenants set forth in Subsection 3.1, Subsection 3.2 and Subsection 3.3 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act or

(iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, whichever event occurs first.

3.5 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.5 by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.5; (iii) to any existing Affiliate, partner, member, stockholder or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to (i) each Major Investor, (ii) each other Investor that, individually or together with such Investor's Affiliates, holds at least 100,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination or other recapitalization or reclassification effected after the date hereof) and (iii) each Key Holder (each a "**First Offer Participant**," and collectively, the "**First Offer Participants**"). A First Offer Participant shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate, among (i) itself and (ii) its Affiliates; provided that each such Affiliate (x) is not a Competitor or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board of Directors, (y) agrees to enter into this Agreement and each of the Amended and Restated Voting Agreement and Amended and Restated Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an "**Investor**" or "**Key Holder**," as applicable, under each such agreement (provided that, except as set forth in Section 5.7, any Competitor or FOIA Party shall not be entitled to any rights as a Major Investor under Subsections 3.1, 3.2 and 4.1 hereof), and (z) agrees to purchase at least such number of New Securities as are allocable hereunder to the First Offer Participant holding the fewest number of shares of Common Stock (including all shares of Class A Common Stock then issuable (directly

or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such First Offer Participant).

(a) The Company shall give notice (the "**Offer Notice**") to each First Offer Participant, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each First Offer Participant may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such First Offer Participant (including all shares of Class A Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such First Offer Participant) bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities). At the expiration of such twenty (20) day period, the Company shall promptly notify each First Offer Participant that elects to purchase or acquire all the shares available to it (each, a "**Fully Exercising Participant**") of any other First Offer Participant's failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Participant may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which First Offer Participants were entitled to subscribe but that were not subscribed for by the First Offer Participants which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Participant bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Participants who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the First Offer Participants in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Company's Certificate of Incorporation) and (ii) shares of Common Stock issued in the IPO.

4.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO or (ii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. The Company shall maintain, from a financially sound and reputable insurer, Directors and Officers liability insurance in an amount and on such other terms and conditions satisfactory to the Board of Directors, until such time as the Board of Directors determines that such insurance should be discontinued.

5.2 Employee Agreements. The Company will cause each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to proprietary information, confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement, substantially in the form approved by the Board of Directors.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following thirty-six (36) months, and (ii) a market stand-off provision substantially similar to that in Subsection 2.11. In addition, unless otherwise approved by the Board of Directors, the Company shall retain a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse the nonemployee directors and observers for all reasonable expenses in their services as a nonemployee director or an observer including out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors.

5.5 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are

contained in the Company's Bylaws, its Certificate of Incorporation or elsewhere, as the case may be.

5.6 Indemnification Matters. The Company hereby acknowledges that one (1) or more of the directors nominated to serve on the Board of Directors by the Investors including the Preferred Director (each a "**Fund Director**") may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their affiliates (collectively, the "**Fund Indemnitors**"). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Fund Director are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Fund Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Fund Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Fund Director to the extent legally permitted and as required by the Company's Certificate of Incorporation or Bylaws of the Company (or any agreement between the Company and such Fund Director), without regard to any rights such Fund Director may have against the Fund Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of any such Fund Director with respect to any claim for which such Fund Director has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Fund Director against the Company.

5.7 Right to Conduct Activities.

(a) The Company hereby agrees and acknowledges that Maverick Advisors Fund, L.P. and Maverick Ventures Investment Fund, L.P. (together with its affiliates, "**Maverick**") are professional investment funds, and as such invest in numerous portfolio companies, some of which may be deemed competitive with the Company's business (as currently conducted or as currently propose to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, Maverick shall not be liable to the Company for any claim arising out of, or based upon, (i) the investment by Maverick in any entity competitive with the Company or (ii) actions taken by any partner, officer or other representative of Maverick to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

(b) The Company hereby agrees and acknowledges that Artal is a professional investment fund, and as such invests in numerous portfolio companies, some of which may be deemed competitive with the Company's business (as currently conducted or as

currently propose to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, Artal shall not be liable to the Company for any claim arising out of, or based upon, (i) the investment by Artal in any entity competitive with the Company or (ii) actions taken by any partner, officer or other representative of Artal to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company. Notwithstanding anything to the contrary in this Agreement, Artal shall retain its rights under Sections 3.1, 3.2 and 4.1 of this Agreement regardless of whether Artal or any of its Affiliates is a Competitor.

(c) The Company hereby agrees and acknowledges that Aju IB are professional investment funds, and as such invest in numerous portfolio companies, some of which may be deemed competitive with the Company's business (as currently conducted or as currently propose to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, Aju IB shall not be liable to the Company for any claim arising out of, or based upon, (i) the investment by Aju IB in any entity competitive with the Company or (ii) actions taken by any partner, officer or other representative of Aju IB to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

(d) The Company hereby agrees and acknowledges that aMoon is a professional investment fund, and as such invests in numerous portfolio companies, some of which may be deemed competitive with the Company's business (as currently conducted or as currently proposed to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, aMoon shall not be liable to the Company for any claim arising out of, or based upon, (i) the investment by aMoon in any entity competitive with the Company or (ii) actions taken by any partner, officer or other representative of aMoon to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

(e) The Company hereby agrees and acknowledges that each Fidelity Investor (as defined below) (together with its Affiliates) is a professional investment fund, and as

such invests in numerous portfolio companies, some of which may be deemed competitive with the Company's business (as currently conducted or as currently proposed to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, no Fidelity Investor (or any of its Affiliates) shall be liable to the Company for any claim arising out of, or based upon, (i) the investment by any Fidelity Investor (or any of its Affiliates) in any entity competitive with the Company or (ii) actions taken by any partner, officer or other representative of any Fidelity Investor to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Fidelity Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company. "**Fidelity Investors**" shall mean any Investors advised or subadvised by Fidelity Management & Research Company or one of its Affiliates.

5.8 Termination of Covenants. The covenants set forth in this Section 5, except for Subsection 5.6, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO or (ii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by (i) a Holder to a transferee of Registrable Securities that (A) is an Affiliate of a Holder or (B) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members or (ii) a Major Investor to a transferee of all of the Registrable Securities held by such Major Investor; provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware.

6.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes**.**

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A or Schedule B (as applicable) hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5. If notice is given to the Company, a copy shall also be sent to Wilson Sonsini Goodrich & Rosati, P.C., 650 Page Mill Road, Palo Alto, California 94304, Attention: Tony Jeffries, and if notice is given to the Investors, a copy shall also be given to Cooley LLP, 3175 Hanover Street, Palo Alto, California 94306, Attention: Kevin Rooney; Patterson Belknap Webb and Tyler LLP, 1133 Avenue of the Americas, New York, New York 10036, Attention: Peter Schaeffer; Morgan, Lewis & Bockius LLP, One Federal Street, Boston, MA 02110-1726; Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, 550 Allerton Street, Redwood City, CA 94063, Attention: Andy Bradley; Attention: James P. Carrigan; Naschitz Brandes Amir & Co., 5 Tuval St. Tel Aviv, Israel, Attention: Asher Assis, Adv., and Inbar Mishory Bartal, Adv and Greenberg Traurig, LLP, One International Place, Suite 2000, Boston, MA 02110, Attention: Bradley A. Jacobson.

6.6 Amendments and Waivers. Any term of this Agreement may be amended, or terminated and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of at least a majority of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing,

this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction, provided however, absent the consent or approval of an adversely affected non-waiving Major Investor who desires to purchase securities in such transaction, any waiver with the effect of reducing the number of New Securities such Major Investor may purchase pursuant to Section 4.1 in any Company financing must proportionately reduce the number of New Securities all other Major Investors may purchase pursuant to Section 4.1 or otherwise in such financing). Further, this Agreement may not be amended, and no provision hereof may be waived, in each case, in any way which would adversely affect the rights of the Key Holders hereunder in a manner disproportionate to any adverse effect such amendment or waiver would have on the rights of the Investors hereunder, without also the written consent of the holders of at least a majority of the shares of Common Stock (including shares of Class A Common Stock issued or issuable upon conversion of Preferred Stock) held by the Key Holders. The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision. Notwithstanding anything to the contrary in this Section 6.6 or otherwise in this Agreement, Sections 3.3(a) and 5.7(b) of this Agreement shall not be amended or waived without the written consent of Artal. Notwithstanding anything to the contrary in this Section 6.6 or otherwise in this Agreement, Section 5.7(c) of this Agreement shall not be amended or waived without the written consent of Aju IB. Notwithstanding anything to the contrary in this Section 6.6 or otherwise in this Agreement, Section 5.7(a) of this Agreement shall not be amended or waived without the written consent of Maverick. Notwithstanding anything to the contrary in this Section 6.6 or otherwise in this Agreement, Sections 3.3(c) and 5.7(d) of this Agreement shall not be amended or waived without the written consent of aMoon. Notwithstanding anything to the contrary in this Section 6.6 or otherwise in this Agreement, Section 5.7(e) of this Agreement shall not be amended or waived without the written consent of the Fidelity Investors.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability

of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof, any purchaser of such shares of Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.

6.11 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of the State of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of the State of Delaware or the United States District Court for the District of Delaware and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

Waiver of Jury Trial: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND

VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

The prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

6.12 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

COMPANY:

SEER, INC.

By: /s/ Omid Farokhzad
Name: Omid Farokhzad
Title: Chief Executive Officer

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

FIDELITY MT. VERNON STREET TRUST:
FIDELITY GROWTH COMPANY FUND

By: /s/ Stacie Smith
Name: Stacie Smith
Title: Authorized Signatory

FIDELITY MT. VERNON STREET TRUST:
FIDELITY SERIES GROWTH COMPANY FUND

By: /s/ Stacie Smith
Name: Stacie Smith
Title: Authorized Signatory

FIDELITY GROWTH COMPANY
COMMINGLED POOL

By: Fidelity Management Trust Company, as
Trustee

By: /s/ Stacie Smith
Name: Stacie Smith
Title: Authorized Signatory

FIDELITY MT. VERNON STREET TRUST:
FIDELITY GROWTH COMPANY K6 FUND

By: /s/ Stacie Smith
Name: Stacie Smith
Title: Authorized Signatory

FIDELITY SELECT PORTFOLIOS: SELECT
MEDICAL TECHNOLOGY AND DEVICES
PORTFOLIO

By: /s/ Stacie Smith
Name: Stacie Smith
Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

AJU LIFE SCIENCE 3.0 VENTURE FUND
C/O AJU IB INVESTMENT

By: /s/ Ji-won Kim
Name: Ji-won Kim
Title: CEO

AJU GOOD VENTURE FUND
C/O AJU IB INVESTMENT

By: /s/ Ji-won Kim
Name: Ji-won Kim
Title: CEO

AMOON 2 FUND LIMITED PARTNERSHIP

By: aMoon 2 Fund G.P. Limited Partnership
its general partner

By: aMoon General Partner Ltd.
its general partner

By: /s/ Tomer Berkovitz
Name: Tomer Berkovitz
Title: Partner & CFO

AMOON CO-INVESTMENT SPV I, LIMITED PARTNERSHIP

By: aMoon 2 Fund G.P. Limited Partnership
its general partner

By: aMoon General Partner Ltd.
its general partner

By: /s/ Tomer Berkovitz
Name: Tomer Berkovitz
Title: Partner & CFO

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

EMERSON COLLECTIVE INVESTMENTS, LLC

By: /s/ Steve McDermid
Name: Steve McDermid
Title: Authorized Signatory

HBM HEALTHCARE INVESTMENTS (CAYMAN) LTD.

By: /s/ Jean-Marc LeSieur
Name: Jean-Marc LeSieur
Title: Director

HBM GENOMICS LTD.

By: /s/ Saeid Akhtari
Name: Saeid Akhtari
Title: Managing Director

INVUS PUBLIC EQUITIES, L.P.

By: /s/ Raymond Debbane
Name: Raymond Debbane
Title: President of the General Partner

SOULBRAIN CO., LTD.

By: /s/ Kang Byung Chang
Name: Kang Byung Chang
Title: CEO

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

MAVERICK VENTURES INVESTMENT FUND, L.P.

By: Maverick Capital Ventures, LLC,
its General Partner

By: Maverick Capital Advisors, L.P.,
its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

MAVERICK ADVISORS FUND, L.P.

By: Maverick Capital Ventures, LLC,
its General Partner

By: Maverick Capital Advisors, L.P.,
its Manager

By: /s/ Ginessa Avila
Name: Ginessa Avila
Title: Authorized Signatory

T. Rowe Price Health Sciences Fund, Inc.
TDMutualFunds-TDHealthSciencesFund
VALICCompany I -Health SciencesFund
T.RowePriceHealthSciencesPortfolio
Each account, severally and not jointly

By: T. Rowe Price Associates, Inc., Investment
Adviser or Subadviser, as applicable

By: /s/ Andrew Baek
Name: Andrew Baek
Title: Vice President

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

WING TWO, LP.
for itself and as nominee for
Wing Principals Two, L.P. and
Wing Strategic Partners Two, L.P.

By: Wing Ventures II, L.L.C.,
its general partner

By: /s/ Hillary Swain
Chief Financial Officer

2003 MA FAMILY LIVING TRUST

By: /s/ Philip Ma
Name: Philip Ma
Title: Trustee

DYNAMICS GROUP LLC

By: /s/ Omid Farokhzad
Name: Omid Farokhzad
Title: Member

ROBERT LANGER

/s/ Robert Langer

PHILIP MA

/s/ Philip Ma

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

OCF TRUST

By: J.P. Morgan Trust Company of Delaware as Trustee

Signature: /s/ Sean M. Becker
Name: Sean M. Becker
Title: Trust Officer

SAF-BND TRUST

Signature: /s/ Shadi Aryanpour-Farokhzad
Name: Shadi Aryanpour-Farokhzad
Title: Trustee

STRONG BRIDGE, LLC

Signature: /s/ Terry McGuire
Name: Terry McGuire
Title: Partner

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

KEY HOLDERS:

2003 MA FAMILY LIVING TRUST

By: /s/ Philip Ma
Name: Philip Ma
Title: Trustee

DYNAMICS GROUP LLC

By: /s/ Omid Farokhzad
Name: Omid Farokhzad
Title: Member

OMID FAROKHZAD

/s/ Omid Farokhzad

ROBERT LANGER

/s/ Robert Langer

PHILIP MA

/s/ Philip Ma

OCF TRUST

By: J.P. Morgan Trust Company of Delaware as Trustee

Signature: /s/ Sean M. Becker
Name: Sean M. Becker
Title: Trust Officer

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

KEY HOLDERS:

SAF-BND TRUST

Signature: /s/ Shadi Aryanpour-Farokhzad
Name: Shadi Aryanpour-Farokhzad
Title: Trustee

SCHEDULE A

Investors

Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund
BNY Mellon
One BNY Mellon Center
500 Grant Street AIM 151-2700
Pittsburgh, Pa 15258

Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund
Mag & Co.
c/o Brown Brothers Harriman & Co.
Attn: Corporate Actions /Vault
140 Broadway
New York, NY 10005

Fidelity Growth Company Commingled Pool
Mag & Co.
c/o Brown Brothers Harriman & Co.
Attn: Corporate Actions /Vault
140 Broadway
New York, NY 10005

Fidelity Mt. Vernon Street Trust: Fidelity Growth Company K6 Fund
BNY Mellon
One BNY Mellon Center
500 Grant Street AIM 151-2700
Pittsburgh, Pa 15258

Fidelity Select Portfolios: Select Medical Technology and Devices Portfolio
Mag & Co.
c/o Brown Brothers Harriman & Co.
Attn: Corporate Actions /Vault
140 Broadway
New York, NY 10005

Aju Life Science 3.0 Venture Fund
201 Teheran-ro, 5th floor
Gangnam-gu, Seoul, Korea 06141

Aju Good Venture Fund
201 Teheran-ro, 5th floor
Gangnam-gu, Seoul, Korea 06141

aMoon 2 Fund, Limited Partnership
aMoon Co-Investment SPV I, L.P.
34 Yerushalaim Rd,
Beit Gamla, 6th Floor,
Ra'anana, 4350110
Israel

Invus Public Equities, L.P.
C/O The Invus Group, LLC
750 Lexington Avenue
New York, NY 10022
Att'n: Raymond Debbane
With a cc to: Philippe Amouyal

Emerson Collective Investments, LLC

Maverick Advisors Fund, L.P.
c/o Maverick Capital, Ltd.
1900 N. Pearl Street, 20th Floor
Dallas, TX 75201
Attn: General Counsel

Maverick Ventures Investment Fund, L.P.
c/o Maverick Capital, Ltd.
1900 N. Pearl Street, 20th Floor
Dallas, TX 75201
Attn: General Counsel

T. Rowe Price Health Sciences Fund, Inc.
TD Mutual Funds - TD Health Sciences Fund
VALIC Company I - Health Sciences Fund
T. Rowe Price Health Sciences Portfolio
c/o T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel

Dynamics Group LLC

Robert S. Langer, Jr.

Philip Ma

Soulbrain Co., Ltd.
34, Pangyo-Ro 255 Beon-Gil, Bundang-Gu
Seongnam-Si, Gyenggi-Do, Republic of Korea
Attn: Dr. Nam Huh

Strong Bridge, LLC
c/o North Star Advisors, LLC
880 Winter Street, Suite 350
Waltham, MA 02451

Mostafa Ronaghi

HBM Genomics Ltd.
Governors Square, Suite #4-212-2
23 Lime Tree Bay Avenue
West Bay
Grand Cayman, Cayman Islands

HBM Healthcare Investments (Cayman) Ltd.
Governors Square, Suite #4-212-2
23 Lime Tree Bay Avenue
West Bay
Grand Cayman, Cayman Islands

Omead Ostadan

David Epstein

WS Investment Company, LLC (2017A)
Attn: James Terranova
c/o Wilson Sonsini Goodrich & Rosati
650 Page Mill Road
Palo Alto, CA 94304

WS Investment Company, LLC (2018A)
Attn: James Terranova
c/o Wilson Sonsini Goodrich & Rosati
650 Page Mill Road
Palo Alto, CA 94304

Alfred Sandrock

R. Randolph Scott

2003 Ma Family Living Trust

OCF 2014 Trust

SAF-BND Trust

Wing Two, L.P.
480 Lytton Avenue
Palo Alto, CA 94301

Global AG Investments LLC
c/o 1928 Alcova Ridge Dr.
Las Vegas, NV 89135

Leslie Hellewell

SCHEDULE B

Key Holders

Omid Farokhzad

Robert S. Langer, Jr.

Philip Ma

Dynamics Group LLC

2003 Ma Family Living Trust

OCF 2014 Trust

SAF-BND Trust

SEER BIOSCIENCES, INC.

2017 Stock Incentive Plan

1. Purpose.

The purpose of this plan (the "Plan") is to secure for Seer Biosciences, Inc., a Delaware corporation (the "Company") and its shareholders the benefits arising from capital stock ownership by employees, officers and directors of, and consultants or advisors to, the Company and its parent and subsidiary corporations who are expected to contribute to the Company's future growth and success. Under the Plan recipients may be awarded both (i) Options (as defined in Section 2.1) to purchase the Company's Class A Common Stock, par value $0.00001 per share ("Class A Common Stock"), and (ii) shares of Class A Common Stock ("Restricted Stock Awards"). Except where the context otherwise requires, the term "Company" shall include any parent and all present and future subsidiaries of the Company as defined in Sections 424(e) and 424(f) of the Internal Revenue Code of 1986, as amended or replaced from time to time (the "Code"). Those provisions of the Plan which make express reference to Section 422 of the Code shall apply only to Incentive Stock Options (as that term is defined below).

2. Types of Awards and Administration.

2.1 **Options.** Options granted pursuant to the Plan ("Options") shall be authorized by action of the Board of Directors of the Company (the "Board" or "Board of Directors") and may be either incentive stock options ("Incentive Stock Options") meeting the requirements of Section 422 of the Code or non-statutory Options which are not intended to meet the requirements of Section 422. All Options when granted are intended to be non-statutory Options, unless the applicable Option Agreement (as defined in Section 5.1) explicitly states that the Option is intended to be an Incentive Stock Option. The vesting of Options may be conditioned upon the completion of a specified period of employment with the Company and/or such other conditions or events as the Board may determine. The Board may also provide that Options are immediately exercisable subject to certain repurchase rights in the Company dependent upon the continued employment of the optionee and/or such other conditions or events as the Board may determine.

2.1.1 **Incentive Stock Options.** Incentive Stock Options may only be granted to employees of the Company. For so long as the Code shall so provide, Options granted to any employee under the Plan (and any other incentive stock option plans of the Company) which are intended to constitute Incentive Stock Options shall not constitute Incentive Stock Options to the extent that such Options, in the aggregate, become exercisable for the first time in any one calendar year for shares of Class A Common Stock with an aggregate fair market value (determined as of the respective date or dates of grant) of more than $100,000. If an Option is intended to be an Incentive Stock Option, and if for any reason such Option (or any portion thereof) shall not qualify as an Incentive Stock Option, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a non-statutory Option appropriately granted under the Plan provided that such Option (or portion thereof) otherwise meets the Plan's requirements relating to non-statutory Options.

2.2 **Restricted Stock Awards.** The Board in its discretion may grant Restricted Stock Awards, entitling the recipient to acquire, for a purchase price determined by the Board, shares of Class A Common Stock subject to such restrictions and conditions as the Board may determine at the time of grant ("Restricted Stock"), including continued employment and/or achievement of pre-established performance goals and objectives.

2.3 **Administration.** The Plan shall be administered by the Board, whose construction and interpretation of the terms and provisions of the Plan shall be final and conclusive. The Board may in its sole discretion authorize issuance of Restricted Stock, the grant of Options and the issuance of shares upon exercise of such Options as provided in the Plan. The Board shall have authority, subject to the express provisions of the Plan, to construe Restricted Stock Agreements, Option Agreements and the Plan, to prescribe, amend and rescind rules and regulations relating to the Plan, to determine the terms and provisions of Restricted Stock Agreements and Option Agreements, and to make all other determinations in the judgment of the Board necessary or desirable for the administration of the Plan. The Board may correct any defect or supply any omission or reconcile any inconsistency in the Plan or in any Restricted Stock Agreement or Option Agreement in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. No director or person acting pursuant to authority delegated by the Board shall be liable for any action or determination under the Plan made in good faith. The Board may, to the full extent permitted by or consistent with applicable laws or regulations, delegate any or all of its powers under the Plan to a committee (the "Committee") appointed by the Board, and if the Committee is so appointed, to the extent of such delegation, all references to the Board in the Plan shall mean and relate to such Committee, other than references to the Board in this sentence and in Section 18 (as to amendment or termination of the Plan) and Section 22.

3. Eligibility.

Options may be granted, and Restricted Stock may be issued, to persons who are, at the time of such grant or issuance, employees, officers or directors of, or consultants or advisors to, the Company; *provided*, that the class of persons to whom Incentive Stock Options may be granted shall be limited to employees of the Company.

3.1 **10% Shareholder**. If any employee to whom an Incentive Stock Option is to be granted is, at the time of the grant of such Option, the owner of stock possessing more than 10% of the total combined voting power of all classes of stock of the Company (after taking into account the attribution of stock ownership rules of Section 424(d) of the Code) (a "Greater Than 10% Shareholder"), any Incentive Stock Option granted to such individual must: (i) have an exercise price per share of not less than 110% of the fair market value of one share of Class A Common Stock at the time of grant; and (ii) expire by its terms not more than five years from the date of grant.

4. Stock Subject to Plan.

Subject to adjustment as provided in Section 14.2 below, the maximum number of shares of Class A Common Stock which may be issued under the Plan is 25,283,351 shares, all of

which may be issued with respect to Incentive Stock Options. If an Option shall expire or terminate for any reason without having been exercised in full, the unpurchased shares subject to such Option shall again be available for subsequent Option grants or Restricted Stock Awards under the Plan. If shares of Restricted Stock shall be forfeited to, or otherwise repurchased by, the Company pursuant to a Restricted Stock Agreement, such repurchased shares shall again be available for subsequent Option grants or Restricted Stock Awards under the Plan. If shares otherwise issuable upon exercise of an Option are withheld by the Company in payment of the exercise price of an Option or to satisfy tax withholding obligations with respect to such exercise, such withheld shares shall again be available for subsequent Option grants or Restricted Stock Awards under the Plan.

5. Forms of Restricted Stock Agreements and Option Agreements.

5.1 **Option Agreement.** Each recipient of an Option shall execute an option agreement ("Option Agreement") in such form not inconsistent with the Plan as may be approved by the Board of Directors. Such Option Agreements may differ among recipients.

5.2 **Restricted Stock Agreement.** Each recipient of a grant of Restricted Stock shall execute an agreement ("Restricted Stock Agreement") in such form not inconsistent with the Plan as may be approved by the Board of Directors. Such Restricted Stock Agreements may differ among recipients.

5.3 **"Lock-Up" Agreement.** Unless the Board specifies otherwise, each Restricted Stock Agreement and Option Agreement shall provide that upon the request of the Company or the managing underwriter(s) of any offering of securities of the Company that is the subject of a registration statement filed under the United States Securities Act of 1933, as amended from time to time (the "Act"), the holder of any Option or the purchaser of any Restricted Stock shall, in connection therewith, agree in writing (in such form as the Company or such managing underwriter(s) shall request) to the general effect that for a period of time (not to exceed 180 days) from the effective date of the registration statement under the Act for such offering, the holder or purchaser will not sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any shares of the common stock of the Company owned or controlled by him or her.

6. Purchase Price.

6.1 **General.** The purchase price per share of Restricted Stock and per share of stock deliverable upon the exercise of an Option shall be determined by the Board, provided, however, that in the case of any Option, the exercise price shall not be less than 100% of the fair market value of such stock, as determined by the Board, at the time of grant of such Option, or less than 110% of such fair market value in the case of any Incentive Stock Option granted to a Greater Than 10% Shareholder.

6.2 **Payment of Purchase Price.** Option Agreements may provide for the payment of the exercise price by delivery of cash or a check to the order of the Company in an

amount equal to the exercise price of such Options, or, to the extent provided in the applicable Option Agreement, by one of the following methods:

(i) with the consent of the Board, by delivery to the Company of shares of the Company's common stock; such surrendered shares shall have a fair market value equal in amount to the exercise price of the Options being exercised,

(ii) with the consent of the Board, a personal recourse note issued by the optionee to the Company in a principal amount equal to such aggregate exercise price and with such other terms, including interest rate and maturity, as the Company may determine in its discretion; provided, however, that the interest rate borne by such note shall not be less than the lowest applicable federal rate, as defined in Section 1274(d) of the Code,

(iii) with the consent of the Board, if the Class A Common Stock is registered under the Securities Exchange Act of 1934 at such time, subject to rules as may be established by the Board, by delivery to the Company of a properly executed exercise notice along with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company for the purchase price,

(iv) with the consent of the Board, by reducing the number of Option shares otherwise issuable to the optionee upon exercise of the Option by a number of shares of Class A Common Stock having a fair market value equal to such aggregate exercise price,

(v) with the consent of the Board, by any combination of such methods of payment.

The fair market value of any shares of Class A Common Stock or other non-cash consideration which may be delivered upon exercise of an Option shall be determined by the Board of Directors. Restricted Stock Agreements may provide for the payment of any purchase price in any manner approved by the Board of Directors at the time of authorizing the issuance thereof.

7. Option Period.

Notwithstanding any other provision of the Plan or any Option Agreement, each Option and all rights thereunder shall expire on the date specified in the applicable Option Agreement, provided that such date shall not be later than ten years after the date on which the Option is granted (or five years in the case of an Incentive Stock Option granted to a Greater Than 10% Shareholder), and in either case, shall be subject to earlier termination as provided in the Plan or Option Agreement.

8. Exercise of Options.

8.1 **General.** Each Option shall be exercisable either in full or in installments at such time or times and during such period as shall be set forth in the Option Agreement evidencing such Option, subject to the provisions of the Plan. To the extent not exercised, installments shall accumulate and be exercisable, in whole or in part, at any time after becoming exercisable, but not later than the date the Option expires.

8.2 **Notice of Exercise.** An Option may be exercised by the optionee by delivering to the Company on any business day a written notice specifying the number of shares of Class A Common Stock the optionee then desires to purchase and specifying the address to which the certificates for such shares are to be mailed (the "Notice"), accompanied by payment for such shares. In addition, the Company may require any individual to whom an Option is granted, as a condition of exercising such Option, to give written assurances (the "Investment Letter") in a substance and form satisfactory to the Company to the effect that such individual is acquiring the Class A Common Stock subject to the Option for his or her own account for investment and not with a view to the resale or distribution thereof, and to such other effects as the Company deems necessary or advisable in order to comply with any securities law(s).

8.3 **Delivery.** As promptly as practicable after receipt of the Notice, the Investment Letter (if required) and payment, the Company shall deliver or cause to be delivered to the optionee certificates for the number of shares with respect to which such Option has been so exercised, issued in the optionee's name; provided, however, that such delivery shall be deemed effected for all purposes when the Company or a stock transfer agent shall have deposited such certificates in the United States mail, addressed to the optionee, at the address specified in the Notice.

9. Nontransferability of Options.

No Option shall be assignable or transferable by the person to whom it is granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution. During the life of an optionee, an Option shall be exercisable only by the optionee.

10. Termination of Employment; Disability; Death. Except as may be otherwise expressly provided in the terms and conditions of the Option Agreement, Options shall terminate on the earliest to occur of:

(i) the date of expiration thereof;

(ii) immediately upon termination of the optionee's employment with, or provision of services to, the Company by the Company for Cause (as hereinafter defined);

(iii) 90 days after the date of voluntary termination of the optionee's employment with, or provision of services to, the Company by the

optionee (other than for death or permanent disability as defined below); or

(iv) 90 days after the date of termination of the optionee's employment with, or provision of services to, the Company by the Company without Cause (other than for death or permanent disability as defined below).

Until the date on which the Option so expires, the optionee may exercise that portion of his or her Option which is exercisable at the time of termination of the employment or service relationship.

An employment or service relationship between the Company and the optionee shall be deemed to exist during any period during which the optionee is employed by or providing services to the Company. Whether an authorized leave of absence or an absence due to military or government service shall constitute termination of the employment relationship between the Company and the optionee shall be determined by the Board at the time thereof.

For purposes of this Section 10, the term "Cause" shall mean (a) any material breach by the optionee of any agreement to which the optionee and the Company are both parties, (b) any act (other than retirement) or omission to act by the optionee which may have a material and adverse effect on the Company's business or on the optionee's ability to perform services for the Company, including, without limitation, the commission of any crime (other than minor traffic violations), or (c) any material misconduct or material neglect of duties by the optionee in connection with the business or affairs of the Company. An optionee's employment shall be deemed to have been terminated for Cause if the Company determines within thirty (30) days of the termination of employment (whether such termination was voluntary or involuntary) that termination for Cause was warranted.

In the event of the permanent and total disability or death of an optionee while in an employment or other relationship with the Company, any Option held by such optionee shall terminate on the earlier of the date of expiration of the Option or 180 days following the date of such disability or death. After disability or death, the optionee (or in the case of death, his or her executor, administrator or any person or persons to whom this option may be transferred by will or by laws of descent and distribution) shall have the right, at any time prior to such termination of an Option , to exercise the Option to the extent the optionee was entitled to exercise such Option as of the date of his or her disability or death. An optionee is permanently and totally disabled if he or she is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to last for a continuous period of not less than 12 months; permanent and total disability shall be determined in accordance with Section 22(e)(3) of the Code and the regulations issued thereunder.

11. Rights as a Shareholder. The holder of an Option shall have no rights as a shareholder with respect to any shares covered by the Option (including, without limitation, any rights to receive dividends or non-cash distributions with respect to such shares) until the date of issue of a stock certificate to him or her for such shares. No adjustment shall be made for

dividends or other rights for which the record date is prior to the date such stock certificate is issued.

12. Additional Provisions. The Board of Directors may, in its sole discretion, include additional provisions in Restricted Stock Agreements and Option Agreements, including, without limitation, restrictions on transfer, rights of the Company to repurchase shares of Restricted Stock or shares of Class A Common Stock acquired upon exercise of Options, commitments to pay cash bonuses, to make, arrange for or guaranty loans or to transfer other property to optionees upon exercise of Options, or such other provisions as shall be determined by the Board of Directors; *provided that* such additional provisions shall not be inconsistent with any other term or condition of the Plan and such additional provisions shall not be such as to cause any Incentive Stock Option to fail to qualify as an Incentive Stock Option within the meaning of Section 422 of the Code.

13. Acceleration, Extension, Etc. The Board of Directors may, in its sole discretion, (i) accelerate the date or dates on which all or any particular Option or Options may be exercised or (ii) extend the period or periods of time during which all, or any particular, Option or Options may be exercised.

14. Adjustment Upon Changes in Capitalization

14.1 **No Effect of Options upon Certain Corporate Transactions.** The existence of outstanding Options shall not affect in any way the right or power of the Company to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company's capital structure or its business, or any merger or consolidation, or any issue of Class A Common Stock, or any issue of bonds, debentures, preferred or prior preference stock ahead of or affecting the Class A Common Stock or the rights thereof, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

14.2 **Adjustment Provisions.** If, through or as a result of any merger, consolidation, sale of all or substantially all of the assets of the Company, reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar transaction, (i) the outstanding shares of Class A Common Stock are increased, decreased or exchanged for a different number or kind of shares or other securities of the Company, or (ii) additional shares or new or different shares or other securities of the Company or other non-cash assets are distributed with respect to such shares of Class A Common Stock or other securities, an appropriate and proportionate adjustment shall be made in (x) the maximum number and kind of shares reserved for issuance under the Plan, (y) the number and kind of shares or other securities subject to any then outstanding Options, and (z) the price for each share or other security subject to any then outstanding Options, so that upon exercise of such Options, in lieu of the shares of Class A Common Stock for which such Options were then exercisable, the relevant optionee shall be entitled to receive, for the same aggregate consideration, the same total number and kind of shares or other securities, cash or property that the owner of an equal number of outstanding shares of Class A Common Stock immediately prior to the event requiring adjustment would own as a result of the event. If any such event shall occur, appropriate

adjustment shall also be made in the application of the provisions of this Section 14 and Section 15 with respect to Options and the rights of optionees after the event so that the provisions of such Sections shall be applicable after the event and be as nearly equivalent as practicable in operation after the event as they were before the event.

14.3 **No Adjustment in Certain Cases.** Except as hereinbefore expressly provided, the issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, for cash or property or for labor or services, either upon direct sale or upon the exercise of rights or warrants to subscribe therefor, or upon conversion of shares or obligations of the Company convertible into such shares or other securities, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Class A Common Stock then subject to outstanding options.

14.4 **Board Authority to Make Adjustments.** Any adjustments under this Section 14 will be made by the Board of Directors, whose determination as to what adjustments, if any, will be made and the extent thereof will be final, binding and conclusive. No fractional shares will be issued under the Plan on account of any such adjustments.

15. Effect of Certain Transactions

15.1 **General.** Except as provided in any Option Agreement or Restricted Stock Agreement to the contrary, if the Company is merged with or into or consolidated with another corporation under circumstances where the stockholders of the Company immediately prior to such merger or consolidation do not own after such merger or consolidation shares representing at least fifty percent (50%) of the voting power of the Company or the surviving or resulting corporation, as the case may be, or if shares representing fifty percent (50%) or more of the voting power of the Company are transferred to an Unrelated Third Party, as hereinafter defined, or if the Company is liquidated, or sells or otherwise disposes of all or substantially all its assets (each such transaction is referred to herein as a "Change in Control Transaction"), the Board, or the board of directors of any corporation assuming the obligations of the Company, may, in its discretion, take any one or more of the following actions, as to some or all outstanding Options or Restricted Stock Awards (and need not take the same action as to each such Option or Restricted Stock Award): (i) provide that such Options shall be assumed, or equivalent Options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), *provided that* any such Options substituted for Incentive Stock Options shall meet the requirements of Section 424(a) of the Code, (ii) upon written notice to the optionees, provide that all unexercised Options (whether vested or unvested) will terminate immediately prior to the consummation of the Change in Control Transaction unless exercised by the optionee to the extent otherwise then exercisable within a specified period following the date of such notice, (iii) upon written notice to the grantees, provide that all unvested shares of Restricted Stock shall be repurchased at cost, (iv) make or provide for a cash payment to the optionees equal to the difference between (A) the fair market value of the per share consideration (whether cash, securities or other property or any combination of the above) the holder of a share of Class A Common Stock will receive upon consummation of the Change in Control Transaction (the "Per Share Transaction Price") times the number of shares of Class A Common Stock subject to outstanding vested Options (to the

extent then exercisable at prices not equal to or in excess of the Per Share Transaction Price) and (B) the aggregate exercise price of such outstanding vested Options, in exchange for the termination of such Options, or (v) provide that all or any outstanding Options shall become exercisable and all or any outstanding Restricted Stock Awards shall vest in part or in full immediately prior to such event. To the extent that any Options are exercisable at a price equal to or in excess of the Per Share Transaction Price, the Board may provide that such Options shall terminate immediately upon the consummation of the Change in Control Transaction without any payment being made to the holders of such Options. "Unrelated Third Party" shall mean any person who is not, on the date of adoption of this Plan by the Board, a holder of stock of any class or preference or any stock option of the Company**.**

15.2 **Substitute Options.** The Company may grant Options in substitution for options held by employees, officers or directors of, or consultants or advisors to, another corporation who become employees, officers or directors of, or consultants or advisors to, the Company, as the result of a merger or consolidation of the employing corporation with the Company or as a result of the acquisition by the Company of property or stock of the employing corporation. The Company may direct that substitute Options be granted on such terms and conditions as the Board considers appropriate in the circumstances.

15.3 **Restricted Stock.** In the event of a business combination or other transaction of the type detailed in Section 15.1, any securities, cash or other property received in exchange for shares of Restricted Stock shall continue to be governed by the provisions of any Restricted Stock Agreement pursuant to which they were issued, including any provision regarding vesting, and such securities, cash, or other property may be held in escrow on such terms as the Board of Directors may direct, to insure compliance with the terms of any such Restricted Stock Agreement.

16. No Special Employment Rights. Nothing contained in the Plan or in any Option Agreement or Restricted Stock Agreement shall confer upon any optionee or holder of Restricted Stock any right with respect to the continuation of his or her employment by the Company or interfere in any way with the right of the Company at any time to terminate such employment or to increase or decrease his or her compensation.

17. Other Employee Benefits. The amount of any compensation deemed to be received by an employee as a result of the issuance of shares of Restricted Stock or the grant or exercise of an Option or the sale of shares received upon issuance of a Restricted Stock Award or exercise of an Option will not constitute compensation with respect to which any other employee benefits of such employee are determined, including, without limitation, benefits under any bonus, pension, profit-sharing, life insurance or salary continuation plan, except as otherwise specifically determined by the Board of Directors.

18. Amendment of the Plan.

18.1 The Board may at any time, and from time to time, modify or amend in any respect or terminate the Plan. If shareholder approval is not obtained within twelve months after any amendment increasing the number of shares authorized under the Plan or changing the

class of persons eligible to receive Options under the Plan, no Options granted pursuant to such amendments shall be deemed to be Incentive Stock Options and no Incentive Stock Options shall be issued pursuant to such amendments thereafter.

18.2 The termination or any modification or amendment of the Plan shall not, without the consent of an optionee or the holder of Restricted Stock, adversely affect his or her rights under an Option or Restricted Stock Award previously granted to him or her. With the consent of the recipient of Restricted Stock or optionee affected, the Board may amend outstanding Restricted Stock Agreements or Option Agreements in a manner not inconsistent with the Plan.

19. Withholding. The Company shall have the right to deduct from payments of any kind otherwise due to the optionee or recipient of Restricted Stock, any federal, state or local taxes of any kind required by law to be withheld with respect to issuance of any shares of Restricted Stock or shares issued upon exercise of Options. Prior to delivery of any Class A Common Stock pursuant to the terms of this Plan, the Board has the right to require that the optionee or recipient of Restricted Stock remit to the Company an amount sufficient to satisfy any minimum tax withholding obligation. Subject to the prior approval of the Company, which may be withheld by the Company in its sole discretion, the obligor may elect to satisfy any minimum withholding obligations, in whole or in part, (i) by causing the Company to withhold shares of Class A Common Stock otherwise issuable, or (ii) by delivering to the Company a sufficient number of shares of Class A Common Stock. The shares so withheld shall have a fair market value equal to such minimum withholding obligation. The fair market value of the shares used to satisfy such minimum withholding obligation shall be determined by the Company as of the date that the amount of tax to be withheld is to be determined. A person who has made an election pursuant to this Section 19 may only satisfy his or her withholding obligation with shares of Class A Common Stock which are not subject to any repurchase, forfeiture, unfulfilled vesting or other similar restrictions.

20. Effective Date and Duration of the Plan.

20.1 **Effective Date.** The Plan shall become effective when adopted by the Board of Directors. If shareholder approval is not obtained within twelve months after the date of the Board's adoption of the Plan, no Options previously granted under the Plan shall be deemed to be Incentive Stock Options and no Incentive Stock Options shall be granted thereafter. Amendments to the Plan not requiring shareholder approval shall become effective when adopted by the Board. Amendments requiring shareholder approval shall become effective when adopted by the Board, but if shareholder approval is not obtained within twelve months of the Board's adoption of such amendment, any Incentive Stock Options granted pursuant to such amendment shall be deemed to be non-statutory Options provided that such Options are authorized by the Plan. Subject to this limitation, Options may be granted under the Plan at any time after the effective date and before the date fixed for termination of the Plan.

20.2 **Termination.** Unless sooner terminated by action of the Board of Directors, the Plan shall terminate upon the close of business on the day next preceding the tenth anniversary of the date of its adoption by the Board of Directors.

21. Provision for Foreign Participants. The Board of Directors may, without amending the Plan, modify the terms of Option Agreements or Restricted Stock Agreements to differ from those specified in the Plan with respect to participants who are foreign nationals or employed outside the United States to recognize differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.

22. Requirements of Law. The Company shall not be required to sell or issue any shares under any Option or Restricted Stock Award if the issuance of such shares shall constitute a violation by the optionee, the Restricted Stock Award recipient, or by the Company of any provision of any law or regulation of any governmental authority. In addition, in connection with the Act, the Company shall not be required to issue any shares upon exercise of any Option unless the Company has received evidence satisfactory to it to the effect that the holder of such Option will not transfer such shares except pursuant to a registration statement in effect under the Act or unless an opinion of counsel satisfactory to the Company has been received by the Company to the effect that such registration is not required in connection with any such transfer. Any determination in this connection by the Board shall be final, binding and conclusive. In the event the shares issuable on exercise of an Option are not registered under the Act or under the securities laws of each relevant state or other jurisdiction, the Company may imprint on the certificate(s) appropriate legends that counsel for the Company considers necessary or advisable to comply with the Act or any such state or other securities law. The Company may register, but in no event shall be obligated to register, any securities covered by the Plan pursuant to the Act; and in the event any shares are so registered the Company may remove any legend on certificates representing such shares. The Company shall not be obligated to take any affirmative action in order to cause the exercise of an Option, the grant of any Restricted Stock Award or the issuance of shares pursuant thereto to comply with any law or regulation of any governmental authority.

23. Conversion of Incentive Stock Options into Non-Qualified Options; Termination. The Board of Directors, with the consent of any optionee, may in its discretion take such actions as may be necessary to convert such optionee's Incentive Stock Options (or any installments or portions of installments thereof) that have not been exercised on the date of conversion into non-statutory Options at any time prior to the expiration of such Incentive Stock Options, regardless of whether the optionee is an employee of the Company or a parent or subsidiary of the Company at the time of such conversion. At the time of such conversion, the Board of Directors (with the consent of the optionee) may impose such conditions on the exercise of the resulting non-statutory Options as the Board of Directors in its discretion may determine, provided that such conditions shall not be inconsistent with this Plan. Nothing in this Plan shall be deemed to give any optionee the right to have such optionee's Incentive Stock Options converted into non-statutory Options, and no such conversion shall occur until and unless the Board of Directors takes appropriate action. The Board of Directors, with the consent of the optionee, may also terminate any portion of any Incentive Stock Option that has not been exercised at the time of such termination.

24. Non-Exclusivity of this Plan; Non-Uniform Determinations. Neither the adoption of this Plan by the Board of Directors nor the approval of this Plan by the stockholders

of the Company shall be construed as creating any limitations on the power of the Board of Directors to adopt such other incentive arrangements as it may deem desirable, including, without limitation, the granting of stock options otherwise than under this Plan, and such arrangements may be either applicable generally or only in specific cases.

The determinations of the Board of Directors under this Plan need not be uniform and may be made by it selectively among persons who receive or are eligible to receive Options or Restricted Stock Awards under this Plan (whether or not such persons are similarly situated). Without limiting the generality of the foregoing, the Board of Directors shall be entitled, among other things, to make non-uniform and selective determinations, and to enter into non-uniform and selective Option Agreements and Restricted Stock Agreements, as to (a) the persons to receive Options or Restricted Stock Awards under this Plan, (b) the terms and provisions of Options or Restricted Stock Awards, (c) the exercise by the Board of Directors of its discretion in respect of the exercise of Options pursuant to the terms of this Plan, and (d) the treatment of leaves of absence pursuant to Section 10 hereof.

25. Governing Law. This Plan and each Option or Restricted Stock Award shall be governed by the laws of the Commonwealth of Massachusetts, without regard to its principles of conflicts of law.

INCENTIVE STOCK OPTION

Granted by

Seer, Inc. (the "Company")

Under the 2017 Stock Incentive Plan

This Option is and shall be subject in every respect to the provisions of the Company's 2017 Stock Incentive Plan, as amended from time to time (the "Plan"), which is incorporated herein by reference and made a part hereof. The holder of this Option (the "Holder") hereby accepts this Option subject to all the terms and provisions of the Plan and agrees that (a) in the event of any conflict between the terms hereof and those of the Plan, the latter shall prevail, and (b) all decisions under and interpretations of the Plan by the Board or the Committee shall be final, binding and conclusive upon the Holder and his or her heirs and legal representatives. Capitalized terms used but not otherwise defined in this Option shall have the respective meanings ascribed to such terms in the Plan.

1. **Name of Holder:** [See Carta]

2. **Date of Grant:** [See Carta]

3. **Vesting Start Date**: [See Carta]

4. **Maximum number of shares for which this Option is exercisable:** [See Carta]

5. **Exercise (purchase) price per share:** $[See Carta]

6. **Method of Exercise:** This Option may be exercised by the delivery of written notice to the Company setting forth the number of shares with respect to which the Option is to be exercised, together with payment by one of the following methods:

   cash or a personal, certified or bank check or postal money order payable to the order of the Company for an amount equal to the exercise price of the shares being purchased; or

   with the consent of the Company, any of the other methods set forth in the Plan.

   As an additional condition to exercise of this Option:

   (i) if and to the extent the Holder is purchasing any unvested shares, the terms and conditions of such purchase shall be as set forth in a restricted stock purchase agreement signed by the Holder and the Company; and

   (ii) if and to the extent the Holder is purchasing any vested shares, the Holder shall deliver to the Company an investment letter in form and substance satisfactory to

the Company and its counsel. No such investment letter shall be required as a condition to such exercise at any time when there shall be an effective registration statement under the Securities Act of 1933, as amended (the "Act") covering the vested shares for which this Option may be exercised.

7. **Expiration Date of Option**: [See Carta] [Note: for ISO, cannot be longer than 10 years from date of grant, or 5 years in case of a Greater Than 10% Shareholder]

8. **Vesting Schedule:**

[See Carta]

In addition to the foregoing, upon the Holder's election at any time after the Date of Grant of this Option, the Holder shall be entitled to exercise this Option immediately and in full for the maximum number of shares as set forth herein, whether or not fully vested, provided that, upon such exercise, the Holder shall execute a restricted stock purchase agreement containing a "reverse vesting" schedule effectively equivalent to the Vesting Schedule set forth herein, pursuant to which the Holder agrees to sell back any unvested shares at the exercise price paid for such shares should he or she cease to perform services for the Company prior to full vesting. The Holder understands that he or she may make an election under Section 83(b) of the Code (an "83(b) Election") with respect to the unvested shares to be issued, and that if he or she chooses to make such election, it must be made within 30 days of the date of execution of such restricted stock agreement, and such filing will be solely the Holder's responsibility. ***If this option is an incentive stock option at the time of exercise, however, an 83(b) Election will be effective only with respect to the "alternative minimum tax" and not with respect to income tax.*** The Holder is advised to consult a personal tax adviser with respect to the tax consequences of early exercise of an ISO, including filing or not filing an 83(b) Election.

9. **Termination of Employment**. This Option shall terminate on the earliest to occur of:

(i) the date of expiration hereof;

(ii) immediately upon termination of the Holder's employment with the Company by the Company for Cause (as defined in the Plan);

(iii) 90 days after the date of voluntary termination of employment by the Holder (other than for death or permanent and total disability as defined in the Plan);

(iv) 90 days after the date of termination of the Holder's employment with the Company by the Company without Cause (other than for death or permanent and total disability as defined in the Plan); or

(v) 180 days after the "permanent and total disability"(as defined at Section 10 of the Plan) or death of the Holder.

10. **Company's Right of First Refusal**. Prior to the effective date of a registration statement under the Act, any shares of stock issued pursuant to exercise of this Option shall be subject to the Company's right of first refusal as set forth at Appendix A.

11. **Lock-Up Agreement**. The Holder agrees that upon the request of the Company or the managing underwriter(s) of any offering of securities of the Company that is the subject of a registration statement filed under the Act, for a period of time (not to exceed 180 days) from the effective date of the registration statement under the Act for such offering, the Holder will not sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any shares of Class A Common Stock issued pursuant to the exercise of this Option, without the prior written consent of the Company and such underwriters.

12. **Incentive Stock Option; Disqualifying Disposition**. Although this Option is intended to qualify as an incentive stock option under the Internal Revenue Code of 1986 (the "Code"), the Company makes no representation as to the tax treatment upon exercise of this Option or sale or other disposition of the shares covered by this Option, and the Holder is advised to consult a personal tax advisor. Upon a Disqualifying Disposition of shares received upon exercise of this Option, the Holder will forfeit the favorable income tax treatment otherwise available with respect to the exercise of this Option. A "Disqualifying Disposition" shall have the meaning specified in Section 421(b) of the Code; as of the date of grant of this Option a Disqualifying Disposition is any disposition (including any sale) of such shares before the later of (a) the second anniversary of the date of grant of this Option and (b) the first anniversary of the date on which the Holder acquired such shares by exercising this Option, provided that such holding period requirements terminate upon the death of the Holder. The Holder shall notify the Company in writing immediately upon making a Disqualifying Disposition of any shares of Class A Common Stock received pursuant to the exercise of this Option, and shall provide the Company with any information that the Company shall request concerning any such Disqualifying Disposition.

13. **Notice**. Any notice to be given to the Company hereunder shall be deemed sufficient if addressed to the Company and delivered to the office of the Company, Seer, Inc., 3800 Bridge Parkway, Suite 102, Redwood City, CA 94065, attention of the President, or such other address as the Company may hereafter designate.

Any notice to be given to the Holder hereunder shall be deemed sufficient if addressed to and delivered in person to the Holder at his or her address furnished to the Company or when deposited in the mail, postage prepaid, addressed to the Holder at such address.

IN WITNESS WHEREOF, the parties have executed this Option, or caused this Option to be executed, as of the Date of Grant.

SEER, INC.

By: _____

The undersigned Holder hereby acknowledges receipt of a copy of the Plan and this Option (including Appendix A hereto), and agrees to the terms of this Option and the Plan.

_____
Holder

Right of First Refusal

1. General. Prior to the effective date of a registration statement under the Securities Act of 1933, as amended (the "Act"), covering any shares of the Company's Class A Common Stock and until such time as the Company shall have effected a public offering of its Class A Common Stock registered under the Act, in the event that, at any time when the Holder (which term for purposes of this section shall mean the Holder and his or her executors, administrators and any other person to whom this Option may be transferred by will or the laws of descent and distribution) is permitted to do so, the Holder desires to sell, assign or otherwise transfer any of the shares issued upon the exercise of this Option, the Holder shall first offer such shares to the Company by giving written notice of the Holder's desire so to sell, assign or transfer such shares.

2. Notice of Intended Transfer. The notice shall state the number of shares offered, the name of the person or persons to whom it is proposed to sell, assign or transfer such shares and the price at which such shares are intended to be sold, assigned or transferred. Such notice shall constitute an offer to the Company for the Company to purchase the number of shares set forth in the notice at a price per share equal to the price stated therein.

3. Company to Accept or Decline Within 30 Days. The Company may accept the offer as to all, but not less than all, such shares by notifying the Holder in writing within 30 days after receipt of such notice of its acceptance of the offer. If the offer is accepted, the Company shall have 60 days after such acceptance within which to purchase the offered shares at a price per share as aforesaid. If within the applicable time periods the Holder does not receive notice of the Company's intention to purchase the offered shares, or if payment in full of the purchase price is not made by the Company, the offer shall be deemed to have been rejected and the Holder may transfer title to such shares within 90 days from the date of the Holder's written notice to the Company of the Holder's intention to sell, but such transfer shall be made only to the proposed transferee and at the proposed price as stated in such notice and after compliance with any other provisions of this Option applicable to the transfer of such shares.

4. Transferred Shares to Remain Subject to Right of First Refusal. Shares that are so transferred to such transferee shall remain subject to the rights of the Company set forth in this Appendix A. As a condition to such transfer, such transferee shall execute and deliver all such documents as the Company may require to evidence the binding agreement of such transferee so to remain subject to the rights of the Company.

5. Remedies of Company. No sale, assignment, pledge or other transfer of any of the shares covered by this Option shall be effective or given effect on the books of the Company unless all of the applicable provisions of this Appendix A have been duly complied with, and the Company may inscribe on the face of any certificate representing any of such shares a legend referring to the provisions of this Appendix A. If any transfer of shares is made

or attempted in violation of the foregoing restrictions, or if shares are not offered to the Company as required hereby, the Company shall have the right to purchase such shares from the owner thereof or his transferee at any time before or after the transfer, as herein provided. In addition to any other legal or equitable remedies which it may have, the Company may enforce its rights by actions for specific performance (to the extent permitted by law) and may refuse to recognize any transferee as one of its stockholders for any purpose, including, without limitation, for purposes of dividend and voting rights, until all applicable provisions hereof have been complied with.

6. Shares Subject to Right of First Refusal. For purposes of the Right of First Refusal pursuant to this Appendix A, the term "shares" shall mean any and all new, substituted or additional securities or other property issued to the Holder, by reason of his or her ownership of Class A Common Stock pursuant to the exercise of this Option, in connection with any stock dividend, liquidating dividend, stock split or other change in the character or amount of any of the outstanding securities of the Company, or any consolidation, merger or sale of all or substantially all of the assets of the Company.

7. Legends on Stock Certificates. Any certificate representing shares of stock subject to the provisions of this Appendix A may have endorsed thereon one or more legends, substantially as follows:

(i) "Any disposition of any interest in the securities represented by this certificate is subject to restrictions, and the securities represented by this certificate are subject to certain options, contained in a certain agreement between the record holder hereof and the Company, a copy of which will be mailed to any holder of this certificate without charge upon receipt by the Company of a written request therefor."

(ii) "The shares of stock represented by this certificate have not been registered under the Securities Act of 1933 or under the securities laws of any state and may not be pledged, hypothecated, sold or otherwise transferred unless such shares have been registered under the Act or unless the Company has received an opinion of counsel satisfactory to the Company, in form and substance satisfactory to the Company, that such registration is not required."

8. Right of First Refusal to Lapse Upon Registration. The restrictions imposed by this Appendix A shall terminate in all respects upon the effective date of a registration statement under the Act covering any of the Company's Class A Common Stock.

NON-STATUTORY STOCK OPTION

Granted by

Seer, Inc. (the "Company")

Under the 2017 Stock Incentive Plan

This Option is and shall be subject in every respect to the provisions of the Company's 2017 Stock Incentive Plan, as amended from time to time (the "Plan"), which is incorporated herein by reference and made a part hereof. The holder of this Option (the "Holder") hereby accepts this Option subject to all the terms and provisions of the Plan and agrees that (a) in the event of any conflict between the terms hereof and those of the Plan, the latter shall prevail, and (b) all decisions under and interpretations of the Plan by the Board or the Committee shall be final, binding and conclusive upon the Holder and his or her heirs and legal representatives. Capitalized terms used but not otherwise defined in this Option shall have the respective meanings ascribed to such terms in the Plan.

1. **Name of Holder:** [See Carta]

2. **Date of Grant:** [See Carta]

3. **Vesting Start Date:** [See Carta]

4. **Maximum number of shares for which this Option is exercisable:** [See Carta]

5. **Exercise (purchase) price per share:** $[See Carta]

6. **Method of Exercise**: This Option may be exercised by the delivery of written notice to the Company setting forth the number of shares with respect to which the Option is to be exercised, together with payment by one of the following methods:

   cash or a personal, certified or bank check or postal money order payable to the order of the Company for an amount equal to the exercise price of the shares being purchased; or

   with the consent of the Company, any of the other methods set forth in the Plan.

   As an additional condition to exercise of this Option:

   (i) if and to the extent the Holder is purchasing any unvested shares, the terms and conditions of such purchase shall be as set forth in a restricted stock purchase agreement signed by the Holder and the Company; and

   (ii) if and to the extent the Holder is purchasing any vested shares, the Holder shall deliver to the Company an investment letter in form and substance satisfactory to

the Company and its counsel. No such investment letter shall be required as a condition to such exercise at any time when there shall be an effective registration statement under the Securities Act of 1933, as amended (the "Act") covering the vested shares for which this Option may be exercised.

7. **Expiration Date of Option: [See Carta]**

8. **Vesting Schedule:**

[See Carta]

In addition to the foregoing, upon the Holder's election at any time after the Date of Grant of this Option, the Holder shall be entitled to exercise this Option immediately and in full for the maximum number of shares as set forth herein, whether or not fully vested, provided that, upon such exercise, the Holder shall execute a restricted stock purchase containing a "reverse vesting" schedule effectively equivalent to the Vesting Schedule set forth herein, pursuant to which the Holder agrees to sell back any unvested shares at the exercise price paid for such shares should he or she cease to perform services for the Company prior to full vesting. The Holder understands that he or she may make an election under Section 83(b) of the Code (an "83(b) Election") with respect to the unvested shares to be issued, and that if he or she chooses to make such election, it must be made within 30 days of the date of execution of such restricted stock agreement. The Holder is advised to consult a personal tax adviser with respect to the tax consequences of filing or not filing an 83(b) Election, and understands that such filing is solely the Holder's responsibility.

9. **Termination of Option.** This Option shall terminate on the earliest to occur of:

(i) the date of expiration hereof;

(ii) immediately upon termination of the Holder's employment with or services to the Company by the Company for Cause (as defined in the Plan);

(iii) 90 days after the date of voluntary termination of employment or services by the Holder (other than for death or permanent and total disability as defined in the Plan);

(iv) 90 days after the date of termination of the Holder's employment with or services to the Company by the Company without Cause (other than for death or permanent and total disability as defined in the Plan); or

(v) 180 days after the "permanent and total disability" (as defined at Section 10 of the Plan) or death of the Holder.

10. **Company's Right of First Refusal.** Prior to the effective date of a registration statement under the Act, any shares of stock issued pursuant to exercise of this Option shall be subject to the Company's right of first refusal as set forth at Appendix A.

11. **Lock-Up Agreement**. The Holder agrees that upon the request of the Company or the managing underwriter(s) of any offering of securities of the Company that is the subject of a registration statement filed under the Act, for a period of time (not to exceed 180 days) from the effective date of the registration statement under the Act for such offering, the Holder will not sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any shares of Class A Common Stock issued pursuant to the exercise of this Option, without the prior written consent of the Company and such underwriters.

12. **Tax Withholding**. The Company's obligation to deliver shares shall be subject to the Holder's satisfaction of any federal, state and local income and employment tax withholding requirements.

13. **Notice**. Any notice to be given to the Company hereunder shall be deemed sufficient if addressed to the Company and delivered to the office of the Company, Seer, Inc., 3800 Bridge Parkway, Suite 102, Redwood City, CA 94065, attention of the President, or such other address as the Company may hereafter designate.

    Any notice to be given to the Holder hereunder shall be deemed sufficient if addressed to and delivered in person to the Holder at his or her address furnished to the Company or when deposited in the mail, postage prepaid, addressed to the Holder at such address.

IN WITNESS WHEREOF, the parties have executed this Option, or caused this Option to be executed, as of the Date of Grant.

SEER, INC.

By: _____

The undersigned Holder hereby acknowledges receipt of a copy of the Plan and this Option (including Appendix A hereto), and agrees to the terms of this Option and the Plan.

_____

Holder

APPENDIX A

Right of First Refusal

1. General. Prior to the effective date of a registration statement under the Securities Act of 1933, as amended (the "Act"), covering any shares of the Company's Class A Common Stock and until such time as the Company shall have effected a public offering of its Class A Common Stock registered under the Act, in the event that, at any time when the Holder (which term for purposes of this section shall mean the Holder and his or her executors, administrators and any other person to whom this Option may be transferred by will or the laws of descent and distribution) is permitted to do so, the Holder desires to sell, assign or otherwise transfer any of the shares issued upon the exercise of this Option, the Holder shall first offer such shares to the Company by giving written notice of the Holder's desire so to sell, assign or transfer such shares.

2. Notice of Intended Transfer. The notice shall state the number of shares offered, the name of the person or persons to whom it is proposed to sell, assign or transfer such shares and the price at which such shares are intended to be sold, assigned or transferred. Such notice shall constitute an offer to the Company for the Company to purchase the number of shares set forth in the notice at a price per share equal to the price stated therein.

3. Company to Accept or Decline Within 30 Days. The Company may accept the offer as to all, but not less than all, such shares by notifying the Holder in writing within 30 days after receipt of such notice of its acceptance of the offer. If the offer is accepted, the Company shall have 60 days after such acceptance within which to purchase the offered shares at a price per share as aforesaid. If within the applicable time periods the Holder does not receive notice of the Company's intention to purchase the offered shares, or if payment in full of the purchase price is not made by the Company, the offer shall be deemed to have been rejected and the Holder may transfer title to such shares within 90 days from the date of the Holder's written notice to the Company of the Holder's intention to sell, but such transfer shall be made only to the proposed transferee and at the proposed price as stated in such notice and after compliance with any other provisions of this Option applicable to the transfer of such shares.

4. Transferred Shares to Remain Subject to Right of First Refusal. Shares that are so transferred to such transferee shall remain subject to the rights of the Company set forth in this Appendix A. As a condition to such transfer, such transferee shall execute and deliver all such documents as the Company may require to evidence the binding agreement of such transferee so to remain subject to the rights of the Company.

5. Remedies of Company. No sale, assignment, pledge or other transfer of any of the shares covered by this Option shall be effective or given effect on the books of the Company unless all of the applicable provisions of this Appendix A have been duly complied with, and the Company may inscribe on the face of any certificate representing any of such shares a legend referring to the provisions of this Appendix A. If any transfer of shares is made

or attempted in violation of the foregoing restrictions, or if shares are not offered to the Company as required hereby, the Company shall have the right to purchase such shares from the owner thereof or his transferee at any time before or after the transfer, as herein provided. In addition to any other legal or equitable remedies which it may have, the Company may enforce its rights by actions for specific performance (to the extent permitted by law) and may refuse to recognize any transferee as one of its stockholders for any purpose, including, without limitation, for purposes of dividend and voting rights, until all applicable provisions hereof have been complied with.

6. Shares Subject to Right of First Refusal. For purposes of the Right of First Refusal pursuant to this Appendix A, the term "shares" shall mean any and all new, substituted or additional securities or other property issued to the Holder, by reason of his or her ownership of Class A Common Stock pursuant to the exercise of this Option, in connection with any stock dividend, liquidating dividend, stock split or other change in the character or amount of any of the outstanding securities of the Company, or any consolidation, merger or sale of all or substantially all of the assets of the Company.

7. Legends on Stock Certificates. Any certificate representing shares of stock subject to the provisions of this Appendix A may have endorsed thereon one or more legends, substantially as follows:

(i) "Any disposition of any interest in the securities represented by this certificate is subject to restrictions, and the securities represented by this certificate are subject to certain options, contained in a certain agreement between the record holder hereof and the Company, a copy of which will be mailed to any holder of this certificate without charge upon receipt by the Company of a written request therefor."

(ii) "The shares of stock represented by this certificate have not been registered under the Securities Act of 1933 or under the securities laws of any state and may not be pledged, hypothecated, sold or otherwise transferred unless such shares have been registered under the Act or unless the Company has received an opinion of counsel satisfactory to the Company, in form and substance satisfactory to the Company, that such registration is not required."

8. Right of First Refusal to Lapse Upon Registration. The restrictions imposed by this Appendix A shall terminate in all respects upon the effective date of a registration statement under the Act covering any of the Company's Class A Common Stock.

SEER, INC.

RESTRICTED STOCK PURCHASE AGREEMENT

(Pursuant to Seer, Inc. 2017 Stock Incentive Plan)

This Restricted Stock Purchase Agreement (this "***Agreement***") is made by and between Seer, Inc., a Delaware corporation (the "***Company***"), and the undersigned Purchaser **(**the "***Purchaser***"). In consideration of the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows in connection with the issuance of shares of Class A Common Stock, par value $0.00001 per share, of the Company specified below (the "***Shares***"), subject to the terms and conditions stated below and those attached hereto, all of which terms and conditions are incorporated herein and made a part hereof. The Shares are being purchased pursuant to the Purchaser's exercise of an option granted under the Company's 2017 Stock Incentive Plan, as amended from time to time (the "***Plan***") and pursuant to [See Carta] Stock Option Agreement dated [See Carta] (the "***Option Agreement***").

Name of Purchaser:	**[See Carta]**
Address of Purchaser:	**[See Carta]**
Date of this Agreement:	**[See Carta]**
Number of Shares:	**[See Carta]**
Purchase Price per Share:	**[See Carta]**
Aggregate Purchase Price:	**[See Carta]**
Repurchase Price per Share:	**[See Carta]**
Number of Shares that are Vested Shares on the Vesting Start Date:	**[See Carta]**
Number of Shares that are Unvested Shares on the Vesting Start Date:	**[See Carta]**
Vesting Start Date:	**[See Carta]**

Vesting Schedule:

The Unvested Shares shall vest as follows:

[See Carta]

All vesting is dependent on the Purchaser serving the Company in one or more Qualified Positions (as hereafter defined) continuously from the date hereof through such vesting date, as provided herein. Unvested Shares and Vested Shares are subject to certain transfer restrictions set forth herein.

Acknowledgement

The Purchaser acknowledges having read the terms and conditions set forth above and in the Incorporated Terms and Conditions attached hereto, including the subsection entitled "Section 83(b) Election," and having had an opportunity to discuss them with counsel of the Purchaser's choosing. ***The Purchaser further acknowledges that if the Option Agreement is an incentive stock option as of the date hereof, an 83(b) Election will be effective only with respect to the "alternative minimum tax" and not with respect to income tax.*** The Purchaser has consulted has or her tax adviser with respect to the tax consequences of early exercise of an ISO, including filing or not filing an 83(b) Election.

By signing below, the Purchaser agrees to purchase the Number of Shares set forth above for the Aggregate Purchase Price set forth above, and further agrees to and accepts the terms and conditions set forth above and attached hereto.

Signed as an agreement under seal as of the Date of this Agreement.

Purchaser:	**Seer, Inc.**
_____	By: _____
[See Carta]	Name:
	Title:
Address: _____	
_____	
_____	
E-mail: _____	

SEER, INC.

Restricted Stock Purchase Agreement – Incorporated Terms and Conditions

1. Agreement Subject to Stock Incentive Plan.

This Agreement is and shall be subject in every respect to the provisions of the Plan, which is incorporated herein by reference and made a part hereof. The Purchaser acknowledges that this Agreement shall be subject to all the terms and provisions of the Plan and agrees that (a) in the event of any conflict between the terms hereof and those of the Plan, the latter shall prevail, and (b) decisions under and interpretations of the Plan by the Board of Directors of the Company (or any committee thereof) shall be final, binding and conclusive upon the Purchaser and the Purchaser's heirs and legal representatives.

2. Purchase and Sale of Shares.

(a) Simultaneously with the execution and delivery of this Agreement, the Purchaser is purchasing from the Company the Number of Shares listed on the signature page hereto for the Aggregate Purchase Price listed on the signature page hereto, subject to the Purchaser's delivery obligations set forth in this Section 2(a). The Purchaser shall deliver to the Company: (a) the Aggregate Purchase Price by check payable to the order of the Company; and (b) a stock power, duly executed by the Purchaser in blank as described in Section 6 below. The Company will hold the executed stock certificate representing the Stock pursuant to Section 6.

(b) The term "***Shares***" (as defined on the signature page hereto) shall also include any shares of capital stock of the Company issued to the Purchaser by virtue of his or her ownership of the Shares, by stock dividend, stock split, recapitalization, merger, combination, reorganization or otherwise. Shares that are subject to the Company's repurchase right as described in Section 5 of this Agreement are referred to as "***Unvested Shares***," and Shares that are not subject to such repurchase right, or as to which such repurchase right has lapsed, are referred to as "***Vested Shares***."

3. Representations of Purchaser. The Purchaser represents and warrants to the Company as follows:

(a) The Purchaser understands that the Shares have not been registered under the Securities Act of 1933, as amended (the "***Act***"), or registered or qualified under the securities or "Blue Sky" laws of any jurisdiction, and are being sold pursuant to exemptions contained in the Act and exemptions contained in other applicable securities or "Blue Sky" laws. The Purchaser understands further that the Company's reliance on these exemptions is based in part on the representations made by the Purchaser in this Agreement. The offer and sale of the Shares is being made to the Purchaser solely in the state shown in the address set forth below the Purchaser's name on the signature page hereto.

(b) The Purchaser is acquiring the Shares for the Purchaser's own account for investment, and not for, with a view to, or in connection with the resale or distribution thereof.

The Purchaser has no present intention to sell, hypothecate, distribute or otherwise transfer (hereafter, "***Transfer***") any of the Shares or any interest therein. The nature and amount of the Purchaser's investment in the Shares are consistent with the Purchaser's investment objectives, abilities and resources. The Purchaser understands that the Shares are an illiquid investment, which will not become freely transferable by reason of any change of circumstances whatsoever. The Purchaser has adequate means of providing for the Purchaser's current needs and possible contingencies and has no need for liquidity in the Purchaser's investment.

(c) The Purchaser understands that the Shares will constitute "restricted securities" within the meaning of Rule 144 promulgated under the Act and that, as such, the Shares must be held indefinitely unless they are subsequently registered under the Act or unless an exemption from the registration requirements thereof is available. The Purchaser has been advised that Rule 144, which permits the resale, subject to various terms and conditions, of such "restricted securities" after they have been held for specified periods of time does not now apply to the Company, because the Company is not now required to file, and does not file, periodic reports under the Securities Exchange Act of 1934, as amended, and because information concerning the Company substantially equivalent to that which would be available if the Company were required to file such reports is not now publicly available. The Company may become a reporting entity at some future date, but no assurance can be given that it will do so.

(d) The Purchaser accepts the condition that the Company will maintain stop transfer orders with respect to the Shares and that each certificate or other document evidencing the Shares will bear a conspicuous legend in substantially the form set forth in Section 7 of this Agreement.

(e) The Purchaser has consulted the Purchaser's attorney or the Purchaser's accountant with respect to the Purchaser's purchase of the Shares. The Purchaser and such attorney or accountant have fully investigated the Company and its business and financial condition and have knowledge of the Company's current activities. The Company has granted the Purchaser and the Purchaser's attorney or accountant access to all information about the Company which they have requested and has offered each of them access to all further information which they deemed relevant to an investment decision with respect to the Shares. The Purchaser and the Purchaser's attorney or accountant have had the opportunity to ask questions of, and receive answers from, representatives of the Company concerning such information and the Company's financial condition and prospects.

4. Restrictions on Transfer. The terms and conditions of this Section 4 shall apply to any Transfer or proposed transfer of the Shares and such terms and conditions shall govern to the extent of any conflict with any provision of the Option Agreement.

(a) No Shares, or any interest therein, may be Transferred at any time or under any circumstances unless (i) the Shares proposed to be Transferred have been registered under the Act and registered or qualified under applicable state securities laws, or (ii) the Company has received an opinion of counsel acceptable to the Company to the effect that such Transfer may be effected without registration under the Act and registration or qualification under the

securities laws of relevant states and the proposed transferee has made such representations and agreements as the Company shall require to assure compliance with the Act and such laws.

(b) No Unvested Share, and no interest in an Unvested Share, may be Transferred except to the Company pursuant to Section 5 of this Agreement.

(c) Right of First Refusal.

(i) Offer of Sale; Notice of Proposed Sale or Transfer. In the event that at any time the Purchaser desires to Transfer any Vested Shares or any interest therein, the Purchaser shall first deliver written notice of the Purchaser's desire to do so (the "***Notice***") to the Company. The Notice must specify the number of Vested Shares proposed to be Transferred, the name of the person or persons to whom the Purchaser proposes to Transfer such Shares, the price at which such Shares are intended to be Transferred and all other terms of the transaction, which must be bona fide. The Notice shall constitute an offer by the Purchaser to the Company for the Company to purchase such Shares on such terms and at a price per share equal to the price stated in the Notice.

(ii) Company's Option to Purchase. The Company shall have the option to purchase all or any part of the Shares offered in the Notice for the price and on the terms specified in such Notice. The Company must exercise such option by giving written notice to the Purchaser no later than fifteen (15) business days after receipt of such Notice.

(iii) Closing of Purchase by Company. In the event the Company duly exercises its option to purchase all or a portion of the Shares, the closing of such purchase shall take place at the offices of the Company on the fifth business day after the expiration of the fifteen-day period. Upon the occurrence of the closing, the Purchaser shall transfer to the Company the number of Shares specified in the Company's notice, free of all liens, encumbrances and rights of others, and shall deliver the certificate(s) representing the number of Shares that the Company has elected to repurchase, as well as the duly executed stock powers accompanying such certificate(s).

(iv) Failure to Fully Exercise Option to Purchase. If within the applicable time period, the Purchaser does not receive notice of the Company's intention to purchase the offered Shares, the offer shall be deemed to have been rejected. In such event, the Purchaser may Transfer title to the offered Shares within ninety (90) days from the date of the Notice, but such Transfer shall be made only to the proposed transferee or transferees and at the proposed price and on such other terms as stated in such Notice. Shares that are so Transferred shall remain subject to this Agreement and, as a condition to any Transfer, the Purchaser shall obtain a written agreement from the transferee by which the transferee agrees to be bound by this Agreement.

(d) Subject to the restrictions set forth in the Plan, if the Purchaser is a natural person, all, or any portion of, the Shares may, without compliance with the provisions of this Section 4, be Transferred by the Purchaser for bona fide estate planning purposes to a member of the Purchaser's immediate family, to a family partnership or to a family trust or, on the Purchaser's death, may be Transferred to the Purchaser's estate or to those entitled to a distribution of the

Shares under the laws of descent and distribution; provided, that Shares that are so Transferred shall remain subject to this Agreement and, as a condition to any Transfer, the Purchaser or the Purchaser's legal representative shall obtain a written agreement from the proposed transferee or transferees by which such transferee agrees or transferees agree to be bound by this Agreement.

(e) No Transfer of Shares shall be effective or given effect on the books of the Company unless all of the applicable provisions of this Section 4 have been duly complied with. The Company shall not be required to recognize as one of its stockholders any purported transferee of Shares which have been attempted to have been Transferred in violation of this Agreement, including, without limitation, for purposes of dividend and voting rights. The restrictions on transfer imposed by this Agreement shall apply not only to voluntary transfers but also to involuntary transfers, by operation of law or otherwise. The Purchaser shall pay all legal fees and expenses of the Company arising out of or relating to any purported sale, assignment or transfer of any Shares in violation of this Agreement.

(f) Lock-Up. The Purchaser agrees that, for a period of up to 180 days from the effective date of any registration of securities of the Company, the Purchaser will not Transfer any Shares held by the Purchaser without the prior written consent of the Company or such underwriters, as the case may be, all as fully provided in Section 5.3 of the Plan. The Purchaser further agrees to execute such agreements as may be reasonably requested by the underwriters that are consistent with this Section 4(f) or that are necessary to give further effect thereto.

(g) The rights of the Company and the obligations of the Purchaser under this Section 4 are in addition to all rights and obligations which the Purchaser may have under other Sections of this Agreement or under other agreements between the Company and the Purchaser regarding the Shares (the "***Other Agreements***"), and this Section 4 shall not give the Purchaser any right to make any Transfer of any Shares which is otherwise prohibited by any other Section of this Agreement or the Other Agreements. In addition, any failure by the Company to exercise its repurchase right under this Section 4 shall in no way affect any rights, including repurchase rights, the Company may have under any of the Other Agreements.

(h) Notwithstanding anything contained herein to the contrary, at no time shall the Purchaser Transfer any Shares or any interest therein to a competitor of the Company without the approval of the Board of Directors.

5. Vesting of Shares; Repurchase of Unvested Shares.

(a) If the Purchaser has served the Company in one or more Qualified Positions (as hereafter defined) continuously from the date hereof through the vesting dates specified on the signature page hereto, Unvested Shares shall become Vested Shares (or shall "vest") on such dates and in such amounts as are specified on the signature page hereto. The term "***Qualified Position***" shall mean a Company-approved position as an employee, consultant, advisor, officer or member of the Board of Directors of the Company or one of its subsidiaries, if any. For the avoidance of doubt, the Board of Directors of the Company, in its discretion, may accelerate any vesting dates or waive any of the requirements for vesting.

(b) In the event that the Purchaser ceases for any reason to provide services to the Company in one or more Qualified Positions before all of the Shares have become Vested Shares (a "***Termination Event***"), then the Company shall have the right to purchase (the "***Repurchase Option***") for a period of ninety (90) days from the date of such Termination Event (the "***Termination Date***") any or all of the Shares that are Unvested Shares at the Termination Date (after giving effect to the look-forward vesting provisions of this Agreement). The purchase of each Unvested Share pursuant to this Section 5(b) shall be effected at the Repurchase Price Per Share set forth on the signature page hereto, appropriately adjusted in the event of a stock dividend, stock split, recapitalization, merger, combination, reorganization or exchange of shares or other similar event occurring subsequent to the date of this Agreement.

(c) Unless the Company notifies the Purchaser within ninety (90) days from the Termination Date that it does not intend to exercise its Repurchase Option with respect to some or all of the Unvested Shares, the Repurchase Option shall be deemed automatically exercised by the Company as of the 90th day following the Termination Date, *provided*, that the Company may notify the Purchaser that it is exercising its Repurchase Option as of a date prior to such 90th day. Unless the Purchaser is otherwise notified by the Company pursuant to the preceding sentence that the Company does not intend to exercise its Repurchase Option as to some or all of the Unvested Shares to which it applies as of the Termination Date, execution of this Agreement by the Purchaser constitutes written notice to the Purchaser of the Company's intention to exercise its Repurchase Option with respect to all Unvested Shares to which such Repurchase Option applies. The Company, at its choice, may satisfy its payment obligation to the Purchaser with respect to exercise of the Repurchase Option by any of (1) delivering a check to the Purchaser in the amount of the purchase price for the Unvested Shares being repurchased, (2) in the event the Purchaser is indebted to the Company, canceling an amount of such indebtedness equal to the purchase price for the Unvested Shares being repurchased, and (3) by a combination of (1) and (2) so that the combined payment and cancellation of indebtedness equals such purchase price. The Company shall use good faith efforts to satisfy its payment obligation to the Purchaser within fifteen (15) days after Company's notice of exercise of the Repurchase Option (or deemed exercise). In the event of any deemed automatic exercise of the Repurchase Option pursuant to this Section 5(c), at such time as the Purchaser is indebted to the Company, the portion of such indebtedness equal to the purchase price of the Unvested Shares being repurchased shall be deemed automatically canceled as of the date of Company's notice of exercise of the Repurchase Option (or deemed exercise). As a result of any repurchase of Unvested Shares pursuant to this Section 5, the Company shall become the legal and beneficial owner of the Unvested Shares being repurchased and shall have all rights and interest therein or related thereto, and the Company shall have the right to Transfer to its own name the number of Unvested Shares being repurchased by the Company, without further action by the Purchaser.

(d) The Company shall, after termination or exercise of all repurchase rights hereunder, deliver to the Purchaser a certificate or certificates representing the Shares, if any, as to which the Purchaser is entitled to ownership free and clear of such repurchase rights.

(e) Fractional Shares. No fractional shares shall vest under this Agreement. Any calculation of Shares scheduled to vest on any date except for the last date on which vesting is

contemplated under this Agreement (the "***Final Vesting Date***") that results in a fractional share shall be rounded down to the nearest whole Share. On the Final Vesting Date, all remaining Unvested Shares shall vest and become Vested Shares.

6. Custody of Certificates.

(a) In order to facilitate the exercise of the Company's repurchase rights under Section 5 of this Agreement, simultaneously with the execution of this Agreement, the Purchaser shall deposit with the Company's counsel the certificate or certificates representing in whole or in part Unvested Shares and shall promptly upon acquisition of any additional Unvested Shares, deposit with the Company's counsel the certificate or certificates for such additional shares. To all certificates deposited by the Purchaser with the Company's counsel, there shall be attached a stock power or stock powers, duly executed by the Purchaser in blank, constituting and appointing the Company or its designee the Purchaser's attorney to transfer such stock on the books of the Company. The Purchaser shall continue to be the owner of the Shares, despite such deposit and stock powers, and shall be entitled to exercise all rights of ownership in such Shares, subject, however, to the provisions of this Agreement.

(b) In the event that a dispute should arise with respect to the delivery, right to possession, and/or ownership of the certificates representing the Shares, the Company's counsel is authorized to retain such certificates and evidences in its possession, or any portion thereof, without liability to anyone, until such dispute shall have been settled either by mutual written agreement of the parties concerned or by final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but neither the Company nor its counsel shall be under any duty whatsoever hereunder to institute or defend any such proceedings.

(c) The Company shall have the right to cause Transfers of Unvested Shares to be effected pursuant to Section 5 notwithstanding any failure of the Purchaser to take the action required of the Purchaser pursuant to this Agreement; provided, however, that no Transfer of Unvested Shares shall be effected hereunder unless payment therefor has been made or tendered to the Purchaser or the Purchaser's executor or other legal representative. The Purchaser hereby appoints each of the President, Treasurer and Secretary of the Company as the Purchaser's attorney-in-fact for purposes of effecting any such Transfer.

7. Legends. Each certificate representing Shares shall prominently bear legends to the following effect:

> "The shares represented by this certificate have been acquired for investment and have not been registered under the Securities Act of 1933, as amended. Such shares may not be sold, transferred, pledged or hypothecated unless the registration provisions of said Act have been complied with or unless the Company has received an opinion of its counsel that such registration is not required.

"The shares represented by this certificate are subject to restrictions on transfer and repurchase rights pursuant to the terms of the Company's 2017 Stock Incentive Plan and a Restricted Stock Purchase Agreement, a copy of which will be furnished to the holder hereof without charge upon written request."

8. Adjustments for Stock Splits, Stock Dividends, etc. The Shares issued pursuant to this Agreement shall be subject to adjustment upon changes in capitalization pursuant to the provisions of Section 14 of the Plan.

9. Miscellaneous.

(a) Entire Agreement. This Agreement, including the signature page hereto and these Incorporated Terms and Conditions, constitutes the entire agreement between the parties with respect to the subject matter hereof, and supersedes all prior agreements, negotiations, representations and proposals, written or oral, relating to such subject matter.

(b) Amendments. Neither this Agreement nor any provision hereof may be changed or modified except by an agreement in writing executed by the Purchaser and on behalf of the Company.

(c) Binding Effect of the Agreement. This Agreement shall inure to the benefit of, and be binding upon, the Company, the Purchaser and their respective estates, heirs, executors, transferees, successors, assigns and legal representatives.

(d) Notices. All notices to any party under this Agreement shall be contained in a written instrument addressed to such party at the address set forth below or such other address as may hereafter be designated in writing by the addressee to the addressor and shall be deemed given (i) when delivered in person or duly sent by e-mail or fax, with confirmation of receipt, (ii) three days after being duly sent by first class mail postage prepaid (other than in the case of notices to or from any non-U.S. resident, which notices must be sent in the manner specified in clause (i) or (iii)), or (iii) two days after being duly sent by UPS, Federal Express or other recognized express international courier service:

(i) if to the Purchaser, to the Address or E-Mail Address of Purchaser set forth on the signature page hereto; and

(ii) if to the Company, to:

Seer, Inc.
c/o Wilson Sonsini Goodrich & Rosati
650 Page Mill Road
Palo Alto, CA 94304
Attention: Tony Jeffries

(e) Consent to Electronic Notices. The Purchaser hereby agrees and consents that the Company may provide the Purchaser, at the Company's option, all notices which are required

to be delivered, whether under this Agreement, pursuant to the General Corporation Law of the State of Delaware or other applicable law or regulation, or otherwise, in electronic form to the E-Mail Address set forth on the signature page of this Agreement.

(f) Relationship with Company. The Company is not by reason of this Agreement or the issuance of any Shares obligated to continue the Purchaser's relationship with the Company as an employee, consultant, advisor, officer, director, or in any other capacity (other than as a stockholder).

(g) ***Section 83(b) Election. The Purchaser understands that it shall be his or her decision whether to make an election under Section 83(b) of the Internal Revenue Code of 1986, as amended (an "83(b) Election") with respect to the Shares, and that if he or she chooses to make such election, it must be made within 30 days of the date of execution of this Agreement, and a copy of such election provided to the Company. The Purchaser represents that he or she understands the tax consequences of filing or not filing an 83(b) Election, and understands that such filing is solely the Purchaser's responsibility.***

(h) Remedies. The Purchaser acknowledges that money damages alone will not adequately compensate the Company for breach of any of the Purchaser's covenants and agreements herein and, therefore, agrees that in the event of the breach or threatened breach of any such covenant or agreement, in addition to all other remedies available to the Company, at law, in equity or otherwise, the Company shall be entitled to injunctive relief compelling specific performance of, or other compliance with, the terms hereof. The rights and remedies of the Company hereunder shall be cumulative and in addition to all other rights and remedies the Company may have, at law, in equity, by contract or otherwise.

(i) Reliance; Liability. In performing its duties under this Agreement, the Company shall be entitled to rely upon any statement, notice, or other writing which it shall in good faith believe to be genuine and to be signed or presented by a proper party or parties or on other evidence or information deemed by the Purchaser to be reliable. In no event shall the Company be liable for any action taken or omitted in good faith. The Company may consult with its counsel or counsel of any of the other parties hereto and, without limiting the generality of the preceding sentence, shall not be held liable for any action taken or omitted in good faith on advice of such counsel.

(j) Awaiting Final Settlement. If any controversy arises between the parties hereto or with any third person with respect to the Shares, this Agreement or its subject matter, the Company shall not be required to take any actions in the premises, but may await the settlement of any such controversy by final appropriate legal proceedings or otherwise as it may require, notwithstanding anything in this Agreement to the contrary, and, in such event, the Company shall not be liable for interest or damages.

(k) Construction. The headings and subheadings of this Agreement have been inserted for convenience only, and shall not affect the construction of the provisions hereof. All references to sections of this Agreement shall be deemed to refer as well to all subsections which

form a part of such section. The words “include,” “includes” and “including” when used herein shall be deemed in each case to be followed by the words “without limitation.”

(l) Severability. In the event that any one or more of the provisions contained herein shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement and all other provisions shall remain in full force and effect. If any provision of this Agreement is held to be excessively broad, it shall be reformed and construed by limiting and reducing it so as to be enforceable to the maximum extent permitted by law.

(m) No Waiver. No modification, renewal, extension, waiver or termination of this Agreement or any of the provisions herein contained shall be binding upon the Company unless made in writing and signed by a duly authorized officer of the Company.

(n) Further Assurances. The parties agree to execute such further instruments and to take such further actions as may reasonably be necessary to carry out the intent of this Agreement.

(o) Counterparts. This Agreement may be executed in counterparts, each such counterpart shall be deemed to be an original instrument, and all of which together shall for all purposes constitute one Agreement, binding on each of the parties hereto notwithstanding that each such party shall not have signed the same counterpart. A signature of any party to this Agreement transmitted by facsimile, electronic mail (including pdf) or other electronic means shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

(p) Applicable Law. This Agreement shall be construed and enforced in accordance with the laws of The State of Delaware, without regard to its principles of conflicts of laws. All litigation arising from or relating to this Agreement shall be filed and prosecuted before any court of competent subject matter jurisdiction located in The State of Delaware. The Purchaser consents to service of process in any such action by certified or registered mail, return receipt requested. The Purchaser consents to the jurisdiction of such courts over the Purchaser, stipulates to the convenience, efficiency and fairness of proceeding in such courts, and covenants not to allege or assert the inconvenience, inefficiency or unfairness of proceeding in such courts.

(q) Disposition of Shares; Purchase by Nominee or Designee. Any Shares that the Company elects to purchase hereunder may be disposed of by it in such manner as it deems appropriate with or without restrictions on the transfer thereof, and the Company may require their transfer to a nominee or designee as part of any purchase of Shares from the Purchaser.

(r) Withholding Taxes. The Purchaser agrees that the Purchaser shall be fully liable for any income and employment taxes owed by the Purchaser with regard to issuance of the Shares, whether owed at the time of transfer pursuant to the Purchaser having made an 83(b) Election, or at the time that the Shares vest pursuant to the vesting schedule set forth above. The Purchaser acknowledges and agrees that the Company has the right to deduct from payments of any kind otherwise due to the Purchaser any federal, state or local taxes of any kind required by

law to be withheld with respect to the purchase of the Shares by the Purchaser. The Purchaser further agrees that, if the Company does not withhold an amount sufficient to satisfy the withholding obligation of the Company with respect to the issuance of the Shares, the Purchaser will make reimbursement on demand, in cash, for the amount underwithheld, provided that the Company has provided the Purchaser with written detail concerning the basis for and amount of the withholding obligation of the Company.

* * * * *

STOCK POWER

FOR VALUE RECEIVED, [See Carta], hereby sells, assigns and transfers to Seer, Inc., a Delaware corporation (the "***Company***"), a total of _____ shares of Class A Common Stock of the Company standing in the name of the stockholder named above on the books of the Company represented by stock certificate number ___ to be delivered herewith, and does hereby irrevocably constitute and appoint Wilson Sonsini Goodrich & Rosati as attorney to transfer said shares on the books of the Company with full power of substitution in the premises.

Dated:

_____

SEER BIOSCIENCES, INC.

NOTICE OF EXERCISE OF OPTION

To: Seer Biosciences, Inc.

This is to notify Seer Biosciences, Inc., a Delaware corporation (the "Company"), that I hereby irrevocably elect to exercise the right to purchase the number of shares of the Company's Class A common stock, $0.00001 par value per share, indicated below (the "Shares").

The Shares are being purchased pursuant to my exercise of an option granted to me under the Company's 2017 Stock Incentive Plan (the "Plan") and pursuant to [an Incentive][a Non-Statutory] Stock Option Agreement dated [_____] (the "Option Agreement").

Option and Exercise:

	Per Share Exercise Price	Number of Shares Purchased	Total Exercise Price
Vested Shares	$[____]	[____]	$[____]
Unvested Shares	---	---	---
Totals:	---	[____]	**$**[____]

As payment for the Shares, enclosed is a ***certified*** or ***bank check*** payable to the order of "Seer Biosciences, Inc." in the sum of $[____].

If any of the Shares are vested shares as of the date hereof (in accordance with the vesting schedule provided in the Option Agreement), enclosed is an executed and dated copy of an investment letter that shall apply with respect to such vested shares. I hereby confirm that I have read and I fully understand the terms and conditions (including representations and warranties) of such letter and the Plan.

If any of the Shares are unvested shares as of the date hereof (in accordance with the vesting schedule provided in the Option Agreement), I acknowledge that the sale of such unvested shares shall be conditioned upon my execution of the Company's standard form of restricted stock purchase agreement (the "RSPA"). I hereby confirm that I have read and I fully understand the terms and conditions (including representations and warranties) of the RSPA and the Plan.

(Signature)	(Street Address)
(Print Name)	(City, State, Zip Code)
(Date)	(E-mail Address)

SEER BIOSCIENCES, INC

INVESTMENT LETTER

To: Seer Biosciences, Inc.

Re: ***Purchase of Class A Common Stock***

Ladies and Gentlemen:

This investment letter is executed and delivered to Seer Biosciences, Inc., a Delaware corporation (the "Company"), in connection with my purchase of [***number of vested shares purchased***] shares of Class A common stock of the Company, $0.00001 par value per share (the "Shares").

The Shares are being purchased pursuant to my exercise of an option granted to me under the Company's 2017 Stock Incentive Plan (the "Plan") and pursuant to [an Incentive][a Non-Statutory] Stock Option Agreement dated [_____] (the "Option Agreement"). I hereby acknowledge that all of the Shares hereunder have vested as of the date hereof in accordance with the vesting schedule provided in the Option Agreement.

I understand that the Shares have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or registered or qualified under the securities or "blue sky" laws of any state or jurisdiction, and are being sold to me pursuant to exemptions contained in the Securities Act and exemptions contained in other applicable securities or "blue sky" laws. I represent and warrant that the offer and sale of the Shares was made solely in the state shown in the address set forth below. I hereby represent to the Company, and agree that the Company is entitled to rely on such representations, (i) that no one else has any beneficial ownership in the Shares and (ii) that the Shares are not subject to any pledge or other lien. The nature and amount of my investment in the Shares are consistent with my investment objectives, abilities and resources. I understand that the Shares are an illiquid investment, which will not become freely transferable by reason of any "change of circumstances" whatsoever. I have adequate means of providing for my current needs and possible contingencies and have no need for liquidity in my investment.

I understand that the Shares will constitute "restricted securities" within the meaning of Rule l44 promulgated under the Securities Act and that, as such, the Shares must be held indefinitely unless they are subsequently registered under the Securities Act or unless an exemption from the registration requirements thereof is available.

I hereby acknowledge and agree that (i) the Shares shall continue to be bound by the terms and conditions of the Option Agreement and the terms of the Plan, and (ii) in addition to any restrictions on transfer pursuant to any applicable law, the Shares are and will remain subject to restrictions on transfer imposed pursuant to the Plan and the Option Agreement. Without limiting the generality of the foregoing, I acknowledge that the Shares shall be subject to that certain right of first refusal in favor of the Company and that certain repurchase right in favor of the Company, which are described in the Option Agreement.

I acknowledge and agree that in addition to legends required or permitted pursuant to the Plan and the Option Agreement, the certificate representing the Shares will bear a legend in substantially the following form:

> THE SHARES OF STOCK REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 OR UNDER THE SECURITIES LAWS OF ANY STATE AND MAY NOT BE PLEDGED, HYPOTHECATED, SOLD OR OTHERWISE TRANSFERRED UNLESS SUCH SHARES HAVE BEEN REGISTERED UNDER THE ACT OR UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY, IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION IS NOT REQUIRED.
>
> ANY DISPOSITION OF ANY INTEREST IN THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO RESTRICTIONS, AND THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN OPTIONS, CONTAINED IN A CERTAIN AGREEMENT BETWEEN THE RECORD HOLDER HEREOF AND THE COMPANY, A COPY OF WHICH WILL BE MAILED TO ANY HOLDER OF THIS CERTIFICATE WITHOUT CHARGE UPON RECEIPT BY THE COMPANY OF A WRITTEN REQUEST THEREFOR.

I acknowledge and agree that the Company may place a stop order pertaining to the certificates evidencing the Shares with any transfer agent of the Company, to the same effect as the above legend. The legend and stop transfer notice referred to above shall be removed only upon my furnishing to the Company an opinion of counsel to the effect that such legend may lawfully be removed and if such counsel and such opinion are satisfactory to the Company.

I have consulted my attorney or my accountant with respect to my purchase of the Shares. My representatives and I have fully investigated the Company and its business and financial conditions and have knowledge of the Company's current corporate activities and financial condition. I acknowledge that the Company has granted me and my attorney or accountant access to all information about the Company which I have requested and has offered each of us access to all further information which I deemed relevant to an investment decision with respect to the Shares. My attorney or accountant and I have had the opportunity to ask questions of, and receive answers from, representatives of the Company concerning such information and the Company's financial condition and prospects.

Very truly yours,

_____	_____
(Signature)	(Street Address)
_____	_____
(Print Name)	(City, State, Zip Code)
_____	_____
(Date)	(E-mail Address)

SEER, INC.

2020 RSU EQUITY INCENTIVE PLAN
(As amended and restated July 28, 2020)

1. Purposes of the Plan. The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide additional incentive to Employees, Directors and Consultants, and
- to promote the success of the Company's business.

The Plan permits the grant of Restricted Stock Units.

2. Definitions. As used herein, the following definitions will apply:

(a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Applicable Laws" means the legal and regulatory requirements relating to the administration of equity-based awards, including but not limited to the related issuance of shares of Common Stock, including but not limited to, under U.S. federal and state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any non-U.S. country or jurisdiction where Awards are, or will be, granted under the Plan.

(c) "Award" means, individually or collectively, a grant under the Plan of Restricted Stock Units.

(d) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(e) "Board" means the Board of Directors of the Company.

(f) "Change in Control" means the occurrence of any of the following events:

(i) Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection, the acquisition of additional stock by any one Person, who is considered to own more than fifty percent (50%) of

the total voting power of the stock of the Company will not be considered a Change in Control; provided, further, that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board also will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company's voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of fifty percent (50%) or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event shall not be considered a Change in Control under this subsection (i). For this purpose, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(ii) Change in Effective Control of the Company. If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such Person or Persons) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (A) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(f), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the jurisdiction of the Company's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(g) "Code" means the Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or regulation thereunder will include such section or regulation, any valid regulation or formal guidance of general or direct applicability promulgated under such section or regulation (and any comparable provision of any future legislation, regulation or formal guidance of general or direct applicability amending, supplementing or superseding such section or regulation).

(h) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board, or by a duly authorized committee of the Board, in accordance with Section 4 hereof.

(i) "Common Stock" means the Class A Common Stock of the Company.

(j) "Company" means Seer, Inc., a Delaware corporation, or any successor thereto.

(k) "Consultant" means any natural person, including an advisor, engaged by the Company or a Parent or Subsidiary to render bona fide services to such entity, provided the services (i) are not in connection with the offer or sale of securities in a capital-raising transaction, and (ii) do not directly promote or maintain a market for the Company's securities, in each case, within the meaning of Form S-8 promulgated under the Securities Act, and provided further, that a Consultant will include only those persons to whom the issuance of Shares may be registered under Form S-8 promulgated under the Securities Act.

(l) "Director" means a member of the Board.

(m) "Disability" means total and permanent disability as defined in Code Section 22(e)(3), provided that the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(n) "Employee" means any person, including officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

(o) "Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended.

(p) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower exercise prices and different terms), awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced or increased. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.

(q) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market, its Fair Market Value will be the closing sales price for such stock (or, if no closing sales price was reported on that date, as applicable, on the last trading date such closing sales price was reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks were reported), as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

(r) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Code Section 424(e).

(s) "Participant" means the holder of an outstanding Award.

(t) "Plan" means this 2020 RSU Equity Incentive Plan.

(u) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 6. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(v) "Section 409A" means Code Section 409A and the Treasury Regulations and guidance thereunder, and any applicable state law equivalent, as each may be promulgated, amended or modified from time to time.

(w) "Securities Act" means the U.S. Securities Act of 1933, as amended.

(x) "Service Provider" means an Employee, Director or Consultant.

(y) "Share" means a share of the Common Stock, as adjusted in accordance with Section 10 of the Plan.

(z) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Code Section 424(f).

3. Stock Subject to the Plan.

(a) Stock Subject to the Plan. Subject to the provisions of Section 10 of the Plan, the maximum aggregate number of Shares that may be subject to Awards and sold under the Plan is 717,232 Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

(b) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, is surrendered pursuant to an Exchange Program, or, is forfeited to or repurchased by the Company due to the failure to vest, the forfeited or repurchased Shares which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock Units are repurchased by the Company or are forfeited to the Company due to the failure to vest, such Shares will become available for future grant under the Plan. Shares used to pay the exercise price of an Award or to satisfy the tax withholdings related to an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan.

(c) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which Committee will be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the number of Shares to be covered by each Award granted hereunder;

(iv) to approve forms of Award Agreements for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price if any, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(vi) to institute and determine the terms and conditions of an Exchange Program;

(vii) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(viii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws or for qualifying for favorable tax treatment under applicable foreign laws;

(ix) to modify or amend each Award (subject to Section 15(c) of the Plan);

(x) to allow Participants to satisfy withholding tax obligations in a manner prescribed in Section 11;

(xi) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xii) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that otherwise would be due to such Participant under an Award; and

(xiii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards and will be given the maximum deference permitted by Applicable Laws.

5. Eligibility. Restricted Stock Units may be granted to Service Providers.

6. Restricted Stock Units.

(a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units, it will advise the Participant in an Award Agreement of the terms, conditions, and restrictions related to the grant, including the number of Restricted Stock Units.

(b) Vesting Criteria and Other Terms. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the Administrator in its discretion.

(c) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) determined by the Administrator and set forth in the Award Agreement. The Administrator, in its sole discretion, may settle earned Restricted Stock Units in cash, Shares, or a combination of both.

(e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

7. Compliance With Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Section 409A such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to be exempt from or meet the requirements of Section 409A and will be construed and interpreted in accordance with such intent (including with respect to any ambiguities or ambiguous terms), except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Section 409A. In no event will the Company or any Parent or Subsidiary have any liability or obligation to reimburse, indemnify, or hold harmless a Participant (or any other person) for any taxes, penalties or interest that may be imposed on, or other costs incurred by, Participant (or any other person) as a result of Section 409A.

8. Leaves of Absence/Transfer Between Locations. Unless the Administrator provides otherwise or as otherwise required by Applicable Laws, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary.

9. Limited Transferability of Awards. Unless determined otherwise by the Administrator, Awards may not be sold, pledged, assigned, hypothecated, or otherwise transferred in any manner other than by will or by the laws of descent and distribution, and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award may only be transferred (i) by will, (ii) by the laws of descent and distribution, or (iii) as permitted by Rule 701 of the Securities Act.

10. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

(a) Adjustments. In the event that any dividend (other than an ordinary dividend) or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of shares of stock that may be delivered under the Plan and/or the number, class, and price of shares of stock covered by each outstanding Award. Further, the Administrator will make such adjustments to an Award as required by Section 25102(o) of the California Corporations Code to the extent the Company is relying upon the exemption afforded thereby with respect to the Award.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Change in Control. In the event of a merger of the Company with or into another corporation or other entity or a Change in Control, each outstanding Award will be treated as the Administrator determines (subject to the provisions of the following paragraph) without a Participant's consent, including, without limitation, that (i) Awards will be assumed, or substantially equivalent awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant's Awards will terminate upon or immediately prior to the consummation of such merger or Change in Control; (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger or Change in Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or (v) any combination of the foregoing. In taking any of the actions permitted under this subsection 10(c), the Administrator will not be obligated to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

For the purposes of this subsection 10(c), an Award will be considered assumed if, following the merger or Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the merger or Change in Control, the consideration (whether stock, cash, or other securities or property) received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the payout of a Restricted Stock Unit, for each Share subject to such Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or Change in Control.

Notwithstanding anything in this Section 10(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be

considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent, in all cases, unless specifically provided otherwise under the applicable Award Agreement or other written agreement between the Participant and the Company or any of its Subsidiaries or Parents, as applicable; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this Section 10(c) to the contrary, and unless otherwise provided in an Award Agreement, if an Award that vests, is earned or paid-out under an Award Agreement is subject to Section 409A and if the change in control definition contained in the Award Agreement does not comply with the definition of "change of control" for purposes of a distribution under Section 409A, then any payment of an amount that is otherwise accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Section 409A without triggering any penalties applicable under Section 409A.

11. Tax Withholding.

(a) Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

(b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by such methods as the Administrator shall determine, including, without limitation, (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable Shares having a fair market value equal to the minimum statutory amount required to be withheld or such greater amount as the Administrator may determine if such amount would not have adverse accounting consequences, as the Administrator determines in its sole discretion, (iii) delivering to the Company already-owned Shares having a fair market value equal to the statutory amount required to be withheld or such greater amount as the Administrator may determine, in each case, provided the delivery of such Shares will not result in any adverse accounting consequences, as the Administrator determines in its sole discretion, (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld, (v) such other consideration and method of payment for the meeting of tax withholding obligations as the Administrator may determine to the extent permitted by Applicable Laws, or (vi) any combination of the foregoing methods of payment. The amount of the withholding requirement will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made, not to exceed the amount determined by using the maximum federal, state or local marginal income tax rates applicable to the Participant with respect to the Award on the date that the amount of tax to be withheld is to be determined or such greater amount as the Administrator may determine if such amount would not have adverse accounting consequences, as the Administrator determines in its

sole discretion. The fair market value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

12. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company or its Subsidiaries or Parents, as applicable, nor will they interfere in any way with the Participant's right or the right of the Company and its Subsidiaries or Parents, as applicable, to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

13. Date of Grant. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator (the "Date of Grant"). Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.

14. Term of Plan. Subject to Section 18 of the Plan, the Plan will become effective upon its adoption by the Board. Unless sooner terminated under Section 15, it will continue in effect for a term of ten (10) years from the later of (a) the effective date of the Plan, or (b) the earlier of the most recent Board or stockholder approval of an increase in the number of Shares reserved for issuance under the Plan.

15. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will materially impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

16. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any

present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

17. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction or to complete or comply with the requirements of any registration or other qualification of the Shares under any state, federal or foreign law or under the rules and regulations of the Securities and Exchange Commission (the "Commission"), the stock exchange on which Shares of the same class are then listed, or any other governmental or regulatory body, which authority, registration, qualification or rule compliance is deemed by the Company's counsel to be necessary or advisable for the issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority, registration, qualification or rule compliance will not have been obtained.

18. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

19. Information to Participants. If and as required (i) pursuant to Rule 701 of the Securities Act, if the Company is relying on the exemption from registration provided pursuant to Rule 701 of the Securities Act with respect to the applicable Award, and/or (ii) pursuant to Rule 12h-1(f) of the Exchange Act, to the extent the Company is relying on the Rule 12h-1(f) Exemption, then during the period of reliance on the applicable exemption and in each case of (i) and (ii) until such time as the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, the Company shall provide to each Participant the information described in paragraphs (e)(3), (4), and (5) of Rule 701 under the Securities Act not less frequently than every six (6) months with the financial statements being not more than 180 days old and with such information provided either by physical or electronic delivery to the Participants or by written notice to the Participants of the availability of the information on an Internet site that may be password-protected and of any password needed to access the information. The Company may request that Participants agree to keep the information to be provided pursuant to this section confidential. If a Participant does not agree to keep the information to be provided pursuant to this section confidential, then the Company will not be required to provide the information unless otherwise required pursuant to Rule 12h-1(f)(1) under the Exchange Act (if the Company is relying on the Rule 12h-1(f) Exemption) or Rule 701 of the Securities Act (if the Company is relying on the exemption pursuant to Rule 701 of the Securities Act).

20. Forfeiture Events.

(a) All Awards granted under the Plan will be subject to recoupment under any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Laws. In addition, the Administrator may impose such other clawback,

recovery or recoupment provisions in an Award Agreement as the Administrator determines necessary or appropriate, including but not limited to a reacquisition right regarding previously acquired Shares or other cash or property. Unless this Section 20 is specifically mentioned and waived in an Award Agreement or other document, no recovery of compensation under a clawback policy or otherwise will be an event that triggers or contributes to any right of a Participant to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company or a Parent or Subsidiary of the Company.

(b) The Administrator may specify in an Award Agreement that the Participant's rights, payments, and benefits with respect to an Award will be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events may include, but will not be limited to, termination of such Participant's status as a Service Provider for cause or any specified action or inaction by a Participant, whether before or after such Participant's cessation of Service Provider status, that would constitute cause for termination of such Participant's status as a Service Provider.

SEER, INC.

2020 RSU EQUITY INCENTIVE PLAN

RESTRICTED STOCK UNIT AWARD AGREEMENT

Unless otherwise defined herein, the terms defined in the 2020 RSU Equity Incentive Plan (the "Plan") shall have the same defined meanings in this Restricted Stock Unit Award Agreement, including the Notice of Grant of Restricted Stock Units (the "Notice of Grant"), the Terms and Conditions of Restricted Stock Unit Grant, and any exhibits attached thereto (all together, the "Award Agreement").

I. NOTICE OF GRANT OF RESTRICTED STOCK UNITS

Name (the "Participant"):

Address:

The undersigned individual (the "Participant") has been granted the right to receive an Award of Restricted Stock Units, subject to the terms and conditions of the Plan and this Award Agreement, as follows:

Date of Grant	_____
Vesting Commencement Date	_____
Number of Restricted Stock Units	_____

Vesting Schedule:

Subject to any acceleration provisions contained in the Plan or set forth below, the Restricted Stock Units will vest in accordance with the following schedule:

[INSERT VESTING SCHEDULE, e.g.: [Twenty-five percent (25%) of the Restricted Stock Units subject to this Award Agreement shall vest on the one (1)-year anniversary of the Vesting Commencement Date, and an additional twenty-five percent (25%) of the Restricted Stock Units subject to this Award Agreement shall vest on each annual anniversary of the Vesting Commencement Date thereafter (and if there is no corresponding day, on the last day of the month), subject to Participant continuing to be a Service Provider through each such date.]]

In the event Participant ceases to be a Service Provider for any or no reason before Participant vests in the Restricted Stock Units, the Restricted Stock Units and Participant's right to acquire any Shares hereunder will immediately terminate.

II. AGREEMENT

1. Grant of Restricted Stock Units. The Company hereby grants to the Participant named in the Notice of Grant of Restricted Stock Units (the "Notice of Grant") in Part I of this Award Agreement under the Plan an Award of Restricted Stock Units, subject to all of the terms and conditions in this Award Agreement and the Plan, which is incorporated herein by reference. Subject to Section 15(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Award Agreement, the terms and conditions of the Plan shall prevail.

2. Company's Obligation to Pay. Each Restricted Stock Unit represents the right to receive a Share on the date it vests. Unless and until the Restricted Stock Units will have vested in the manner set forth in Section 4 or 6, Participant will have no right to payment of any such Restricted Stock Units. Prior to actual payment of any vested Restricted Stock Units, such Restricted Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.

3. Participant's Representations. In the event the Shares have not been registered under the Securities Act at the time the Restricted Stock Units are paid to Participant, Participant shall, if required by the Company, concurrently with the receipt of all or any portion of this Restricted Stock Unit Award, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit A.

4. Vesting Schedule. Except as provided in Section 6, and subject to Section 7, the Restricted Stock Units awarded by this Award Agreement will vest in accordance with the vesting schedule set forth in the Notice of Grant, subject to Participant continuing to be a Service Provider through each applicable vesting date.

5. Lock-Up Period. Participant hereby agrees that Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed one hundred and eighty (180) days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company,

Participant shall provide, within ten (10) days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section 5 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said one hundred and eighty (180) day (or other) period. Participant agrees that any transferee of the Restricted Stock Unit Award or Shares acquired pursuant to the Restricted Stock Unit Award shall be bound by this Section 5.

6. Payment after Vesting.

(a) General Rule. Subject to Section 10, any Restricted Stock Units that vest will be paid to Participant (or in the event of Participant's death, to his or her properly designated beneficiary or estate) in whole Shares. Subject to the provisions of Section 6(b), such vested Restricted Stock Units shall be paid in whole Shares as soon as practicable after vesting, but in each such case within sixty (60) days following the vesting date. In no event will Participant be permitted, directly or indirectly, to specify the taxable year of payment of any Restricted Stock Units payable under this Award Agreement.

(b) Acceleration.

(i) Discretionary Acceleration. The Administrator, in its discretion, may accelerate the vesting of the balance, or some lesser portion of the balance, of the unvested Restricted Stock Units at any time, subject to the terms of the Plan. If so accelerated, such Restricted Stock Units will be considered as having vested as of the date specified by the Administrator. If Participant is a U.S. taxpayer, the payment of Shares vesting pursuant to this Section 6(b) or otherwise shall in all cases be paid at a time or in a manner that is exempt from, or complies with, Section 409A. The prior sentence may be superseded in a future agreement or amendment to this Award Agreement only by direct and specific reference to such sentence.

(ii) Notwithstanding anything in the Plan, this Award Agreement or any other agreement (whether entered into before, on or after the Date of Grant) to the contrary, if the vesting of the balance, or some lesser portion of the balance, of the Restricted Stock Units is accelerated in connection with Participant's termination as a Service Provider (provided that such termination is a "separation from service" within the meaning of Section 409A, as determined by the Company), other than due to Participant's death**,** and if (x) Participant is U.S. taxpayer and a "specified employee" within the meaning of Section 409A at the time of such termination as a Service Provider and (y) the payment of such accelerated Restricted Stock Units will result in the imposition of additional tax under Section 409A if paid to Participant on or within the six (6) month period following Participant's termination as a Service Provider, then the payment of such accelerated Restricted Stock Units will not be made until the date six (6) months and one (1) day following the date of Participant's termination as a Service Provider, unless the Participant dies following his or her termination as a Service Provider, in which case,

the Restricted Stock Units will be paid in Shares to the Participant's estate as soon as practicable following his or her death.

(c) Section 409A. It is the intent of this Award Agreement that it and all payments and benefits to U.S. taxpayers hereunder be exempt from, or comply with, the requirements of Section 409A so that none of the Restricted Stock Units provided under this Award Agreement or Shares issuable thereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to be so exempt or so comply. Each payment payable under this Award Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). In no event will the Company have any liability or obligation to reimburse, indemnify, or hold harmless Participant for any taxes or costs that may be imposed on or incurred by Participant as a result of Section 409A. For purposes of this Award Agreement, "Section 409A" means Section 409A of the Code, and any proposed, temporary or final Treasury Regulations and Internal Revenue Service guidance thereunder, as each may be amended from time to time.

7. Forfeiture Upon Termination as a Service Provider. Notwithstanding any contrary provision of this Award Agreement, if Participant ceases to be a Service Provider for any or no reason, the then-unvested Restricted Stock Units awarded by this Award Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.

8. Tax Consequences. Participant has reviewed with its own tax advisors the U.S. federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Award Agreement. With respect to such matters, Participant relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. Participant understands that Participant (and not the Company) shall be responsible for Participant's own tax liability that may arise as a result of this investment or the transactions contemplated by this Award Agreement.

9. Death of Participant. Any distribution or delivery to be made to Participant under this Award Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary, or if no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

10. Tax Withholding. Pursuant to such procedures as the Administrator may specify from time to time, the Company shall withhold the minimum amount required to be withheld for the payment of income, employment and other taxes which the Company determines must be withheld (the "Withholding Taxes"). The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit or require Participant to satisfy such Withholding Taxes, in whole or in part (without limitation) by (a) paying cash, (b) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value equal to the amount of such Withholding Taxes, (c) withholding the amount of such Withholding Taxes from Participant's paycheck(s), (d) delivering to the Company already vested and owned Shares

having a Fair Market Value equal to such Withholding Taxes, or (d) selling a sufficient number of such Shares otherwise deliverable to Participant through such means as the Company may determine in its sole discretion (whether through a broker or otherwise) equal to the amount of the Withholding Taxes. To the extent determined appropriate by the Company in its discretion, it shall have the right (but not the obligation) to satisfy any tax withholding obligations by reducing the number of Shares otherwise deliverable to Participant. If Participant fails to make satisfactory arrangements for the payment of such Withholding Taxes hereunder at the time any applicable Restricted Stock Units otherwise are scheduled to vest pursuant to Sections 4 or 6, or tax withholding obligations with respect to the Restricted Stock Units are otherwise due, Participant will permanently forfeit such Restricted Stock Units and any right to receive Shares thereunder and the Restricted Stock Units will be returned to the Company at no cost to the Company. Participant acknowledges and agrees that the Company may refuse to deliver the Shares if such Withholding Taxes are not delivered at the time they are due.

11. Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until certificates representing such Shares (which may be in book entry form) will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant (including through electronic delivery to a brokerage account). After such issuance, recordation and delivery, Participant will have all the rights of a stockholder of the Company with respect to voting such Shares and receipt of dividends and distributions on such Shares.

12. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF THE RESTRICTED STOCK UNITS PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS RESTRICTED STOCK UNIT AWARD OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AWARD AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

13. Grant is Not Transferable. Except to the limited extent provided in Section 9, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby,

or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.

14. Company's Right of First Refusal. Subject to Section 13 any Shares held by Participant or any transferee (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 14 (the "Right of First Refusal").

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares (the "Offered Price"), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price ("Right of First Refusal Price") for the Shares purchased by the Company or its assignee(s) under this Section 14 shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board in good faith.

(d) Payment. Payment of the Right of First Refusal Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within thirty (30) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder's Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 14, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, *provided* that such sale or other transfer is consummated within one hundred and twenty (120) days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section 14 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section 14 notwithstanding, the transfer of any or all of the Shares during Participant's lifetime or on Participant's death by will or intestacy to Participant's immediate family or a trust for the benefit of Participant's immediate family shall be exempt from the provisions of this Section 14. "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Award Agreement, including but not limited to this Section 14, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 14.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the earlier of (i) the first sale of Common Stock of the Company to the general public, or (ii) a Change in Control in which the successor corporation has equity securities that are publicly traded.

15. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Participant understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL IN FAVOR OF THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE RESTRICTED STOCK UNIT AWARD AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL IN FAVOR OF THE ISSUER OR ITS ASSIGNEE(S) ARE BINDING ON TRANSFEREES OF THESE SHARES.
>
> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD OF TIME FOLLOWING THE EFFECTIVE DATE OF THE UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES SET FORTH IN AN AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE

SHARES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER PRIOR TO THE EXPIRATION OF SUCH PERIOD WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Award Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

16. Address for Notices. Any notice to be given to the Company under the terms of this Award Agreement will be addressed to the Company at Seer, Inc., 3800 Bridge Parkway, Suite 102, Redwood City, CA 94065, attention of the President, or at such other address as the Company may hereafter designate in writing.

17. Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to the Restricted Stock Units awarded under the Plan or future Restricted Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

18. No Waiver. Either party's failure to enforce any provision or provisions of this Award Agreement shall not in any way be construed as a waiver of any such provision or provisions, nor prevent that party from thereafter enforcing each and every other provision of this Award Agreement. The rights granted both parties herein are cumulative and shall not constitute a waiver of either party's right to assert all other legal remedies available to it under the circumstances.

19. Successors and Assigns. The Company may assign any of its rights under this Award Agreement to single or multiple assignees, and this Award Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Award Agreement shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns. The rights and obligations of Participant under this Award Agreement may only be assigned with the prior written consent of the Company.

20. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration, qualification or rule compliance of the Shares upon any securities exchange or under any state, federal or foreign law, the tax code and

related regulations or under the rulings or regulations of the United States Securities and Exchange Commission or any other governmental regulatory body or the clearance, consent or approval of the United States Securities and Exchange Commission or any other governmental regulatory authority is necessary or desirable as a condition to the issuance of Shares to Participant (or his or her estate) hereunder, such issuance will not occur unless and until such listing, registration, qualification, rule compliance, clearance, consent or approval will have been completed, effected or obtained free of any conditions not acceptable to the Company. Subject to the terms of the Award Agreement and the Plan, the Company shall not be required to issue any certificate or certificates for Shares hereunder prior to the lapse of such reasonable period of time following the date of vesting of the Restricted Stock Units as the Administrator may establish from time to time for reasons of administrative convenience.

21. Interpretation. The Administrator will have the power to interpret the Plan and this Award Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. Neither the Administrator nor any person acting on behalf of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Award Agreement.

22. Modifications to the Award Agreement. This Award Agreement constitutes the entire understanding of the parties on the subjects covered. Participant expressly warrants that he or she is not accepting this Award Agreement in reliance on any promises, representations, or inducements other than those contained herein. Modifications to this Award Agreement or the Plan can be made only in an express written contract executed by a duly authorized officer of the Company. Notwithstanding anything to the contrary in the Plan or this Award Agreement, the Company reserves the right to revise this Award Agreement as it deems necessary or advisable, in its sole discretion and without the consent of Participant, to comply with Section 409A or to otherwise avoid imposition of any additional tax or income recognition under Section 409A in connection to this Award of Restricted Stock Units.

23. Governing Law; Severability. This Award Agreement and the Restricted Stock Units are governed by the internal substantive laws, but not the choice of law rules, of California. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Award Agreement shall continue in full force and effect.

24. Entire Agreement. The Plan is incorporated herein by reference. The Plan and this Award Agreement (including the exhibits referenced herein) constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant’s interest except by means of a writing signed by the Company and Participant.

Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Award Agreement subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Award Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Award Agreement and fully understands all provisions of this Award Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Award Agreement. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT:	SEER, INC
Signature	By
Print Name	Title

Residence Address:

[Signature Page to Seer, Inc. RSU Award Agreement]

EXHIBIT A

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT :

COMPANY : SEER, INC.

SECURITY : CLASS A COMMON STOCK

AMOUNT :

DATE :

In connection with the receipt of the above-listed Securities, the undersigned Participant represents to the Company the following:

(a) Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Participant further acknowledges and understands that the Company is under no obligation to register the Securities. Participant understands that the certificate evidencing the Securities shall be imprinted with any legend required under applicable state securities laws.

(c) Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Restricted Stock Unit Award to

Participant, the receipt of the Securities shall be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of the applicable conditions specified by Rule 144, including in the case of affiliates (1) the availability of certain public information about the Company, (2) the amount of Securities being sold during any three (3) month period not exceeding specified limitations, (3) the resale being made in an unsolicited "broker's transaction", transactions directly with a "market maker" or "riskless principal transactions" (as those terms are defined under the Securities Exchange Act of 1934) and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Restricted Stock Unit Award, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which may require (i) the availability of current public information about the Company; (ii) the resale to occur more than a specified period after the purchase and full payment (within the meaning of Rule 144) for the Securities; and (iii) in the case of the sale of Securities by an affiliate, the satisfaction of the conditions set forth in sections (2), (3) and (4) of the paragraph immediately above.

(d) Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 shall have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption shall be available in such event.

PARTICIPANT

_____

Signature

_____

Print Name

_____

Date

[***] Certain information in this document has been excluded pursuant to Regulation S-K, Item 601(b)(10). Such excluded information is not material and would likely cause competitive harm to the registrant if publicly disclosed.

Umbrella Development & Supply Agreement

between

Seer, Inc

and

Hamilton Company

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UMBRELLA DEVELOPMENT & SUPPLY AGREEMENT

This UMBRELLA DEVELOPMENT & SUPPLY AGREEMENT (this "**Agreement**") by and between SEER, INC., a State of California corporation ("**Buyer**"), and HAMILTON COMPANY, a State of Nevada corporation ("**Hamilton**"), is effective as of March 9, 2020 (the "**Effective Date**"). Buyer and Hamilton may be referred to individually as a "**Party**" and collectively as the "**Parties**".

Buyer is a life sciences company focused on developing and commercializing its Proteograph™ platform for high-throughput and accurate analyses of the proteome for research and clinical applications;

Hamilton is in the business of developing liquid handling solutions, assisting with the development of application specifications of liquid handling processes and selling the Products (as defined below); and

Buyer desires to purchase directly from Hamilton the Products and receive support for aftermarket activities from Hamilton, and Hamilton desires to sell the Products and provide such support to Buyer, all pursuant to the terms and conditions of this Agreement.

In consideration of the mutual covenants set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto covenant and agree as follows:

ARTICLE 1 – DEFINITIONS

As used throughout this Agreement, each of the following initially capitalized terms has the respective meaning set forth below:

1. "**Affiliate**" of a Party hereto means any entity that directly or indirectly controls, is controlled by or is under common control with such Party, for so long as such control exists. For purposes of this definition only, "**control**" (and, with correlative meanings, the terms "controlled by" and "under common control with") means, in the case of a corporation, the ownership of more than fifty percent (50%) of the outstanding voting securities thereof or, in the case of any other type of entity, an interest that results in the ability to direct or cause the direction of the management and policies of such Party or the power to appoint more than 50% of the members of the governing body of the Party.

2. "**Applicable Laws**" means all federal, state, provincial, local, national and supra-national laws, statutes, rules and regulations, including any rules, regulations, guidance, guidelines or requirements of Regulatory Authorities, national securities exchanges or securities listing organizations, in any country, and applicable customary and reasonable industry practices, in each case that are in effect from time to time during the Term and applicable to a particular activity hereunder.

3. "**Business Day**" means any day other than a Saturday, Sunday or other day on which banks in Reno, Nevada are authorized or required by law to close.

4. "**Buyer's Technology**" means any Buyer Intellectual Property that is proprietary to Buyer and/or its Affiliates, including but not limited to Buyer's Know-How, trade secrets, Proteograph™ platform and related technology and Confidential Information (to the extent not otherwise incorporating Hamilton Technology or Confidential Information). For clarity, Buyer's Technology includes all assays and related Methods included in or otherwise necessary to exploit Buyer's Proteograph™ platform (collectively, "**Buyer's Assays**"). For clarity, Hamilton may manufacture and/or sell an Instrument that may compete with Final Product herein, so long as the Instrument does not contain Buyer Technology, proprietary information, or any technology or information based substantially on technology or information provided by Buyer or derived from such Buyer-provided technology or information.

5. "**Commercial Launch**" means the first date upon which Buyer makes Final Product available to the public for purchase and commercial use by third party customers.

6. "**Consumables**" means the Hamilton provided disposable tips (i.e., Nested Conductive Filter and Clear Tips), reagent reservoirs and other consumables (if any) described in the applicable Project Work Scope Schedule.

7. "**Customer Requirement Specifications**" or "**CRS**" means a required document (maintained outside this Agreement) outlining the Buyer's requirements for a project, updated and agreed upon between the Parties.

8. "**FDA**" means the U.S. Food and Drug Administration, or any successor agency thereto.

9. "**Final Product**" means each of Buyer's final saleable products comprising, collectively, the Product and any Buyer or third party offered products, and consumables used on or in conjunction with the Product not included in the Instrument bill of materials ("**BOM**") set forth in the applicable Project Work Scope Schedule.

10. "**Fiscal Year**" means the 12-month period starting July 1st of a calendar year and ending June 30th of the following calendar year.

11. "**Hamilton Technology**" means any Hamilton Intellectual Property that is proprietary to Hamilton and/or its Affiliates, including but not limited to Hamilton's Know-How, trade secrets, manufacturing processes, Product data, Confidential Information and Specifications (to the extent not otherwise incorporating Buyer's Technology or Confidential Information).

12. "**Instrument**" means the configured automated liquid handling workstation(s) identified as described in the applicable Project Work Scope Schedule.

13. "**Intellectual Property**" means any item, property, process, product, trade secret, or similar creation or right, whether or not patentable, copyrightable, trademarkable or otherwise protectable under intellectual property or other Applicable Laws, as well as all inventions, discoveries, methods, ideas, designs, developments, hardware, firmware, software and programs (including object code and source code), improvements, innovations, formulas, processes, assays, written works, know-how, techniques, works of authorship and technology developed, conceived, contemplated, written, completed, reduced to practice, or learned by a Party, including any enhancements or modifications made by such Party (including its employees, agents, contractors and subcontractors) at any time to the above, and intellectual property rights worldwide associated with or relating to the foregoing whether arising under statutory or common law or by contract and whether or not perfected, now existing or hereafter filed, issued, or acquired, including all (i) patent rights (including patent applications and disclosures), (ii) rights of priority, (iii) rights associated with works of authorship including copyrights and mask work rights, (iv) trademark rights, (v) rights relating to the protection of trade secrets and non-public, confidential or proprietary information, and (vi) any right analogous to those set forth herein and any other proprietary rights relating to intangible property (collectively, (i)-(vi), "**Intellectual Property Rights**").

14. "**Know-How**" means, with respect to a Party, any and all technical information presently available or generated during the Term of this Agreement that relates to the Products or any improvements thereto made by such Party (including its employees, agents, contractors and subcontractors) and shall include, without limitation, all manufacturing data and any other information relating thereto and useful for the development, manufacture, use or effectiveness of such Products.

15. "**Method**" means a workflow for processing an assay in order to qualitatively assess or quantitatively measure the presence, amount, or functional activity of a target application.

16. "**Product**" means, individually and/or collectively, the Instrument and Consumables and the associated Hamilton provided accessories, software, supplies and Spare Parts, in each case listed on a Project Work Scope Schedule(s) or Instrument BOM. For the avoidance of doubt, any and all products, consumables and other items incorporated in Final Product or intended for use with the Instrument, but in each case not supplied by Hamilton hereunder, are expressly excluded from the definition of Product.

17. "**Project Work Scope Schedule**" means each individual project specific scope, attached hereto (or to be attached hereto) as Exhibits and incorporated into this Agreement by reference, outlining the deliverables

based on the CRS, Product Specifications, Product pricing, and applicable lead time for Product, as may be entered into or amended by the Parties from time to time during the Term.

18. "**Purchase Order**" means a written request from Buyer submitted to Hamilton requesting the supply of Products in accordance with section 2.5.

19. "**Quarter**" means each period of three consecutive calendar months commencing on July 1, October 1, January 1 and April 1 of each Fiscal Year.

20. "**Raw Materials**" means the materials, components, and packaging required to manufacture and package the Product in accordance with the Specifications.

21. "**Regulatory Authority**" means any applicable government regulatory authority involved in granting approvals for the use, development, manufacture or commercialization of Products, including the FDA, or any other national, supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity with authority over the use, manufacture or commercialization of Products, or any successor agency thereto.

22. "**Representatives**" means, in respect of a Party, its subsidiaries and its Affiliates' respective directors, officers, managers, members, employees, contractors and agents.

23. "**Service**" means aftermarket hardware support and maintenance for Instruments under warranty or extended service agreement, as described in Exhibit 3.

24. "**Spare Parts**" means items required for the care or enhancement of the original Product.

25. "**Specifications**" means, with respect to a Product, the specifications for the design, composition, product safety assurance, manufacture, packaging, acceptance criteria and quality control of such Product set forth or referenced in the applicable Project Work Scope Schedule. In addition, the Specifications shall include compliance with Applicable Laws. For clarity, the Specifications are Hamilton's property to the extent not incorporating Buyer's Technology or Confidential Information.

26. "**Term**" means the Initial Term and any Extended Term.

ARTICLE 2 – SUPPLY, PRICING, FORECASTS, ORDERS, SERVICES

2.1 Supply of Product.

2.1.1 During the Term, Hamilton shall supply Buyer with those quantities of Product ordered by Buyer pursuant to this Agreement, subject to the ordering procedures set forth in section 2.5 below. Each Product sold hereunder will conform to the Specifications for such Product.

2.1.2 Buyer may request at any time by written notice to change any one or more of the following: (a) method of packaging; (b) carrier; or (c) place and/or time of delivery, subject to section 2.5.3. Hamilton shall accept and implement such changes as soon as reasonably practical at Buyer's expense.

2.1.3 Hamilton may subcontract or delegate any portion (but not all) of its obligations under this Agreement, provided that Hamilton shall (a) ensure that each subcontractor has and maintains all appropriate qualifications, and (b) be responsible for each subcontractor's performance hereunder (including performance or non-performance by such subcontractor that would constitute a breach of this Agreement if conducted by Hamilton) as if Hamilton were itself performing such activities.

2.2 Prices.

The prices for Products sold by Hamilton to Buyer during the Term are as set forth in the applicable Project Work Scope Schedule and subject to adjustment only as expressly provided herein. Such prices shall include all of Hamilton's costs of normal packaging, labeling and testing in accordance with the Specifications. The price for Product does not include any shipping, freight, insurance or tax (other than

taxes on Hamilton's income). Such shipping, freight, insurance, and tax expenses shall, to the extent incurred by Hamilton, be invoiced separately by Hamilton and borne by Buyer.

2.3 Price Adjustments.

2.3.1 Annual Adjustments. Prices will be in effect and fixed for the duration of the Initial Term. Not later than 90 days prior to the beginning of the Extended Term, Hamilton may provide to Buyer an updated price list effective for the Extended Term to the extent reflecting actual changes to Hamilton's list pricing for Products (which updated pricing, for clarity, shall be subject to the discounting described in this section 2.3 below). No later than 30 days prior to the beginning of the Extended Term, the relevant Exhibit(s) shall be amended and signed by both Parties to reflect any agreed price changes. A price change will not affect Purchase Orders placed by Buyer during the Initial Term.

2.3.2 Tier Levels for Instrument purchases. The price for Instruments will be discounted as set forth in the applicable Project Work Scope Schedule based upon the cumulative number of Instruments ordered by Buyer over each 12-month period commencing on the first day of the Quarter during which Commercial Launch occurs, provided that Instruments ordered by Buyer prior to the first day of such Quarter will be deemed, for purposes of this section 2.3.2, to have been ordered during the first such 12-month period. The discount will initially be calculated based on Buyer's Initial Forecast or Rolling Forecast, as applicable, for such 12-month period. If Buyer orders fewer Instruments than forecasted during the applicable 12-month period the discount will be recalculated to the appropriate tier for the number of Instruments ordered in such 12-month period, and Buyer will be required to pay Hamilton the difference between the discount taken and the discount earned. If Buyer orders more Instruments than forecasted during the applicable 12-month period, the discount will be recalculated to the appropriate tier for the number of Instruments ordered in such 12-month period, but Hamilton will not be required to credit or refund Buyer the difference between the discount taken and the discount earned for orders previously completed during such 12-month period. For example, with respect to a 12-month period, if Buyer estimated in its Rolling Forecast that it will order [***] Instruments, Buyer will be charged [***] pricing for each Instrument ordered by Buyer during such 12-month period ([***] units x $[***] per unit, $[***]). If Buyer actually ordered [***] units in aggregate during such 12-month period, the pricing will be adjusted to [***] pricing for each Instrument ordered by Buyer during such 12-month period, and Buyer will pay to Hamilton the difference ([***] units x $[***] per unit, $[***]).

2.3.3 Tier Levels for disposable tip purchases. The price for disposable tips will be discounted as set forth in the applicable Project Work Scope Schedule based upon the cumulative number of disposable tip cases ordered by Buyer over each 12-month period commencing on the first day of the Quarter during which Commercial Launch occurs, provided that disposable tip cases ordered by Buyer prior to the first day of such Quarter will be deemed, for purposes of this section 2.3.3, to have been ordered during the first such 12-month period. The discount will initially be calculated based on Buyer's Initial Forecast or Rolling Forecast, as applicable, for such 12-month period. If Buyer orders fewer disposable tip cases than forecasted during the applicable 12-month period the discount will be recalculated to the appropriate tier for the number of disposable tip cases ordered in such 12 month period, and Buyer will be required to pay Hamilton the difference between the discount taken and the discount earned. If Buyer orders more disposable tip cases than forecasted during the applicable 12-month period the discount will be recalculated to the appropriate tier for the number of disposable cases ordered in such 12 month period, but Hamilton will not be required to credit or refund Buyer the difference between the discount taken and the discount earned for orders previously completed during such 12-month period.

2.4 Forecasts.

No later than one Quarter prior to Commercial Launch, Buyer shall provide Hamilton with Buyer's anticipated number of Instruments and Consumables that Buyer plans to purchase for the 12-month period commencing on the first day of such Quarter ("**Initial Forecast**"). Thereafter, at least 60 calendar days prior to the beginning of each fiscal Quarter (i.e. by the first day of May, August, November and February) the Buyer will provide an update of Buyer's anticipated number of Instruments and Consumables for the 12-month period beginning on the first day of the Quarter for which the forecast is applicable ("**Rolling Forecast**"). Such Rolling Forecasts shall be prepared in good faith by Buyer in order to facilitate Hamilton's timely manufacture according to the terms of this Agreement.

Except as expressly provided herein, the number of Instruments and Consumables included in the Initial Forecast and each Rolling Forecast shall be non-binding on the Parties and will be provided for planning purposes only, provided that Buyer shall attempt to make each forecast as accurate as reasonably possible.

2.5 Orders.

2.5.1 Subject to section 2.5.4, Buyer shall place orders directly to Hamilton, and not through a third party, for Product by written or electronic Purchase Order. Such Purchase Orders shall set forth the desired date of delivery with respect to the Products ordered and shall be placed in accordance with the Product lead-time stated in the Project Work Scope Schedule(s). A Purchase Order will be deemed accepted by Hamilton upon the first of the following to occur: (a) Hamilton making, signing, or delivering to Buyer any letter, form, or other writing or instrument acknowledging acceptance of the Purchase Order, (b) any performance by Hamilton under the Purchase Order; or (c) Hamilton failing to make, sign or deliver any letter, form or other writing or instrument rejecting the Purchase Order within 10 business days of receipt. Once accepted (or deemed accepted), a Purchase Order will be binding upon the Parties.

2.5.2 Hamilton agrees to accept blanket Purchase Orders for Products, which Buyer may cancel upon 60 days' written notice to Hamilton. Notwithstanding the foregoing, Buyer shall be obligated to purchase any finished Product or Raw Material that Hamilton has completed or ordered, as applicable, in furtherance of providing the Products ordered by Buyer pursuant to any blanket Purchase Order prior to the date Hamilton receives such notice of cancellation from Buyer. Hamilton shall use commercially reasonable efforts to mitigate expenses related to any such cancellation by Buyer. For clarity, manufacturing of Instruments against a blanket Purchase Order will not occur until Buyer provides required delivery dates (allowing for Product lead times).

2.5.3 Buyer may, at any time prior to shipment, request to change the delivery schedule of ordered Instruments upon notice to Hamilton. Such change requests may only be made once per Quarter.

2.5.4 Notwithstanding anything to the contrary in this Agreement, Hamilton will accept and fulfill Consumable orders placed by Buyer's customers directly with Hamilton. Buyer will not be responsible for orders placed by its customers, and Hamilton's recourse for non-payment will solely be against such customers and not against Buyer.

2.5.5 Hamilton will accept and fill Purchase Orders up to 115% of the forecasted quantities by Buyer and use commercially reasonable efforts to supply additional Products ordered in excess of 115% of the forecasted quantities by Buyer.

2.5.6 From time to time prior to Commercial Launch, Buyer may place orders, and Hamilton shall accept such orders, for manufacture and supply of beta prototype instruments, all on the terms and conditions of this Agreement.

2.6 Performance of Engineering Services.

Hamilton agrees to perform the non-recurring engineering (NRE) and other services described in each Project Work Scope Schedule and deliver to Buyer all deliverables in accordance with all Applicable Laws and the respective specifications, schedules and other criteria described in such Project Work Scope Schedule. For clarity, Hamilton shall perform such services at its facility in Reno, Nevada except as expressly set forth in the applicable Project Work Scope Schedule or otherwise mutually agreed in writing by the Parties. Buyer shall remit payment of any applicable fees within 45 days of the date of receipt of an applicable invoice from Hamilton following performance.

ARTICLE 3 - PAYMENT AND DELIVERY

3.1 Payment Terms.

3.1.1 Hamilton shall send Buyer an invoice for all Product purchases to Buyer's address set forth on the front of an applicable Purchase Order. Such invoices shall be dated and sent no earlier than the date of

shipment. Provided that the Products delivered comply with the terms of this Agreement, Buyer shall pay in U.S. dollars the amount shown on such invoice. Buyer shall remit payment to Hamilton (i) within days of the date of receipt of an applicable invoice (Net 45) until Buyer has achieved "Tier 2" pricing with respect to Instruments (i.e., ordered [***] units), and (ii) thereafter, within 60 days of the date of receipt of an applicable invoice (Net 60). Buyer shall make payments by check, or electronic transfer of funds.

3.1.2 Buyer shall pay interest on all undisputed late payments at the lesser of the rate of one percent (1%) per month or the highest rate permissible under applicable law, calculated daily and compounded monthly from the date payment was due. In addition to all other remedies available under this Agreement or at law (which Hamilton does not waive by the exercise of any rights hereunder), Hamilton shall be entitled to suspend the delivery of any Product if Buyer fails to pay any undisputed amounts when due hereunder and such failure continues for 10 business days following Buyer's receipt of written notice thereof.

3.2 Delivery.

3.2.1 All Products shipped domestically (i.e., within the U.S.) shall be shipped to the location expressed on the Purchase Order, via FCA Hamilton's manufacturing facility (INCOTERMS 2020). All Products shipped internationally shall be shipped to the location expressed on the Purchase Order, via Ex Works Hamilton's manufacturing facility (INCOTERMS 2020). Hamilton shall (a) pack each of the Products in a manner suitable for export shipment, (b) arrange for shipment of the Products and (c) place the Products on a common carrier for shipment and shall promptly forward the full set of requisite shipping documents to Buyer. Accordingly, title to the Products and risk of loss thereof shall transfer to Buyer upon delivery to such common carrier. All shipments shall be accompanied by a packing slip that describes the Products, states the Purchase Order number, part number and quantity delivered and shows the shipment's destination. Disposal of all packaging and packing materials is Buyer's responsibility. For clarity, Hamilton shall manufacture Products solely at its facility in Reno, Nevada, except as expressly set forth in the applicable Project Work Scope Schedule or otherwise mutually agreed in writing by the Parties.

3.2.2 In order for Hamilton to ensure that all Products are shipped timely, Buyer shall submit a completed Site Requirement form as referenced within Exhibit 5 to Hamilton at least 30 days prior to the delivery date. Failure to do so may cause a delay in shipping of Product, for which Hamilton shall not be liable.

3.2.3 When assistance from third party riggers is required to assist with placement of Instruments the expense will, to the extent incurred by Hamilton, be added to the respective invoice and be the responsibility of Buyer.

3.2.4 For shipments of Products requested by Buyer to be delayed by more than 60 days in accordance with section 2.5.3, the Parties agree that (a) as to Instruments, Buyer is permitted to reschedule shipment of up to two Instruments at no additional charge, (b) for each Instrument, Buyer shall be responsible to pay Hamilton a monthly storage fee of $[***] USD per unit that is not shipped on or by the 60th day, and (c) as to Consumables, Buyer is permitted to reschedule shipment at no additional charge. Buyer shall remit payment of such charges applied in this section 3.2.4 (b) within 45 days of the date of receipt of an applicable invoice from Hamilton following the applicable storage.

3.3 Installation, Qualification.

Except as previously agreed in writing by Buyer, Hamilton shall be responsible for installing and qualifying each Instrument in accordance with the Specifications, Hamilton's standard operating procedures (SOPs) and the applicable Project Scope Work Schedule. Such installation and qualification shall be at Buyer's expense, except as otherwise mutually agreed in writing by the Parties. Payment for installation and qualification services (to the extent not included in Instrument pricing) will be due within 45 days from the date of Buyer's receipt of an applicable invoice from Hamilton following such installation and qualification.

ARTICLE 4 - TRAINING

4.1 Technical Training.

4.1.1 During the Term of this Agreement, Hamilton shall, at its expense, provide Buyer with one course per Product of basic user training for two of Buyer's employees and one service training for two of Buyer's employees who will be engaged in the technical support of the Product. Training will be conducted at Hamilton's facility in Reno, NV or at Buyer's facility in Redwood City, CA as mutually agreed. If conducted at other than Hamilton's facility, Hamilton shall pay for the salary of its instructor(s) and Buyer shall pay all reasonable costs incurred by Hamilton's instructor(s) for travel and living expenses during the period of such training in accordance with Exhibit 3.

4.1.2 At Buyer's request, additional training courses will be offered to Buyer at Buyer's expense in accordance with Exhibit 3. Such training shall cover in detail, the installation, configuration, operation, troubleshooting, adjustment, and test and maintenance of the Product. Hamilton shall provide a reasonable quantity of appropriate Product as training aids. When such classes are conducted at Buyer's facilities, Buyer shall provide one Instrument for every two trainees as well as required service tools.

4.1.3 Buyer is responsible to remit payment for training within 30 days of the date of receipt of an applicable invoice following completion of the applicable training course.

4.2 Training Materials.

4.2.1 During the Term of this Agreement, Hamilton shall provide Buyer with all materials utilized to provide training in connection with the Products. Training materials shall include, but are not limited to, instructor guides, overheads, student workbooks, and manual/guides. Hamilton shall provide masters of such training materials in both hard copy and electronic media. Buyer is permitted to use such material in training Buyer's sales and support staff and its customers on the Products or as otherwise necessary or reasonably useful to exercise its rights or fulfill its obligations under this Agreement.

4.2.2 Hamilton hereby grants to Buyer a royalty-free, non-exclusive, worldwide license to use, modify, create derivative works based upon, reproduce, display, demonstrate and distribute the training materials (whether modified or unmodified but excluding proprietary technical information relating to the Products) for course development use solely in connection with the Products distributed under the terms of the Agreement.

ARTICLE 5 - IMPROVEMENTS AND CHANGES TO THE PRODUCT

5.1. Improvements.

From time to time upon written notification, Buyer may request to modify the work in a related CRS or Project Work Scope Schedule (including but not limited to changes in the drawings, designs, Specifications and/or packaging of the Products) ("**Change Order**"). For clarity, Hamilton will not be required to perform work that is beyond the initial scope of work described in the Project Work Scope Schedule or CRS without an approved Change Order. Hamilton will use commercially reasonable efforts to approve a Change Order based on assessment of needs, risks, and resources. Hamilton reserves the right to charge Buyer for additional labor and expense in connection with a Change Order. Buyer will be responsible for additional labor, expense, and price increases that may occur due to any change to the Project Work Scope Schedule or CRS caused by inclusion of a Change Order, in each case solely to the extent previously approved in writing by Buyer.

5.2. Critical Parts.

From time to time during the Term, the Parties shall define a list of specific components/parts used in a Product that are considered critical to the functionality of Instrument performance or to safety, environmental or other governmental compliance of the Product, and shall update the applicable Project Work Scope Schedule ("**Critical Parts**"). As of the Effective Date, Critical Parts are listed on Exhibit 4.

5.3. Change Notification.

Hamilton shall not make any changes to Critical Parts without prior approval from Buyer except as outlined in Exhibit 4. Buyer has 90 days from the date of receipt of Hamilton's notification therefor to (a) accept such

change to a Critical Part and/or Specification, (b) reject such change, in which case Buyer may continue to place Purchase Orders for Products during the 6-month period following such rejection with the unchanged Critical Part and/or Specifications for delivery during the 18-month period following such implementation (provided, for clarity, that Buyer may place Purchase Orders for changed Products notwithstanding such rejection), or (c) request a Change Order for consideration. For clarity, Hamilton shall accept all such Purchase Orders, and shall use commercially reasonable efforts to approve all such Change Orders, in each case in accordance with this Agreement.

ARTICLE 6 – TERM

6.1 Initial Term.

The initial term of this Agreement (the "**Initial Term**") shall commence on the Effective Date hereof and remain in effect for a period of three years following Commercial Launch, unless sooner terminated as expressly provided herein.

6.2 Automatic Extensions.

6.2.1 This Agreement shall renew for a [***] renewal period following the Initial Term (the "**Extended Term**") upon Buyer's delivery of written notice given to Hamilton at least 90 days prior to the end of the Initial Term.

6.2.2 Deliveries will be scheduled after the Term for Purchase Orders issued during the Term and unfulfilled as of the end of the Term.

ARTICLE 7 – TERMINATION

7.1 Termination by Buyer for Convenience.

Buyer may terminate this Agreement, or any Project Work Scope Schedule with or without cause, upon 120 days prior written notice to Hamilton, and subject to any accrued or outstanding obligations of Buyer under this Agreement.

7.1.1 Upon receipt of a termination notice for any Project Work Scope Schedule, unless otherwise directed by Buyer, Hamilton shall take commercially reasonable steps to mitigate any expenses or losses arising from such termination, including but not limited to: (i) stopping work under all Purchase Orders to the extent specified; (ii) terminating all orders to the extent they relate to terminated work; and (iii) placing no further orders for Raw Materials, goods, supplies or services required to be furnished by Hamilton to complete the Products ordered hereunder (collectively, "**Material**").

7.1.2 Upon termination of any Project Work Scope Schedule, Hamilton shall use commercially reasonable effort to (i) settle all claims with its suppliers for Raw Materials, (ii) use commercially reasonable effort to sell any Material relating to the terminated work, and (iii) re-direct finished Product to other products or customers to minimize Buyer's liability.

7.2 Termination by Hamilton for Discontinuance of Business.

Hamilton may terminate this Agreement at any time upon 365 days' prior written notice to Buyer in the event Hamilton determines in its sole and absolute discretion to discontinue the manufacture and sale of the Instruments. Buyer shall be entitled to place Purchase Orders for such discontinued Instruments for delivery during the 18-month period following such termination. In addition, if requested by Buyer, Hamilton will cooperate with Buyer to amend and restate this Agreement to replace such discontinued Instruments with Hamilton's intended replacement instrument(s), including without limitation the MicroLab® VANTAGE Liquid Handling System product lines.

7.3 Termination for Breach.

This Agreement may be terminated, prior to the expiration of the Term, by either Party by giving written notice of its intent to terminate and stating the grounds therefore if the other Party shall have materially breached or materially failed in the observance or performance of any representation, warranty, guarantee, covenant or obligation under this Agreement. The Party receiving such notice shall have 60 days from the date of receipt thereof to cure such breach or failure. In the event such breach is cured during such period, such notice shall be of no force or effect and this Agreement shall not be terminated. If the breach is not cured, this Agreement will terminate 60 days after a Party receives such notice. Notwithstanding the foregoing, if the Party alleged to be in material breach of this Agreement disputes such breach in good faith by written notice to the alleging Party promptly after receiving notice of such breach, the alleging Party shall not have the right to terminate this Agreement pursuant to this section 7.3 unless it has been determined that this Agreement was materially breached in accordance with section 16.3 and the breaching Party fails to comply with its obligations hereunder within 60 days after such determination.

7.4 Termination for Insolvency.

Either Party may terminate this Agreement with notice to the other Party: (a) if a proceeding or case shall be commenced against the other Party hereto in any court of competent jurisdiction, seeking (1) its liquidation, reorganization, dissolution or winding-up, or the composition or readjustment of its debts, (2) the appointment of a trustee, receiver, custodian, liquidator or the like of the Party or of all or any substantial part of its assets, or (3) similar relief under any bankruptcy laws, and in each case (1)-(3) such proceeding or case is not voluntarily dismissed within a period of 90 days; or (b) in the event an order for relief against the other Party hereto shall be entered in an involuntary case under the Bankruptcy Code or any bankruptcy law.

7.5 [*** represents one paragraph of the termination policy]

7.6 Effect of Termination.

In the event of termination of this Agreement by either Party in accordance with the terms of this Agreement, other than termination by Buyer for Hamilton's material breach, Buyer shall be liable for the following: (a) payment for all Products ordered by Buyer whether or not delivered or in transit to Buyer or its customer as well as all finished Products in Hamilton's inventory prior to written notification of Termination, (b) payment for all work-in-process related to any Product, and (c) payment for all non-cancelable Hamilton purchase orders for Materials to be used by Hamilton in the production of Products in amounts necessary to fulfill Buyer's Rolling Forecast for 12 months. Hamilton shall use commercially reasonable efforts to minimize cancellation charges by returning inventory and Material for credit, canceling Material on order and applying Material to other Hamilton projects (when possible and at the sole and absolute discretion of Hamilton). Upon Buyer's payment of the amounts outlined above, all work-in-process, and components in Hamilton's possession and control or on order (non-cancelable) shall be delivered to and become property of Buyer on an as is basis.

In the event of termination of this Agreement by either Party or expiration of this Agreement, Buyer shall have the right to purchase Consumables, Spare Parts, and other Products, excluding the Instrument, for a period of seven years, at Hamilton's then applicable price for such items, if and to the extent that such items are regularly stocked by Hamilton. Buyer expressly acknowledges and agrees that Hamilton has no obligation to stock or order any such items, and Buyer's rights set forth in this section 7.6 are limited to Hamilton's inventory.

Termination or expiration of this Agreement shall not relieve a Party from any liability or obligation that, at the time of termination or expiration, has accrued to the other Party. The provisions of articles 1, 7, 11 (solely for a period of three years), 14, 15 (with respect to section 15.4, solely for 3 years), and 16 (with respect to section 16.1, solely for seven years) and sections 3.1, 4.2.2, 8.1.1, 9.1, 13.1 (solely with respect to Products supplied under this Agreement) and 13.4 shall survive the expiration or termination of this Agreement.

ARTICLE 8 – INVENTORY

8.1 Inventory/Tooling.

8.1.1 Unless otherwise agreed to in writing: (i) title to tooling, equipment, or material furnished to Hamilton by Buyer, or paid for by Buyer, and any replacement thereof, including any materials affixed thereto, is and shall remain solely Buyer's property; and (ii) Hamilton holds such property solely as bailee. Hamilton shall not substitute any property for Buyer's property or use Buyer's property for any purpose other than for filling Buyer's Purchase Orders. Hamilton shall keep accurate records showing that Buyer's property is held on behalf of Buyer, and on Buyer's written request shall furnish Buyer as soon as reasonably practical, an inventory of Buyer's property held by Hamilton. Upon Buyer's request, Hamilton shall transfer to Buyer all such tooling, equipment and/or material, as well as copies of any related drawings or other documentation, at Buyer's expense.

ARTICLE 9 – LIMITED WARRANTY, PRODUCT ACCEPTANCE, SUPPORT SERVICES

9.1 Warranty.

9.1.1 Hamilton represents and warrants to Buyer that all Products, at the time of shipment to Buyer, shall be (i) of merchantable quality, and (ii) manufactured in accordance and conformity with the Specifications. The warranty period is [***], whichever is earlier, or such longer period required under Applicable Laws. The "**Installation Date**" shall be that date on which the Instrument has been installed at Buyer's or its customer's facility and the installation qualification to show performance to Specification has been met. For clarity, such representations and warranties shall extend to all Products regardless of the country of sale or installation.

9.1.2 The Product is designed and validated exclusively with CO-RE technology tips. Buyer acknowledges and agrees that the Instrument performance Specifications shall not apply to the use of non-Hamilton CO-RE tips on the Instrument. For clarity, use of non-Hamilton CO-RE tips shall void the Instrument performance Specifications and warranty. The warranty shall include full parts and labor during the initial warranty time period. For Materials that Hamilton purchases from a third party, Hamilton shall, to the extent Hamilton is permitted by such third party to do, assign any warranties extended by such third party to Buyer, provided, for clarity, that such assignment shall not limit any of the warranties provided hereunder by Hamilton. The warranty expressly does not cover damage caused by normal wear, maintenance performed by a third-party failure to observe the operating instructions, installation not carried out by Hamilton and replacement costs of any Consumables.

9.1.3 EXCEPT AS SET FORTH IN THIS AGREEMENT, INCLUDING SECTIONS 9.1.1 AND 9.1.2 ABOVE, THE PRODUCTS ARE PROVIDED BY HAMILTON ON AN "AS IS" BASIS, WITH NO WARRANTIES OF ANY KIND. EXCEPT AS SET FORTH IN THIS AGREEMENT, INCLUDING SECTIONS 9.1.1 AND 9.1.2 ABOVE, HAMILTON AND BUYER EACH DISCLAIMS TO THE FULLEST EXTENT PERMITTED BY LAW, ALL EXPRESS, IMPLIED, AND STATUTORY WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. EXCEPT AS OTHERWISE SET FORTH IN THIS AGREEMENT, REPAIR OR REPLACEMENT OF THE PRODUCTS BY HAMILTON IS BUYER'S SOLE AND EXCLUSIVE REMEDY OF ANY BREACH OF ANY WARRANTY SET FORTH IN SECTION 9.1.1.

9.2 Product Acceptance.

9.2.1 After delivery of a shipment of any Products to Buyer or Buyer's customer, Buyer shall have 30 days following installation to examine such Products to determine if they conform to the Specifications, are free from defects in design and otherwise comply with the warranties set forth in section 9.1, and, on the basis of such examination, to accept or reject such shipment. Any claims for failure to so conform or for such defects ("**Product Claims**") shall be made by Buyer in writing to Hamilton, within such 30 days, indicating the non-conforming characteristics of the Products ("**RMA Product**"). Hamilton will provide a Return Material Authorization (RMA) number prior to the return of the RMA Product to Hamilton. Hamilton will make reasonable effort to provide an RMA number within 24 hours, but in no event will an RMA number be issued more than two Business Days after Hamilton's receipt of the Product Claim. Notwithstanding the foregoing, if Buyer or its customer first discovers that any Product fails to conform with the Specifications, is defective in design and/or otherwise does not comply with the warranties set forth in section 9.1 after

acceptance thereof, and such failure would not have been readily discoverable from a reasonable inspection or review of the Product (any, a "**Latent Defect**"), Buyer shall have the continuing right to reject the Products, provided it notifies Hamilton of the Latent Defect promptly after discovery or knowledge, as applicable, thereof.

Buyer shall have no obligation to pay for any RMA Products that are subject to Product Claims under investigation by Hamilton. However, if payment has already been made by Buyer, then as promptly as possible after the submission of a Product Claim by Buyer, Buyer will initiate negotiations for discrepancy resolution with Hamilton. Options for resolution for confirmed non-conforming Product include but are not limited to, at Buyer's discretion, (i) provide Buyer with a refund of the full amount paid by Buyer for such RMA Products, (ii) issue Buyer a credit against future billings equal to the full amount paid by Buyer for such RMA Products, (iii) direct a Hamilton certified engineer to repair such RMA Products, or (iv) replace such RMA Products.

Hamilton shall pay for all shipping costs of returning RMA Products that are the subject of Product Claims. Hamilton shall bear the risk of loss for such RMA Products from the time such RMA Products are picked up at or shipped from Buyer, or Buyer's customer premises for return delivery. If no such Defect is found, Buyer shall reimburse Hamilton for all reasonable fees, costs and expenses incurred to analyze and, if requested by Buyer, replace the non-defective RMA Product and Buyer shall bear responsibility for (1) all transportation costs to and from Hamilton's designated facility, (2) the price of the Product found to be conforming, and (3) the price of the replacement Product (if any).

9.2.2 If, after Hamilton has received and inspected RMA Products returned by Buyer pursuant to section 9.2.1, the Parties disagree as to the RMA Product's conformance to the Specifications or whether the RMA Product has a defect or otherwise fails to comply with the warranties set forth in section 9.1, such matter shall be referred to a review committee (the "Review Committee"). The Review Committee shall consist of representatives from each of Buyer and Hamilton and will meet as required. The Review Committee shall review any material or data presented by Buyer that supports its Product Claim that any Product is defective, fails to conform to Specification or otherwise does not comply with the warranties set forth in section 9.1 (e.g., that such Product has affected assay quality). Hamilton may present any material or data in opposition to such Product Claim. The Review Committee may request such additional information or data from the Parties or independently gather such additional data or information, as it deems necessary to settle any disagreement. All resolutions of disagreements by the Review Committee shall be made in good faith and on a timely basis, and the Parties agree to abide by all such resolutions. In addition to settling disagreements in accordance with this section 9.2.2, the Review Committee may also discuss any issues relating to performance or quality of the Products generally.

9.2.3 In the event the Review Committee is unable to resolve such disagreement within 60 days, such disagreement may be submitted for determination by an independent laboratory mutually selected by the Parties and the decision of such independent laboratory (absent manifest error) shall be final and binding on the Parties as to the RMA Product conformance's to the Specifications or whether the RMA Product has a defect or otherwise fails to comply with the warranties set forth in section 9.1. The independent laboratory's fees shall be borne by the non-prevailing Party.

9.3 Support Services.

At Buyer's request and expense, Hamilton shall provide to Buyer and its customers the "third level support" Services described in Exhibit 3 at the rates specified therein, either on an annual service contract or time-and-materials basis. Payment for all Services will be due within 45 days from the date of Buyer's receipt of an applicable invoice from Hamilton following performance or, with respect to annual contracts, within 45 days from the date of Buyer's receipt of an applicable invoice from Hamilton. For clarity, as between the Parties, Buyer shall be responsible for performing all "first level support" and "second level support" services described in Exhibit 3.

ARTICLE 10 – COMPLIANCE

10.1 Each Party covenants and agrees to comply with all Applicable Laws in connection with its performance of this Agreement.

10.2 Hamilton represents and warrants that: (a) it holds all necessary authorizations and permits for any and all manufacturing and supply of Products under this Agreement from the relevant Regulatory Authorities, except where the failure to so hold could not be reasonably expected to have a material adverse effect on Hamilton; and (b) it holds all necessary authorizations and permits from the relevant Regulatory Authorities for the sale, exportation, importation, shipment, holding and further processing of Products, except where the failure to so hold could not be reasonably expected to have a material adverse effect on Hamilton.

10.3 Buyer acknowledges that Hamilton has informed it that U.S. law (Nevada) and U.S. Export Administration Regulations govern and may prohibit the re-export or other disposition of Products and related technical data received by Buyer or its customers without prior approval from the applicable Regulatory Authorities.

10.4 Buyer agrees that diversion of Products from destinations identified in the “Shipper's Export Declaration” constitutes a fundamental and material breach under this Agreement. If Products are diverted from intended destinations, the sale may be voided in the sole discretion of Hamilton, and all right, title and interest in Products shall revert to Hamilton. In the event of such breach, and without limiting any other right or remedy available to Hamilton hereunder, at law, in equity or otherwise, Buyer shall be liable to Hamilton for all costs, fees and expenses incurred by Hamilton in connection with recovery of Products, including reasonable attorney fees.

ARTICLE 11 - REGULATORY MATTERS

11.1 Notification of Certain Events.

11.1.1 If Hamilton becomes aware of information that reasonably suggests that the Product, or any component thereof, has caused or contributed to a death or serious injury due to a malfunction of the Product, or any component thereof, Hamilton shall notify Buyer within one business day of becoming aware of such information and, at Buyer’s request, shall provide Buyer with any other material facts or information that Hamilton has relating thereto.

11.1.2 Hamilton shall notify Buyer in the event of a loss of ISO certification.

11.1.3 Hamilton shall notify Buyer of any audit from a regulatory body, of its factory for the manufacture of the Instrument, or any request for information from the regulatory body related to the manufacture of the Instrument, as soon as possible after Hamilton receives notice of such audit or such request.

11.1.4 If Buyer becomes aware of information that reasonably suggests that the Final Product has caused or contributed to a death or serious injury due to a malfunction of the Final Product, or any component thereof, Buyer shall notify Hamilton within one business day of becoming aware of such information and, at Hamilton’s request, shall provide Hamilton with any other material facts or information that Buyer has relating thereto.

11.1.5 For the purposes of Final Product registration with a government, regulatory agency or notified body, Buyer is solely responsible for registering and paying applicable fees for registration. Hamilton may provide, upon request, design and verification documentation as applicable and defined per CRS to assist Buyer in the registration process. Hamilton may be listed (when applicable) as a Contract Manufacturer, per U.S. FDA Definitions of Establishment Activities, for the Instrument in the U.S. only.

ARTICLE 12 - FAILURE TO SUPPLY; FORCE MAJEURE

12.1 Failure to Supply.

Hamilton will immediately notify Buyer in writing in the event that Hamilton is unable or anticipates that it will be unable to supply Products in the quantities and by the delivery dates specified in accepted Purchase Orders in accordance with this Agreement (any, a “Failure to Supply”). In the event of a Failure to Supply, Buyer shall have the rights, without limiting other rights and remedies available to Buyer arising from Hamilton’s breach of this Agreement, (a) to terminate this Agreement in its entirety immediately upon written notice to Hamilton in the event

a Failure to Supply continues for more than one hundred eighty (180) days, and (b) to cancel Purchase Orders for any quantities of Products affected by such Failure to Supply effective upon notice to Hamilton without penalty or liability.

12.2 Force Majeure Events.

Except as otherwise provided in this section 12.2, the failure of either Party to perform the terms of this Agreement in whole or in part will be temporarily excused if such failure is the result of causes beyond such Party's reasonable control, including, without limitation, acts of God, flood, earthquake, wind and lightning, insurrections, riots, war and warlike operations, civil commotion, fires, explosions, accidents, terrorist acts, acts of the public enemy, epidemics, and changes in laws or regulations or restrictions of any Regulatory Authority (collectively, a "**Force Majeure Event**"). If performance of this Agreement is excused pursuant to this section 12.2, the Party thus excused will use reasonable efforts to avoid, remove and correct the circumstances which caused the failure to perform, and the Party excused from performance will resume performance with the utmost dispatch when such circumstances are avoided, removed or corrected.

A Party claiming to be unable to perform its obligations under this Agreement (either on time or at all) in any of the circumstances set out in this section 12.2 shall notify the other Party of the nature and extent of the circumstances in question as soon as practicable.

This section 12.2 shall cease to apply when such circumstances have ceased to have effect on the performance of this Agreement and the Party affected shall give notice to the other Party that the circumstances have ceased.

If any circumstance relied on by either Party for the purposes of this section 12.2 continues for more than six months, the other Party shall be entitled to terminate this Agreement immediately by providing the other Party written notice of termination.

12.3 Other Arrangements.

Notwithstanding the provisions of section 12.2, in the event that due to the occurrence of a Force Majeure Event, Hamilton shall be unable to supply any Product in such quantities as Buyer shall request and in compliance with the delivery schedule requested by Buyer, then Buyer shall be permitted (with no obligation or liability to Hamilton) to obtain such product similar to the Product affected from another supplier until such time Hamilton can resume supply.

ARTICLE 13 - LABELING; ARTWORK; PROPRIETARY RIGHTS

13.1 Buyer's use of Hamilton Marks.

Buyer shall have the limited right to use Hamilton's corporate name, trademarks, trade names, artwork, logos and designs ("**Hamilton Marks**") to the extent (i) affixed to any Product; (ii) required by law after written notice to Hamilton; or (iii) otherwise provided in this Agreement. The name "Hamilton", its trademark or associated design will appear on the front of the Instrument, in a place visible to end-users of the Final Product and will be no larger than 0.5 inches high by 2.5 inches wide. Hamilton hereby grants to Buyer and its Affiliates a nonexclusive right and license to use the Hamilton Marks in accordance with this section 13.1.

13.2 Hamilton's use of Buyers Marks.

Hamilton shall have the limited right and obligation to use Buyer's corporate name, trademarks, trade names, artwork, logos and designs ("**Buyer's Marks**") to the extent (i) mutually agreed by the Parties; (ii) requested by Buyer in writing to Hamilton in order to brand the Instrument or Products necessary to exercise rights or fulfill obligations in this Agreement; (iii) required by law after written notice to Buyer; or (iv) otherwise provided in this Agreement. Without limiting the foregoing, the name "Seer, Inc.", its trademark or associated design will appear on the front of the Instrument, in a place visible to end-users of the Final Product, as instructed by Buyer in writing. Buyer hereby grants to Hamilton a nonexclusive right and license to use the Buyer's Marks in accordance with this section 13.2. Buyer shall own all right, title and interest in

and to the Buyer's Marks, and all goodwill from the use of the Buyer's Marks shall vest in and inure to the benefit of Buyer.

13.3 Instrument Skin; Packaging.

Buyer shall select, in consultation with Hamilton, the design and appearance of the "skin" of each Instrument reasonably prior to manufacture. For clarity, the Instrument prices set forth in Exhibit 2 are inclusive of any such skin, except to the extent that Buyer requests a skin following the Effective Date that is materially more expensive to manufacture (as supported by competent written evidence) than the skin(s) discussed by the Parties and selected in principle by Buyer prior to the Effective Date.

Buyer and Hamilton shall jointly agree, prior to release, on the appearance and text of any labeling and packaging used in connection with the Product or any finished product containing the Product. Product is to be packaged for shipment in a manner that ensures quality of delivery to Buyer.

13.4 Intellectual Property.

Subject to section 13.1, all rights, title and interest in Hamilton Technology, Hamilton Marks, and other Hamilton Intellectual Property are and shall remain solely with and the property of Hamilton. Subject to section 13.2, all rights, title and interest in Buyer's Technology, Buyer's Marks (including all goodwill therein and thereto), and other Buyer Intellectual Property are and shall remain solely with and the property of Buyer. Accordingly, Buyer hereby assigns all of its right, title and interest in and to Hamilton Intellectual Property to Hamilton, and Hamilton hereby assigns all of its right, title and interest in and to Buyer Intellectual Property to Buyer. Each Party agrees to execute any and all papers and documents that are necessary or convenient to perfect the foregoing assignments.

It is not intended that any Intellectual Property will be jointly developed by the Parties. If the Parties anticipate that they will jointly develop Intellectual Property, they will negotiate a separate agreement to address ownership of such Intellectual Property.

The Parties acknowledge and agree that all Intellectual Property Rights associated with the MicroLab® NIMBUS, MicroLab® STAR, and MicroLab® VANTAGE Liquid Handling System product lines are owned solely and exclusively by Hamilton and that nothing in this Agreement grants or conveys to Buyer or any other party any ownership, right, title or interest, or any security interest in the MicroLab® NIMBUS, MicroLab® STAR, and MicroLab® VANTAGE Liquid Handling System product line other than permissive rights granted to Buyer herein. The Parties further acknowledge and agree that all Intellectual Property Rights associated with the Proteograph™ platform (including without limitation in or to any Buyer's Assays) are owned solely and exclusively by Buyer and that nothing in this Agreement grants or conveys to Hamilton or any other party any ownership, right, title or interest, or any security interest in the Proteograph™ platform (or such Buyer's Assays). All rights not expressly granted herein are reserved by the owner thereof.

ARTICLE 14 - GENERAL AND SPECIFIC REPRESENTATIONS AND WARRANTIES

14.1 Corporate Standing.

Buyer and Hamilton each represents and warrants to the other that it is duly organized, validly existing and in good standing under the laws of the jurisdiction in which incorporated, organized or formed, as applicable, and that it has full authority and power to carry on the business presently being conducted by it and to enter into and perform its obligations under this Agreement.

14.2 Due Authorization/Enforceability.

Buyer and Hamilton each represents and warrants to the other that (i) it has taken all actions necessary to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder, (ii) the individual executing this Agreement on its behalf has the legal power, right and authority to bind such Party to the terms and conditions of this Agreement, and (iii) and this Agreement is a valid and binding obligation of the Party, enforceable according to its terms.

14.3 No Infringement.

Hamilton represents and warrants to Buyer that the manufacture, use or sale of the Products do not infringe on any patent, trademark or other intellectual property of any third party.

14.4 Title.

Hamilton represents and warrants to Buyer that title to all Product supplied to Buyer under this Agreement shall pass as provided in this Agreement, free and clear of any security interest, lien, or other encumbrance.

14.5 ISO Certification.

Hamilton represents and warrants to Buyer that it has and will maintain during the Term ISO certification for its manufacturing facilities and all other regulatory authorizations and approvals necessary to manufacture and supply the Products and perform the Services in accordance with this Agreement.

14.6 Buyer's Assays.

Hamilton represents and warrants to Buyer that, during the period commencing on the effective date of the Prior CDA and continuing until the Effective Date, neither it nor any of its Affiliates has filed, or caused to be filed, a patent application claiming in whole or in part any Buyer's Assays. Hamilton agrees, during the Term, not to incorporate into any instrument or product or otherwise practice any Buyer's Assays or other Buyer's Technology, except, in each case, on behalf of Buyer pursuant to this Agreement.

ARTICLE 15 – INDEMNIFICATION / INSURANCE

15.1 Indemnification by Hamilton.

Except as otherwise limited hereby, Hamilton shall indemnify, defend and hold harmless Buyer and its Representatives from and against any and all losses, liabilities, costs, expenses, or damages (including reasonable attorney's fees and related costs), based upon, arising out of, or resulting from a claim or demand by a third party (each a "**Claim**" and collectively, the "**Claims**") due to: (a) any breach in the performance of Hamilton's obligations under this Agreement, including any representation or warranty; (b) any gross negligence or willful misconduct by Hamilton or any of its Representatives; (c) any violation of Applicable Law by Hamilton or any of its Representatives; or (d) any allegation that Hamilton or the use of its Intellectual Property in connection with the Products infringes a patent, trademark, copyright, trade secret or any Intellectual Property Right of a third party, except to the extent that any such allegation is based upon allegations that the use of Buyer's Intellectual Property embodied in the Products infringes a patent, trademark, copyright, trade secret or any Intellectual Property Right of a third party.

15.2 Indemnification by Buyer.

Except as otherwise limited hereby, Buyer shall indemnify, defend and hold harmless Hamilton and its Representatives from and against any and all Claims due to: (a) any breach in the performance of Buyer's obligations under this Agreement, including any representation or warranty; (b) any gross negligence or willful misconduct by Buyer or any of its Representatives; (c) any violation of Applicable Law by Buyer or any of its Representatives; or (d) any allegation that Buyer or the use of its Intellectual Property, infringes a patent, trademark, copyright, trade secret or any Intellectual Property Right of a third party, except to the extent that any such allegation is based upon allegations that the use of Hamilton's Intellectual Property embodied in or used to manufacture the Products infringes a patent, trademark, copyright, trade secret or any Intellectual Property Right of a third party. Buyer shall have no such obligation to indemnify, defend or hold harmless for a Claim under this section 15.2 to the extent Hamilton is responsible for such Claim pursuant to section 15.1 above.

15.3 Claims.

A party having the right to indemnification hereunder (the "**Indemnified Party**") shall promptly notify the other (the "**Indemnifying Party**") of the commencement of any action, suit or proceeding for which

indemnification may be sought, and the Indemnifying Party, through counsel reasonable satisfactory to the Indemnified Party, shall assume the defense thereof; provided, however, that the Indemnified Party shall be entitled to participate in any such action, suit or proceeding with counsel of its own choice, but at its own expense. If the Indemnifying Party fails to assume the defense within a reasonable time, the Indemnified Party may assume such defense and the reasonable fees and expenses of its attorneys will be covered by the indemnity provided for in this article 15. The Indemnifying Party shall not, without the written consent of the Indemnified Party, which consent shall not be unreasonably withheld: (i) settle or compromise any action, suit or proceeding or consent to the entry of any judgment which does not include as an unconditional term thereof the delivery by the claimant or plaintiff to the Indemnified Party of a written release from all liability in respect of such action, suit or proceeding; or (ii) settle or compromise any action, suit or proceeding in any manner which may materially and adversely affect the Indemnified Party other than as a result of money damages or other money payments. The Indemnifying Party shall have the exclusive right to control the action, suit or proceeding and, subject to the foregoing, enter into any settlement with respect thereto.

15.4 Insurance.

Hamilton's Insurance Minimum Requirements. Hamilton will maintain, for the Term, policies of liability insurance, with product liability coverage's with minimum limits of [***] per occurrence and [***] in the aggregate. Hamilton shall, upon Buyer's request, provide a certificate of insurance which will evidence the foregoing coverage limits and the insurer's agreement to notify Buyer in writing of any proposed cancellation of such policies at least thirty (30) days before any such cancellation is to be effective.

Buyer's Insurance Minimum Requirements. Buyer will maintain, for the Term, policies of liability insurance, with product liability coverage with minimum limits of [***] per occurrence and [***] in the aggregate. Buyer shall, upon Hamilton's request, provide a certificate of insurance which will evidence the foregoing coverage limits and the insurer's agreement to notify Hamilton in writing of any proposed cancellation of such policies at least thirty (30) days before any such cancellation is to be effective.

Upon the other Party's request, each Party shall provide to the other Party a certificate of coverage or other written evidence reasonably satisfactory to the other Party of such insurance coverage.

ARTICLE 16 – MISCELLANEOUS

16.1 Confidentiality.

Confidentiality Term. During the Term, and for a period of five years thereafter, the Parties shall take such steps as are reasonably required to protect Confidential Information (as hereinafter defined) supplied or revealed to it (the "**Receiving Party**") by the other Party (the "**Disclosing Party**") pursuant to this Agreement and shall not use such information except for the purposes hereof.

Confidential Information. All non-public, confidential or proprietary information, including but not limited to Specifications, samples, patterns, designs, plans, drawings, documents, data, business operations, customer lists, pricing, discounts or rebates, disclosed, whether disclosed orally or disclosed or accessed in written, electronic or other form or media, and whether or not marked, designated or otherwise identified as "confidential" in connection with this Agreement is confidential ("**Confidential Information**"), solely for the use of performing the Agreement and may not be disclosed or copied unless authorized in advance by the Disclosing Party in writing.

Obligations of the Receiving Party. The Receiving Party shall (a) protect and safeguard the confidentiality of all of the Disclosing Party's Confidential Information with at least the same degree of care as the Receiving Party would protect its own Confidential Information, but in no event with less than a commercially reasonable degree of care; and (b) not use the Disclosing Party's Confidential Information, or permit it to be accessed or used, for any purpose other than performance of obligations or exercise of rights in accordance with this Agreement, including without limitation to reverse engineer, disassemble, decompile or design around the Disclosing Party's proprietary services, products and/or confidential Intellectual Property.

Exceptions. Nothing in this article 16 shall be construed to impose a confidentiality obligation on the Receiving Party in connection with any information to the extent such information is (1) at the time of disclosure already known to the Receiving Party (as established by such Party's prior written records); (2) at the time of disclosure or subsequently becomes part of the public domain through no fault, act or omission of the Receiving Party; (3) subsequently disclosed to the Receiving Party without any confidentiality obligation by a third party whose receipt and disclosure of such information does not constitute a violation of any confidentiality obligation; (4) independently developed by or for the Receiving Party by individuals having no access to or knowledge of the Disclosing Party's Confidential Information (as established by such Party's contemporaneous written records); or (5) required to be disclosed by law or governmental regulation, provided that the Receiving Party (i) provides the Disclosing Party with prompt written notice of such disclosure requirement if legally permitted, (ii) affords the Disclosing Party an opportunity, and cooperates with the Disclosing Party's efforts, to oppose or limit, or secure confidential treatment for such required disclosure (at the Disclosing Party's expense), and (iii) if the Disclosing Party is unsuccessful in its efforts pursuant to subsection (ii), discloses only that portion of the Confidential Information that the Receiving Party is legally required to disclose as advised by the Receiving Party's legal counsel.

Feedback. Hamilton hereby grants to Buyer a non-exclusive, perpetual, irrevocable, royalty free, worldwide license, with the right to grant and authorize sublicenses, to use, offer for sale, sell, distribute, display, perform and otherwise exploit Feedback without restriction. For purposes of this Agreement, "**Feedback**" means any ideas, suggestions, feedback, guidance or other information or materials disclosed by Hamilton to Buyer or its customers relating to Buyer's Proteograph™ platform or business (including any Intellectual Property Rights in or to the foregoing).

Retrieval of Confidential Information. Except as otherwise permitted under this Agreement, upon request by the Disclosing Party after expiration or termination of this Agreement, the Receiving Party shall either return all of such Disclosing Party's Confidential Information (including all copies thereof) received or prepared by it or destroy the same; provided, however, that counsel for the Receiving Party may keep one copy of the Confidential Information for purposes of ascertaining the Receiving Party's obligations under this article 16.

Adequate Remedy Unavailable. Each Party acknowledges that that the other Party may not have an adequate remedy at law for breach of any of the covenants contained in this article 16 and agrees that the breach or threatened breach of such covenants will entitle the other Party to seek injunctive relief issued by any court having appropriate jurisdiction thereof, in addition to any other legal remedies that may be available to it.

Survival. In the event of termination of this Agreement by either Party for any reason, Buyer may retain and use, for a period of seven years after termination, any Confidential Information necessary in order to service each such Product that Buyer has in inventory or has sold or placed.

Prior CDA. This Agreement supersedes the Mutual Non-Disclosure Agreement between Hamilton and Buyer effective March 20, 2019 (the "**Prior CDA**") with respect to information disclosed thereunder. All information or materials disclosed or provided by Hamilton to Buyer under the Prior CDA shall be deemed Confidential Information of Hamilton (subject to the exceptions set forth herein) and shall be subject to Buyer's confidentiality obligations under this section 16.1. All information disclosed by Buyer under the Prior CDA shall be deemed Confidential Information of Buyer (subject to the exceptions set forth herein) and shall be subject to Hamilton's confidentiality obligations under this section 16.1.

16.2 Public Announcements.

Each Party hereto covenants and agrees that, except as provided for herein, it will not from and after the date hereof make, issue or release any public announcement, press release, statement or acknowledgment of the existence of, or reveal publicly the terms, conditions and status of, the transactions contemplated herein, without the prior written consent of the other Party as to the content and time of release of and the media in which such statement or announcement is to be made, such consent not to be unreasonably withheld; provided, however, that in the case of announcements, statements, acknowledgments or revelations which either Party is required by law to make, issue or release, the making, issuing or releasing of any such announcement, statement, acknowledgment or revelation by the Party so required by law shall

not constitute a breach of this Agreement if such Party shall have given, to the extent reasonably practicable, not less than two calendar days prior notice to the other Party, and shall have attempted, to the extent reasonably possible, to clear such announcement, statement, acknowledgment or revelation with the other Party. Hamilton shall not use the name of Buyer or any of its Affiliates for advertising or promotional purposes without the prior written consent of Buyer. In furtherance of the foregoing, Hamilton shall not originate any publicity or other announcement, written or oral, whether to the public, the press, the trade, Buyer's or Hamilton's customers or otherwise, relating to this Agreement or the existence of an arrangement between the Parties, without the prior written approval of Buyer. To the extent the name "Hamilton", its trademark and/or associated design is not required to appear on the front of the Instrument under the terms of this Agreement, Buyer shall not have the right to use the name of Hamilton or any of its Affiliates for advertising or promotional purposes without the prior written consent of Hamilton, which consent shall not be unreasonably withheld, conditioned or delayed. To the extent the name "Hamilton", its trademark and/or associated design is required to appear on the front of the Instrument under the terms of this Agreement, Buyer shall have the right to identify Hamilton as the manufacturer of the Instruments on its website, in press releases and in advertising and promotional materials for any Final Product (or component thereof).

16.3 Arbitration.

All disputes, controversies and differences between the Parties arising directly or indirectly from this Agreement or any transaction contemplated hereby shall be resolved by binding arbitration. Such arbitration shall be held before one arbitrator in San Francisco, California pursuant to the Commercial Arbitration Rules then in effect of the American Arbitration Association, which arbitration shall be binding on all Parties and shall constitute the final resolution of such dispute. No Party shall commence any action against another to resolve any such dispute in any court except to confirm or enforce such arbitrator's award. Judgment upon any such award rendered may be entered by any court having jurisdiction thereof, and each Party expressly consents to the jurisdiction thereof. The arbitrator (a) shall not have any power or authority to add to, alter, amend or modify the terms of this Agreement; (b) shall interpret and construe this Agreement in accordance with, and shall be bound by, the laws of the State of Delaware (except that this section 16.3 shall be governed by the Federal Arbitration Act); (c) shall have no power or authority to grant or award punitive damages (except as provided in this section 16.3 below); (d) shall establish and enforce appropriate rules to ensure that the proceedings, including the decision, be kept confidential and that all Confidential Information of the Parties be kept confidential and be used for no purpose other than the arbitration and (e) shall have the power to enforce specifically this Agreement and the terms and conditions hereof in addition to any other remedies at law or in equity. EXCEPT FOR BREACHES OF SECTION 16.1 OR A PARTY'S GROSS NEGLIGENCE OR INTENTIONAL MISCONDUCT, THE ARBITRATOR SHALL NOT BE AUTHORIZED TO AWARD ANY PARTY PUNITIVE, EXEMPLARY, MULTIPLIED OR CONSEQUENTIAL DAMAGES, AND EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT TO SEEK SUCH DAMAGES.

16.4 Governing Law.

This Agreement shall be governed by the laws of the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than those of the State of Delaware.

16.5 Relationship of the Parties.

The relationship of Hamilton to Buyer under this Agreement is intended to be that of independent contractor. Nothing contained in this Agreement is intended or is to be construed so as to constitute Buyer and Hamilton as partners or as employer/employee or principal/agent, or the employees or the agents of any Party hereto as employees or agents of any other Party hereto. Neither Party hereto has any express or implied right or authority under this Agreement to assume or create any obligations on behalf of or in the name of the other Party hereto or to bind the other Party hereto to an agreement or other undertaking with any third party, other than the successors and permitted assigns of the respective Parties hereto.

16.6 Entire Agreement.

It is the mutual desire and intent of the Parties to provide certainty as to their respective future rights and remedies against each other by defining the extent of their mutual undertakings as provided herein. The Parties have, in this Agreement, incorporated all representations, warranties, covenants, commitments and understandings on which they have relied in entering into this Agreement, and, except as provided for herein, neither Party makes any covenant or other commitment to the other concerning its future action. Accordingly, this Agreement and all exhibits to this Agreement (a) constitutes the entire agreement and understanding between the Parties with respect to the subject matter hereof and there are no promises, representations, conditions, provisions or terms related thereto other than those set forth in this Agreement and (b) supersedes all previous understandings, agreements and representations between the Parties, written or oral, including without limitation the Prior CDA. No modification, change or amendment to this Agreement shall be effective unless in writing signed by each of the Parties hereto. Except as otherwise expressly provided in this Agreement, the provisions of this Agreement shall survive the expiration or termination of this Agreement indefinitely.

16.7 Headings.

The article and section headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning and interpretation of this Agreement.

16.8 Notices.

All notices and other communications hereunder shall be in writing. All notices hereunder of an Indemnity Claim, a Force Majeure Event, default or breach hereunder, or, if applicable, termination or renewal of the term hereof, or any other notice of any event or development material to this Agreement taken as a whole, shall be delivered personally, or sent by national overnight delivery service or postage pre-paid registered or certified U.S. mail, and shall be deemed given: when delivered, if by personal delivery or overnight delivery service; or if so sent by U.S. mail, three Business Days after deposit in the mail, and shall be addressed:

If to Hamilton:

Hamilton Company
4970 Energy Way
Reno, Nevada 89502
Attention: VP OEM Robotics

With a copy to:

Hamilton Company

4970 Energy Way
Reno, Nevada 89502
Attention: Contract Administrator

If to Buyer:

Seer, Inc
3800 Bridge Parkway, Suite 102
Redwood City, California 94065
Attention: CEO

Or to such other place as either Party may designate by written notice to the other in accordance with the terms hereof.

16.9 Failure to Exercise.

The failure of either Party to enforce at any time for any period any provision hereof shall not be construed to be a waiver of such provision or of the right of such Party thereafter to enforce each such provision, nor shall any single or partial exercise of any right or remedy hereunder preclude any other or further exercise

thereof or the exercise of any other right or remedy. Remedies provided herein are cumulative and not exclusive of any remedies provided at law.

16.10 Assignment.

This Agreement may not be assigned or otherwise transferred by a Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed; provided, however, that each Party may assign this Agreement to an Affiliate of such Party or to a third party in connection with the sale of all or substantially all of its business or assets to which this Agreement relates, whether by merger, reorganization, operation of law or otherwise. Any attempted assignment in contravention of this section 16.10 shall be null and void. Subject to the foregoing sentence, this Agreement shall bind and inure to the benefit of the Parties hereto and their respective successors and assigns.

16.11 Severability.

If any provision of this Agreement is, becomes or is deemed invalid, illegal or unenforceable in any jurisdiction in which the Agreement is sought to be enforced, (a) such provision shall be deemed and amended to conform to Applicable Laws of such jurisdiction so as to be valid and enforceable or, if it cannot be so amended without materially altering the intention of the Parties, it shall be stricken; (b) the validity, legality and enforceability of such provision will not in any way be affected or impaired thereby in any other jurisdiction; and (c) the remainder of this Agreement shall remain in full force and effect.

16.12 Expenses.

Each Party shall pay all of its own fees and expenses (including all legal, accounting and other advisory fees) incurred in connection with the negotiation and execution of this Agreement and their respective obligations hereunder.

16.13 Maintaining Records.

Hamilton agrees to maintain records for seven years (or such longer period required under Applicable Laws) for Products provided to Buyer and to provide such records to Buyer, as soon as practical, upon Buyer’s request. If originals are provided to Buyer, copies of records must be maintained in accordance with Hamilton’s record retention requirements.

16.14 Project Work Scope Schedule.

The Parties hereby agree to be bound by and fully perform the terms, conditions, representations, warranties and obligations contained in each Project Work Scope Schedule attached hereto and made part hereof, as if the same were fully set forth in this Agreement. Any change to a specific Project Work Scope Schedule shall be agreed upon in writing between the Parties and shall be included as an addendum to this Agreement.

16.15 Interpretation.

To the extent the terms and conditions of the body of this Agreement conflict with the terms and conditions of any Purchase Order or other agreement between the Parties, the terms and conditions of the body of this Agreement will govern. Except for ordering information set forth in a Purchase Order, no additional terms contained in any Purchase Order, or other ordering document, will bind either Party or be construed to modify or amend the terms of this Agreement. No agreement or understanding varying or extending this Agreement will be binding upon either Party, unless set forth in a writing which specifically refers to the Agreement that is signed by duly authorized officers or representatives of the respective Parties, and the provisions of the Agreement not specifically amended thereby will remain in full force and effect. Unless the context clearly requires otherwise, whenever used in this Agreement: (i) the words “include” or “including” shall be construed as incorporating, also, “but not limited to” or “without limitation”; (ii) the word “or” shall have its inclusive meaning of “and/or”; (iii) the word “notice” shall require notice in writing (whether or not specifically stated) and shall include notices, consents, approvals and other written communications contemplated under this Agreement; (iv) the words “hereof,” “herein,” “hereunder,” “hereby” and derivative

or similar words refer to this Agreement (including any Exhibits); (v) provisions that require that a Party or the Parties "agree," "consent" or "approve" or the like shall require that such agreement, consent or approval be specific and in writing; (vi) words of any gender include the other gender; (vii) words using the singular or plural number also include the plural or singular number, respectively; and (viii) references to any specific law, or article, section or other division thereof, shall be deemed to include the then-current amendments thereto or any replacement thereof.

16.16 Counterparts.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Manual signatures transmitted in any electronic method including PDF scans or facsimile shall have the same force and effect and be as binding as original signatures.

[Intentionally left blank; signature page follows]

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized respective representatives as of the Effective Date.

SEER, INC:

Date: 3/16/20

By: /s/ Omid Farokhzad
Signature

Name: Omid Farokhzad
Print

Title: CEO
Print

HAMILTON COMPANY:

Date: 3/16/20

By: /s/ Steve T. Hamilton
Signature

Name: Steve T. Hamilton
Print

Title: CEO
Print

Exhibit 1 – Instrument

[*** represents five pages of instrument specifications]

Exhibit 2 – Price Schedule

[*** represents nine pages of pricing schedules]

Exhibit 3 – Service Terms and Conditions

[*** represents three pages of terms of conditions]

Exhibit 4 – Change Notification

[*** represents two pages of the change notification policy]

Exhibit 5 – Site Requirements

https://robotics.hamiltoncompany.com/microlab-star-site-requirements