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Registration No. 333-250954

PROSPECTUS

6,500,000 Shares



908 Devices Inc.

Common Stock

We are offering 6,500,000 shares of our common stock. This is our initial public offering and no public market currently exists for our common stock. The initial public offering price is \$20.00 per share.

Prior to this offering, there has been no public market for our common stock. Our common stock has been approved for listing on the Nasdaq Global Market under the symbol "MASS."

Investing in our common stock involves risks. See "Risk Factors" beginning on page 13 of this prospectus.

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 and will be subject to reduced public company reporting requirements for this prospectus and future filings. See "Prospectus Summary—Implications of Being an Emerging Growth Company" on page 9 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial Public Offering Price	\$20.00	\$130,000,000
Underwriting Discounts and Commissions	\$ 1.40	\$ 9,100,000
Proceeds, before expenses, to us	\$18.60	\$120,900,000

We have granted the underwriters an option for a period of up to 30 days to purchase up to 975,000 additional shares of our common stock.

Delivery of the shares of common stock is expected to be made on or about December 22, 2020.

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SVB LEERINK

WILLIAM BLAIR

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THE DATE OF THIS PROSPECTUS IS DECEMBER 17, 2020.

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We and the underwriters have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide you. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the common stock.

For investors outside the United States: Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction, other than the United States, where action for that purpose is required. Persons outside 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 common stock and the distribution of this prospectus outside the United States.

We own various trademark registrations and applications, and unregistered trademarks, including MX908, Rebel, ZipChip and 908 Devices and our corporate logo. All other trade names, trademarks and service marks of other companies appearing in this prospectus are the property of their respective holders. Solely for convenience, the trademarks and trade names in this prospectus may be referred to without the ®, ™ or RTM symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend to use or display other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. Before investing in our common stock, you should carefully read this entire prospectus, including the sections titled “Risk Factors”, “Management’s Discussion and Analysis of Financial Condition and Results of Operations”, and “Business” and our financial statements and the related notes included elsewhere in this prospectus. As used in this prospectus, unless the context otherwise requires, references to the “company,” “we,” “us” and “our” refer to 908 Devices Inc.

Analysis for Life

We are leading a revolution in measurement devices for chemical and biochemical analysis. We are democratizing laboratory mass spectrometry instruments with our simple handheld and desktop devices, addressing critical-to-life applications. We are reimagining where Mass Spec technology can be used if it is sufficiently small in size, low in cost, and simple to operate.

Overview

We have developed an innovative suite of purpose-built handheld and desktop mass spectrometry, or Mass Spec, devices for the point-of-need. Leveraging our proprietary platform technology, we make the extraordinary analytical power of Mass Spec available in devices that are significantly smaller and more accessible than conventional laboratory instruments. Our Mass Spec devices are used at the point-of-need to interrogate unknown and invisible materials and provide quick, actionable answers to directly address some of the most critical problems in life sciences research, bioprocessing, industrial biotech, forensics and adjacent markets. As we democratize the extraordinary power of Mass Spec, we believe our technology platform can expand in future opportunities far beyond the current \$8 billion market for Mass Spec and associated front-end separations. We estimate our total addressable market, or TAM, for our devices to be \$4.8 billion in 2020 growing to an estimated \$22 billion over the next five years.

We create simplified measurement devices that our customers can use as accurate tools where-and-when their work needs to be done, rather than overly complex and centralized analytical instrumentation. We believe the insights and answers our devices provide will accelerate workflows, reduce costs, and offer transformational opportunities for our end users.

Since the launch of our first device, we have sold more than 1,200 handheld and desktop devices to over 300 customers in 32 countries, including 18 of the top 20 pharmaceutical companies by 2019 revenue, as well as numerous domestic and foreign government agencies and leading academic institutions. We generated revenue of? \$9.6 million and \$21.2 million in the nine months ended September 30, 2019 and 2020, respectively, representing 120% period-over-period growth, while incurring net losses of? \$12.9 million and \$2.6 million in the nine months ended September 30, 2019 and 2020, respectively. Historically, we have derived a majority of our revenue from government customers. While we cannot provide any assurance as to our future results or the success of our sales efforts, we believe we will continue to derive a significant portion of our revenue from the government sector.

Our current products are available for both battery powered handheld and desktop applications, including our flagship devices—MX908 and Rebel.



Front-line workers rely upon our handheld devices to combat the opioid crisis and detect counterfeit pharmaceuticals and illicit materials in the air or on surfaces at levels 1,000 times below their lethal dose. Our desktop devices are accelerating development and production of biotherapeutics by identifying and quantifying extracellular species in bioprocessing critical to cell health and productivity. They sit alongside bioreactors and fermenters producing drug candidates, functional proteins, cell and gene therapies, and synthetic biology-derived products. We believe the insights and answers our devices provide accelerate workflows, reduce costs, and offer transformational opportunities for our end users. Mass Spec is the gold-standard analytical technology for laboratory-based molecular analysis and can identify and quantify sample components via molecular weight measurements. Mass Spec is highly regarded for its ability to provide an extraordinarily detailed analysis of a wide variety of samples—from small molecules to large complex proteins. While Mass Spec is an extremely powerful analytical tool, conventional Mass Spec instruments are very large, expensive, and highly complex, which has profoundly bottlenecked market opportunities and relegated them to the equivalent of mainframe computers in central facilities. We are seeking to reimagine where Mass Spec technology can be used <i>if</i> it is sufficiently small in size, low in cost, and simple to operate. Our proprietary Mass Spec platform relies on extreme miniaturization of the core of Mass Spec—the ion trap and its vacuum system. Using semiconductor microfabrication techniques, we design and produce components that are more than a thousand fold smaller in volume when compared with most laboratory Mass Spec instruments and costs only dollars to manufacture. The vacuum system alone in a typical laboratory instrument weighs hundreds of pounds and requires several hundred watts of power, 24 hours per day, 365 days per year. Our miniaturized vacuum system weighs less than a pound, and our Mass Spec in total requires less power than a 20-watt LED light bulb. Sample preparation and separation can be a painfully slow hours-long process, and we have invested heavily in the development of microfluidic sample preparation and microscale separation technologies to reduce preparation and separation time from hours to minutes. The size of a business card, our microfluidic capillary-electrophoresis, or CE, chip has demonstrated world-class performance and speed in separating everything from small molecules such as metabolites and drugs, to biopharmaceutical proteins, antibodies, and oligonucleotides. Lastly, it is imperative that a point-of-need solution is operable by the widest possible user base. We have industry-leading expertise in applying software automation and machine learning techniques to both control the hardware in our devices and interpret the incredibly rich and complex data streaming off of them. It is common for expert data interpretation from a laboratory Mass Spec instrument to take hours or days—we can provide answers immediately to maximize value to the customer in critical-to-life applications where minutes matter. We fundamentally believe that the technology platform we have built and the investments we are making will allow people to answer chemical and biochemical questions in times and places that were previously inconceivable. Given the market opportunity, we expect to face substantial competition from large established manufacturers of laboratory-based Mass Spec instruments and from new entrants; however, our proprietary advances have enabled us to manufacture the first truly handheld Mass Spec devices and compact desktops and we believe we are well-positioned to face future competition. We intend to continue to aggressively invest in the development of post-sale partnerships with our government and other customers and to drive broader adoption across the organization. In particular, government agencies, both in the U.S. and in other countries, generally evaluate our products for critical, strategic applications. As a result, the procurement processes for orders by government agencies may involve complex and time-consuming competitive bidding processes. It is our belief that investment pre- and post-sale with prospects can create the potential for enterprise adoption and the opportunity for our devices to become the organizational standard for our customers. Our Strengths The following competitive strengths provide us the ability to address point-of-need applications in forensics, life sciences research, bioprocessing, industrial biotech and synthetic biology, or synbio:
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- *Our proprietary microscale Mass Spec platform leverages well established, gold-standard technology.*
- *Point-of-need technologies disrupt Mass Spec and create new product categories.*
- *Highly attractive business model validated by rapidly growing installed base of devices.*
- *Talented team with significant domain expertise.*

Our Industry Background

Conventional Mass Spec—The Mainframe Computer of the Analytical Laboratory

Mass Spec is the cornerstone of almost any chemical laboratory within academia, industry and government, serving an extremely wide range of applications for markets including forensics, healthcare, environmental, industrial, and more. To stimulate capital equipment replacement cycles, Mass Spec manufacturers have oriented their research and development towards sustained improvements in raw analytical performance metrics such as resolution, sensitivity, and range. As a result, conventional Mass Spec instruments:

- are extremely large and not readily mobile;
- are expensive (often ranging from \$100,000 to \$1 million);
- require a dedicated power source; and
- require onsite specialists to maintain and operate.

These significant limitations have profoundly bottlenecked market opportunities for conventional Mass Spec instruments.

The Democratization of Mass Spec—Handhelds and Desktops

Given the inherent limitations of conventional mainframe Mass Spec instruments, we believe there is a compelling opportunity for handheld and compact desktop Mass Spec devices. Analogous to the democratization of computer technologies, we strongly believe that the democratization of Mass Spec will open up new markets and applications as price, access and complexity are reduced, while user space opens and utilization increases.

Our Technology Platform and Approach

We have developed a technology platform designed to bring Mass Spec out of the confines of central laboratories and to the point-of-need. Our technology platform and approach democratizes the Mass Spec market with high fidelity handheld and desktop devices. We believe this democratization gives rise to:

- an expanded and more diverse set of users;
- more frequent measurements; and
- new use cases that were previously untenable.

The core elements of our technology platform and approach include High-Pressure Mass Spec, or HPMS, microfluidics and analytics and machine learning.

HPMS Approach Enables Mass Spec at the Point-of-Need

A key component of our technology is our proprietary microscale ion trap, which we estimate is more than 1,000 times smaller than those in conventional laboratory Mass Spec instruments. These microfabricated traps are able to operate at much closer to atmospheric pressures than conventional Mass Spec instruments. This HPMS approach results in devices with dramatically smaller size and lower cost-of-goods through a reduction of vacuum pump requirements, power consumption, and an overall simplification of the hardware topology. HPMS allows us to build ultracompact, high fidelity measurement devices that are purpose-built for specific applications and deployable at the point-of-need, while circumventing the complexities associated with the conventional and much larger, general-purpose, central laboratory Mass Spec instruments.

Microfluidics Enable Convenient Sample Preparation and Fast Separations

Today, most central laboratory Mass Spec instruments are paired with large, complex solid and liquid handling systems for sample preparation and separation. These systems are engineered for

general applications and require large quantities of solvents, high level of maintenance and expertly trained users, all of which lead to higher operating costs. Our approach integrates proprietary microfluidic sample preparation, separation, and ionization technologies onto a single chip that can be produced efficiently in scale using semiconductor microfabrication techniques. These microfluidic chips can be paired with our microscale Mass Spec technology to create devices with extraordinary performance that are accessible and usable at the point-of-need by non-experts. Our integrated microfluidic capillary-electrophoresis, or CE, technology can perform extremely high-performance separations of a wide range of molecular species from small molecule metabolites, amino acids, and vitamins, to intact antibodies and other proteins. Importantly for our platform, our microfluidic CE is <i>electrically</i> driven and requires no bulky liquid pumping and valving systems. The microfluidic device consumes 100-200 nanoliters (nL) of electrolyte per minute making it remarkably efficient with source and waste fluids. Microfluidic CE separations are also extremely rapid and can be an order of magnitude or faster than similar chromatography separations. This allows for highly complex separations with high resolution to be completed in minutes. <i>Analytics and Machine Learning Technology Provide Actionable Answers Versus Raw Data</i> The third crucial element of our technology platform and approach is holistic device design with embedded analytics and machine learning. Our development team designs devices for a <i>specific purpose</i>, rather than for a <i>wide scope of often disparate needs</i>. Conventional Mass Spec manufacturers focus their attention on canonical analytical specifications in the hopes of appealing to a wide range of laboratory specialist needs. Our devices are designed to do a job quickly and easily. Achieving that aim requires very sophisticated autonomous and adaptive control systems and the machine learning engine to interpret the data and produce a clear, accurate result. Our devices can manage themselves autonomously by adapting to various environmental factors, while also optimizing themselves for a diverse array of user-based analytical objectives. This ability to automatically control the system reduces or eliminates the user's responsibility and opportunity for error in set up, optimization and troubleshooting. Also, our data team has a commercial track record of embedding a "scientist in the box" with highly customized statistical and machine learning methods for our platforms to complete the customer experience. Our Products We were founded on a vision to deliver high quality Mass Spec to a broad set of users at the point-of-need. We have handheld and desktop devices, each of which are capable of providing quick, high fidelity and actionable results. These aspects are important to our customers as previously they have had to choose between a slow and thorough analysis by Mass Spec in a laboratory versus a timely point-of-need result that provided only a partial measurement picture prone to false-positives. Our devices are changing this paradigm and providing rapid laboratory-level results at the point-of-need. MX908® Launched in June 2017, MX908 is a handheld, battery-powered, Mass Spec device designed for rapid analysis of gas, liquid and solid materials of unknown identity. It is an agile, multi-purpose device utilized by a wide spectrum of user segments for a variety of forensic field applications such as chemical, explosive, priority drug and HazMat operations, detecting materials at the trace level. The MX908 detects trace quantities of more than 100 named dangerous materials, including fentanyl and its many derivatives, explosives, and hazardous chemical agents with sensitivity comparable to existing field-based technologies, but with much higher specificity. This allows users to conduct rapid field analysis for a broad range of unknown substances at trace levels that would typically lead to confusion and false positives in other instruments. The device is also able to identify a far greater number of substances than other trace technologies and with 1,000,000 times the dynamic range of those other handheld or mobile technologies. Compared to a leading transportable Mass Spec product, the MX908 is up to 15x faster, up to 10x smaller and up to 2x cheaper. The MX908 is able to start up in less than a minute, completing analysis of gas and vapor materials in less than ten seconds, and solids
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and liquids in less than a minute. The MX908 was designed to operate in harsh outdoor environments such as pervasive rain and dust, and scorching to freezing temperatures in a nimble 4.3 kg handheld form factor. More than 1,000 MX908s have been sold across five continents and in 32 countries. Numerous agencies in the U.S. federal government are adopters, and there is at least one MX908 in every U.S. state. More than 3,600 operators have been trained to optimize their use of the MX908. <i>Rebel™</i> The Rebel is a small desktop analyzer providing real-time information on the extracellular environment in bioprocesses. Compared to a traditional laboratory high-performance liquid chromatography, or HPLC, assay, Rebel's price per sample is up to 10 times lower, at approximately one-third of the capital cost, and delivers answers up to 2,000 times faster. Rebel provides results within seven minutes, enabling critical on-the-spot decisions regarding bioprocess cell culture media optimization, accelerating process-development cycles and maximizing bioreactor efficiency. Customers are using Rebel in GxP environments to evaluate fresh media for conformity to standards, track the extracellular environment and metabolic flux during growth cycles, monitor performance during stress experiments, and characterize spent media. A purpose-built at-line system, the Rebel is designed to be located within the same laboratory as a bioreactor, enabling more frequent monitoring of key cell culture media parameters. To run this analysis, the Rebel requires as little as one microliter of cell culture media with little sample preparation. This allows customers to run more tests while preserving precious cell culture media, which is extremely valuable for the small batches used in cell therapy and personalized medicine. Since the launch of the Rebel in November 2019, we have sold 31 units and 13 of those units are with top-20 revenue biotech organizations. Four organizations have already purchased multiple units. Our focus has been on increasing U.S. placements, but we also have a meaningful international opportunity and have recently sold Rebel in China and Europe. <i>ZipChip</i> ZipChip is a plug-and-play, high-resolution separation platform that optimizes Mass Spec sample analysis. Our ZipChip platform consists of a ZipChip Interface, which is installed into a conventional Mass Spec instrument and consumable microfluidic chips, or ZipChips. We designed this technology to work both within our devices and to be compatible with third party Mass Spec instruments. Powered by our integrated microfluidic technology, the ZipChip Interface allows researchers to consolidate a host of time-consuming biotherapeutic, metabolomic, and proteomic applications typically run on multiple instruments or configurations onto a single platform. With ZipChip, researchers can switch applications in minutes instead of hours with an alternative such as liquid chromatography. As an open-access discovery platform that can interface with more than 10,000 conventional Mass Spec instruments, ZipChip provides us the ability to leverage the growing list of newly established applications and publications from customers who have incorporated the device into their projects. By incorporating select assays investigated on the ZipChip by customers into our MX908 and Rebel devices, we have established a pipeline of new customer-driven, point-of-need Mass Spec applications. A number of the customer-driven assays have already been incorporated in our MX908 and Rebel devices and several more are under investigation for our future product pipeline. We expect that the scope of analytes our devices can detect and analyze will continue to expand. Since launch of the ZipChip platform, we have sold more than 150 units and have established 17 multi-unit accounts in leading, global pharmaceutical organizations and academic institutions. Our ZipChip platform is currently compatible with market-leading conventional Mass Spec instruments installed in laboratories today and we intend to continue to expand the ZipChip platform to become compatible with any conventional Mass Spec instrument. Market Opportunities <i>Our Initial Market—Field Forensics</i> We estimate that the market opportunity addressable by our handhelds is \$1.5 billion per year in 2020 for trace detection of drugs, explosives, priority chemicals, and other hazards on surfaces and in

the air. Our accessible market expands to over \$3 billion with use cases in good practice, or GxP, facilities for raw material inspection, counterfeit and adulteration inspection, contamination and cleaning validation, and other quality assurance and quality control assays. These use cases are accessed through release of additional software apps for our base hardware. Our estimates of our total addressable markets, or TAM, are based on potential customer research and development spending, addressable aspects of potential customers' end product development process, and potential platform usage. We also utilize estimated penetration and placement rates for our platform with potential customers in our target markets and historical patterns for consumables usage.

Life Sciences

End market sales of biologics across mAbs, cell, and gene therapies are estimated at \$150 billion in 2020, growing to approximately \$250 billion by 2025 at a 11% compounded annual growth rate according to third party reports and analyst sources. While mAbs are forecasted to continue to dominate end product sales in 2025, it is estimated that the pipeline of cell and gene therapies will be nearly 6,000 assets, representing more than 50% of the total biologics pipeline. A massive expansion of global bioprocessing capacity is underway to accommodate the needed small batched production. We estimate Rebel's TAM to be \$260 million in 2020, representing more than 1,700 device placements and 1.6 million media tests to support process development, and is expected to expand to approximately \$12 billion TAM by 2025 (third party reports and analyst sources) with the execution of our roadmap and the rapid growth of cell therapy.

Future Market Opportunities

The fastest and most convenient way to explore new applications incorporating our platform technology is through interfacing with a conventional general-purpose laboratory Mass Spec instrument. Our laboratory interface connects our proprietary microfluidic chip technology, ZipChip, in a simple and customer friendly manner to form an open-discovery platform. Our research customers incorporate ZipChip into their projects and prove-out new assays spanning a range of markets, including diagnostics, consumer health and beauty, agrochemical, oil and gas, and defense. They measure such things as novel therapeutics, metabolites, quality and process attributes, and explore complex proteomics. We estimate our ZipChip platform is able to address \$3.0 billion in 2020 across the research chromatography market space, growing to more than \$6.9 billion with further roadmap expansion into proteomics. The resulting pipeline and market multiplier for subsequent point-of-need products has not been considered and may be significant.

Our Growth Strategy

We are pursuing the democratization of the gold-standard molecular analysis laboratory technique, mass spectrometry. Akin to how mainframe computers transitioned to desktops, tablets, and mobile devices, we are pursuing a similar transformation of the Mass Spec market. Our growth strategy includes the following key elements:

- *Increase measurement consumption through a continued focus on simplicity, speed, and convenience with reduced cost.*
- *Drive enterprise adoption in our seeded accounts.*
- *Grow the installed base through expansion of commercial channels.*
- *Deepen our footprint into the rapidly growing bioprocessing market.*
- *Expand our customer-driven pipeline of new point-of-need applications.*

Risk Factors

Our business is subject to a number of risks that you should be aware of before making an investment decision. You should carefully consider all of the information set forth in this prospectus and, in particular, should evaluate the specific factors set forth in the section titled "Risk Factors" in deciding whether to invest in our common stock. Among these important risks are the following:

- We have a history of net losses and may not be able to achieve profitability for any period in the future or sustain cash flow from operating activities.
- Our operating results may fluctuate significantly from period-to-period and may fall below expectations in any particular period, which could adversely affect the market price of our common stock.

- Without giving effect to the net proceeds from this offering, there is substantial doubt about our ability to continue as a going concern in our audited financial statements included in this prospectus.
- We have experienced a period of significant growth in recent years, and our inability to manage this growth could have a material adverse effect on our business, the quality of our products and services and our ability to retain key personnel.
- We must develop new products, as well as enhancements to existing products, and adapt to rapid and significant technological change to remain competitive.
- We have limited experience in marketing and sales and are in the early stages of building our sales channels in the life science market and internationally.
- The recent global COVID-19 outbreak has significantly affected our business and operations.
- We face intense and growing competition from leading technology companies as well as from emerging companies. Our inability to compete effectively with any or all of these competitors could affect our ability to achieve our anticipated market penetration and achieve or sustain profitability.
- Currently, we derive the majority of our revenue from our handheld products and are actively growing the revenue we derive from our desktop products, focused today in the life science market. If we fail to maintain significant market acceptance in existing markets or fail to successfully increase our penetration in new and expanding markets, we will not generate expected revenue and our prospects may be harmed.
- Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense, which contribute to the unpredictability and variability of our financial performance and may adversely affect our profitability.
- Insiders will continue to own a significant portion of our outstanding common stock following this offering and will therefore have substantial control over us and will be able to influence corporate matters.
- A significant portion of our business depends on sales to the public sector, and our failure to receive and maintain government contracts or changes in the contracting or fiscal policies of the public sector could have a material adverse effect on our business.
- U.S. government programs are limited by budgetary constraints and political considerations and are subject to uncertain future funding levels that could result in the termination of programs.
- We rely on in-bound licenses granted to us from third parties. If we lose these rights, our business may be materially adversely affected, our ability to develop improvements to our existing products and to develop new products may be negatively and substantially impacted, and if disputes arise, we may be subjected to future litigation as well as the potential loss of or limitations on our ability to develop and commercialize products and technology covered by these license agreements.

Implications of Being an Emerging Growth Company

We qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. As a result, we are permitted to rely on exemptions from certain disclosure requirements that are applicable to other companies that are not emerging growth companies. For so long as we are an emerging growth company, we will not be required to:

- engage an independent registered public accounting firm to report on our internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;
- comply with any requirement that may be adopted by the Public Company Accounting Oversight Board, or PCAOB, regarding mandatory audit firm rotation or a supplement to the independent registered public accounting firm’s report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis);
- submit certain executive compensation matters to stockholder advisory votes, such as “say-on-pay,” “say-on-frequency” and “say-on-golden parachutes”; or

- disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of the chief executive officer's compensation to median employee compensation.

We will remain an emerging growth company until the earliest to occur of:

- our reporting of? \$1.0 billion or more in annual gross revenue;
- our issuance, in any three-year period, of more than \$1.0 billion in non-convertible debt;
- our becoming a "large accelerated filer;" and
- the end of the fiscal year that follows the fifth anniversary of the completion of this offering.

Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period, provided in Section 13(a) of the Exchange Act, for complying with new or revised accounting standards. In other words, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards 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 and the reported results of operations contained therein may not be directly comparable to those of other public companies.

Corporate Information

We were incorporated in Delaware in 2012 as 908 Devices Inc. Our offices are located at 645 Summer Street, Boston, Massachusetts 02210. Our telephone number is (857) 254-1500. Our corporate website is www.908devices.com. The information contained on or that can be accessed through our website is not incorporated by reference into this prospectus.

THE OFFERING	
Common stock offered by us	6,500,000 shares
Common stock to be outstanding immediately after this offering	26,200,762 shares
Option to purchase additional shares offered by us	The underwriters have an option for a period of 30 days to purchase up to 975,000 additional shares of our common stock at the public offering price, less the underwriting discounts and commission
Use of proceeds	We estimate that we will receive net proceeds from the sale of shares of our common stock in this offering of approximately \$118.2 million, or \$136.3 million if the underwriters exercise their option to purchase additional shares in full, based on the initial public offering price of? \$20.00 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering, together with our existing cash, for working capital and general corporate purposes, including: (1) to expand our commercial operations to grow and support the installed base of our products among life sciences research customers in the United States and internationally; and (2) to fund our research and development efforts to advance the platform of technologies. We may also use a portion of the remaining net proceeds, if any, to acquire complementary businesses, products, services or technologies, including scientific expertise. For a more complete description of our intended use of the proceeds from this offering, see “Use of Proceeds.”
Risk factors	You should carefully read the “Risk Factors” section of this prospectus for a discussion of factors that you should consider before deciding to invest in our common stock.
Nasdaq Global Market symbol	“MASS”
Directed Share Program	At our request, the underwriters have reserved up to 325,000 shares of our common stock for sale, at the initial public offering price, through a directed share program to our directors, officers, employees, business associates and other persons with whom we have a relationship. There can be no assurance that any of the reserved shares will be so purchased. The number of shares available for sale to the general public in the offering will be reduced to the extent the reserved shares are purchased in the directed share program. Any reserved shares of common stock not purchased through the directed share program will be offered to the general public on the same basis as the other common stock offered hereby. See “Underwriting” for more information.

The number of shares of our common stock to be outstanding after this offering is based on 19,700,762 shares of our common stock outstanding as of October 31, 2020, and gives effect to the conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 14,691,929 shares of our common stock upon the completion of this offering, and excludes:

- 154,634 shares of common stock issuable upon the exercise of warrants to purchase shares of redeemable convertible preferred stock that will become warrants to purchase common stock outstanding as of October 31, 2020, with a weighted-average exercise price of? \$7.92 per share;
- 3,264,022 shares of common stock issuable upon the exercise of stock options outstanding as of October 31, 2020 under our 2012 Stock Option and Grant Plan, or our 2012 Plan, with a weighted-average exercise price of? \$1.72 per share;
- 220,508 shares of common stock reserved for future issuance as of October 31, 2020 under our 2012 Plan which became available for issuance under our 2020 Stock Option and Incentive Plan, or our 2020 Plan, upon the effectiveness of the 2020 Plan;
- 1,843,771 shares of our common stock that became available for future issuance under our 2020 Plan upon the effectiveness of the registration statement of which this prospectus forms a part; and
- 288,857 shares of our common stock that became available for future issuance under our Employee Stock Purchase Plan, or our ESPP, upon the effectiveness of the registration statement of which this prospectus forms a part.

Unless otherwise indicated, all information in this prospectus reflects or assumes the following:

- the filing of our sixth amended and restated certificate of incorporation and the effectiveness of our amended and restated by-laws in connection with the completion of this offering;
- the conversion of all outstanding shares of redeemable convertible preferred stock into an aggregate of 14,691,929 shares of common stock upon the completion of this offering;
- the outstanding warrants to purchase our redeemable convertible preferred stock becoming warrants to purchase an aggregate of 154,634 shares of our common stock upon the closing of this offering;
- no exercise of outstanding options or warrants after October 31, 2020;
- a one-for-1.6271 reverse split of our common stock effected on December 11, 2020;
- no exercise by the underwriters of their option to purchase up to 975,000 additional shares of common stock in this offering; and
- no purchase of shares of our common stock by directors, officers, employees or existing stockholders through our directed share program.

SUMMARY FINANCIAL DATA

The following tables present the summary financial and other data for the periods and as of the dates indicated. The statement of operations data for the years ended December 31, 2018 and 2019 have been derived from our audited financial statements included elsewhere in this prospectus. The statement of operations data for the nine months ended September 30, 2019 and 2020 and the balance sheet data as of September 30, 2020 have been derived from our unaudited financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited financial statements. Our historical results are not necessarily indicative of the results that may be expected in the future. You should read the following summary financial data together with the sections titled "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes included elsewhere in this prospectus. Our unaudited interim financial statements were prepared on the same basis as our audited financial statements and include, in the opinion of management, all adjustments, consisting of normal recurring adjustments, that are necessary for the fair presentation of the financial information set forth in those financial statements.

	Year Ended December 31,		Nine Months Ended	
	2018	2019	2019	2020
	(in thousands, except per share data)			
Statement of Operations Data:				
Revenue:				
Product and service revenue	\$13,738	\$15,344	\$8,292	\$18,844
License and contract revenue	8,316	2,628	1,332	2,333
Total revenue	22,054	17,972	9,624	21,177
Cost of revenue:				
Product and service cost of revenue	9,002	9,098	5,397	8,121
License and contract cost of revenue	659	731	418	712
Total cost of revenue	9,661	9,829	5,815	8,833
Gross profit	12,393	8,143	3,809	12,344
Operating expenses:				
Research and development	9,528	8,993	7,020	5,953
Selling, general and administrative	9,304	11,294	8,624	8,320
Total operating expenses	18,832	20,287	15,644	14,273
Loss from operations	(6,439)	(12,144)	(11,835)	(1,929)
Other income (expense):				
Interest expense	(1,147)	(1,530)	(1,276)	(732)
Other income (expense), net	50	301	227	68
Total other expense, net	(1,097)	(1,229)	(1,049)	(664)
Net loss and comprehensive loss	(7,536)	(13,373)	(12,884)	(2,593)
Accretion of redeemable convertible preferred stock to redemption value	(76)	(109)	(79)	(74)
Net loss attributable to common stockholders(1)	\$(7,612)	\$(13,482)	\$(12,963)	\$(2,667)
Net loss per share attributable to common stockholders, basic and diluted(1)	\$(1.55)	\$(2.70)	\$(2.60)	\$(0.53)
Weighted average common shares outstanding, basic and diluted(1)	4,907	4,990	4,990	4,996
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)(1)		\$(0.71)		\$(0.13)
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)(1)		18,983		19,688

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(1) See Note 13 to our financial statements included elsewhere in this prospectus for details on the calculation of basic and diluted net loss per share attributable to common stockholders and unaudited basic and diluted pro forma net loss per share attributable to common stockholders.

?	??	As of September 30, 2020				?
?	??	Actual	??	Pro Forma(2)	??	Pro Forma As Adjusted(3)
?	??	(in thousands)				?
Balance Sheet Data:	????	????	??	?	???	??
Cash	???	\$ 19,712	???	\$ 19,712	???	\$ 137,912
Working capital(1)	???	22,071	???	22,071	???	141,139
Total assets	???	43,404	???	43,404	???	160,736
Long-term debt, net of discount, including current portion	???	14,817	???	14,817	???	14,817
Deferred revenue, including current portion	???	9,256	???	9,256	???	9,256
Commercial services agreement liability?—related party	???	375	???	375	???	375
Preferred stock warrant liability	???	754	???	—	???	—
Redeemable convertible preferred stock	???	71,091	???	—	???	—
Total stockholders' equity (deficit)	???	(65,608)	???	6,237	???	124,437

(1) We define working capital as current assets less current liabilities.

(2) The pro forma balance sheet data give effect to (i) the conversion of all outstanding shares of redeemable convertible preferred stock of into an aggregate of 14,691,929 shares of common stock and (ii) all outstanding warrants to purchase shares of redeemable convertible preferred stock becoming warrants to purchase shares of common stock.

(3) The pro forma as adjusted balance sheet data give further effect to our issuance and sale of 6,500,000 shares of our common stock in this offering at the initial public offering price of \$20.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our 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 “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations, and prospects. In such an event, the market price of our 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.

Risks related to our business and industry

We have a history of net losses and may not be able to achieve profitability for any period in the future or sustain cash flow from operating activities.

We have had a history of net losses since our inception in 2012, including net losses of \$7.5 million and \$13.4 million for the fiscal years ended December 31, 2018 and 2019, respectively, and \$12.9 million and \$2.6 million for the nine months ended September 30, 2019 and 2020, respectively, and we may never achieve or maintain profitability. As of September 30, 2020, our accumulated deficit was \$68.2 million. We cannot make any assurances that we will be able to increase our revenue to sustain cash flow from operating activities or reach profitability.

As we continue to expand and develop our business, we expect to incur significant additional expenditures in the areas of sales, marketing, research and development, and customer service and support. Additionally, as a public company, we expect our legal, accounting and other expenses to be substantially higher than the expenses we incurred as a private company. Furthermore, we may encounter unforeseen issues that require us to incur additional costs. We will have to generate and sustain increased revenue to achieve profitability and positive cash flow as a result of these increased expenditures. Accordingly, if we are not able to achieve or maintain profitability and we incur significant losses in the future, the market price of our common stock may decline, and you could lose part or all of your investment.

Our operating results may fluctuate significantly from period-to-period and may fall below expectations in any particular period, which could adversely affect the market price of our common stock.

Our quarterly results of operations may fluctuate significantly from period-to-period. Accordingly, the results of any one quarter should not be relied upon as an indication of future performance. If our revenue or operating results fall below the expectations of investors or any securities analysts that follow our company in any period, the price of our common stock would likely decline. Each of the risks described in this section, as well as other factors, may affect our operating results. For example, factors that may cause our operating results to fluctuate include:

- our dependence on a limited number of large orders from U.S. government agencies for a substantial portion of our revenue in any quarterly period, whereby the loss of or delay in a customer order, or any delay in our fulfillment of deliverables under a customer order, could significantly reduce our revenue for that quarter;
- the addition of new customers or the loss of existing customers;
- the rates at which customers purchase additional products or consumables from us;
- our ability to enhance our products with new and better functionality that meets customer requirements;
- the length and unpredictability of our product sales cycle;
- the productivity and growth of our sales force and customer service team;
- the effectiveness of our distributors in securing new orders and fulfilling existing orders;
- service interruptions with any of our single source suppliers or subassembly manufacturers;
- unexpected costs or delays related to the COVID-19 pandemic;

- our ability to attain and maintain production volumes and quality levels for our products, and to accurately forecast customer demand for our products and consumables;
- the timing of our product releases or upgrades or related announcements by us or our competitors;
- the possibility of seasonality in demand for our products;
- changes in pricing by us or our competitors;
- the timing of investments in research and development related to new product releases or upgrades;
- our ability to control costs, including operating expenses and the costs of the components used in our products;
- future accounting pronouncements and changes in accounting policies;
- costs related to the acquisition and integration of companies, assets, or technologies; and
- general economic conditions.

Our operating expenses are heavily based on our anticipated product revenue growth, especially as we continue to invest significant resources in building out our sales and marketing channels and the development of future products. As a result, any shortfall in product revenue in relation to our expectations could cause significant changes in our operating results from period-to-period and could result in negative cash flow from operations and a decrease in the price of our common stock.

Without giving effect to the net proceeds from this offering, there is substantial doubt about our ability to continue as a going concern in our audited financial statements included in this prospectus.

Our recurring losses from operations raise substantial doubt about our ability to continue as a going concern. As a result, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements for the year ended December 31, 2019 with respect to this uncertainty. Our ability to continue as a going concern will require us to obtain additional funding. We believe that the net proceeds from this offering, together with our existing cash, will enable us to fund our operating expenses, capital expenditure requirements and debt service payments into 2023. Without giving effect to the net proceeds from this offering, we expect that our existing cash as of December 31, 2019 will be sufficient to fund our operating expenses, capital expenditure requirements and debt service payments into the third quarter of 2021. We have based these estimates on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. If we are unable to raise capital when needed or on acceptable terms, we would be forced to delay or discontinue the further development and commercialization efforts of one or more of our products or we may be forced to reduce or terminate our operations.

We have experienced a period of significant growth in recent years, and our inability to manage this growth could have a material adverse effect on our business, the quality of our products and services and our ability to retain key personnel.

We have experienced a period of significant growth in recent years. Our growth has placed increased demands on our management and other resources and will continue to do so in the future. We may not be able to maintain or accelerate our current growth rate, manage our expanding operations effectively or achieve planned growth on a timely or profitable basis. Managing our growth effectively will involve, among other things:

- continuing to retain, motivate, and manage our existing employees and attract and integrate new employees, particularly qualified sales personnel;
- continuing to provide a high level of service to an increasing number of customers;
- maintaining the quality of product and services offerings while controlling our expenses;
- growing our direct sales force and channel partners; and
- developing, implementing, and improving our operational, financial, accounting, and other internal systems and controls on a timely basis.

If demand for our products increases rapidly, we will need to expand internal production capacity or implement additional outsourcing of components and/or our assembled products. Success in

developing, manufacturing and supporting products manufactured in small volumes does not guarantee comparable success in operations conducted on a larger scale. Modifying and reconfiguring our facility to increase production capacity may delay delivery of our products. In addition, component costs as well as additional production, financial, and management control costs may rise. If we are unable to meet the demand of our customers and deliver products quickly and cost effectively, customers may turn to our competitors. The costs associated with implementing new manufacturing technologies, methods and processes, including the purchase of new equipment, and any resulting delays, inefficiencies, and loss of sales, could harm our results of operations.

As we grow, we will also need to make corresponding improvements to other operational functions, such as our customer service and billing systems, compliance programs and our internal quality assurance programs. We will also need additional equipment, manufacturing and warehouse space and trained personnel to process higher volumes of products. We cannot assure you that any increases in scale, related improvements and quality assurance will be successfully implemented or that equipment, manufacturing and warehouse space and 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.

If we are unable to manage our growth effectively, there could be a material adverse effect on our ability to maintain or increase revenue and profitability, the quality of our products and services and our ability to retain key personnel. These factors could adversely affect our reputation in the market and our ability to generate future sales from new or existing customers.

We must develop new products, as well as enhancements to existing products, and adapt to rapid and significant technological change to remain competitive.

We sell our products in industries that are characterized by significant enhancements and evolving industry standards. As a result, our customers' needs are rapidly evolving. If we do not appropriately innovate and invest in new technologies, our offerings may become less desirable in the markets we serve, and our customers could move to new technologies offered by our competitors or make products themselves. To achieve market acceptance for our products, we must effectively anticipate customer requirements, and we must offer products that meet changing customer demands in a timely manner. Customers may require product features and capabilities that our current products do not have. Any of the current plans we have for future developments or enhancements are strategic in nature and not commitments to develop such capabilities for our customers. If we fail to develop products that satisfy customer requirements, our ability to create or increase demand for our products will be harmed.

Without the timely introduction of new products, services and enhancements, our offerings will likely become less competitive over time, in which case our competitive position and operating results could suffer. Accordingly, we focus significant efforts and resources on the development and identification of new technologies, products and markets to further broaden our offerings. In addition, the development cycle for our products and technologies can take multiple years and require significant investment, including substantial research and development, development of different engineering and manufacturing workflows, and adjustments to our data and analytics infrastructure. Even if these efforts are successful, the product or enhancement may not perform as expected. The ultimate success of our new products depends, in large part, on the accuracy of our assessments of the long-term needs of the industries and markets we serve, and it is difficult to quickly change the design or function of a planned new product if the market need does not develop as anticipated. As a result, to the extent we fail to accurately forecast the needs of our customers and timely introduce new and innovative products or services, or fail to obtain desired levels of market acceptance, our business may suffer and our operating results could be adversely affected. The challenge of identifying market trends and customer needs is even more demanding for markets that we have recently entered, such as the bioprocessing market, or that we intend to enter in the future, such as the GxP quality assurance market. There is no certainty that we will effectively identify these trends and needs or introduce products that are successful.

We have limited experience in marketing and sales and are in the early stages of building our sales channels in the life science market and internationally.

We may not be able to market, sell or distribute our current and future products effectively enough to support our planned growth. Currently, we sell our products through a combination of direct sales

efforts and partnerships with distributors across all of our key markets. During 2019, two of our distributors each accounted for greater than 10% of our total revenue, 28% in the aggregate. We are in the process of broadening and diversifying our sales channels across all markets. In the future, if we fail to maintain good relationships with, or fail to successfully motivate any of our large distributors, our revenue may decline. If we do not diversify our sales channels and effectively utilize our direct sales force, we will continue to be susceptible to risks associated with having a large percentage of revenue concentrated with a limited number of distributors.

As of the date of this prospectus, we have a direct sales force of more than 15 employees and we intend to increase the size and reach of our sales team in the future, particularly those focused on the life sciences market. Competition for employees capable of selling expensive instruments within the pharmaceutical and biotechnology industries is intense. We may not be able to attract and retain personnel or be able to build an efficient and effective sales organization, which could negatively impact sales and market acceptance of our products and limit our revenue growth and potential profitability. In addition, the time and cost of establishing a specialized sales, marketing and customer service force for a particular product or service may be difficult to justify in light of the revenue projected to be generated by such additional personnel and resources. We also intend to add additional distribution partners in the life science market, and if we are unable to do so successfully, it will adversely impact our ability to increase the revenue from our Rebel and ZipChip Interface.

We rely on distributors for the sale of our products in certain countries outside of the United States. We intend to continue to grow our business internationally and to do so we must attract additional distributors and retain existing distributors to maximize the commercial opportunity for our products. We exert limited control over existing distributors under our agreements with them, and if their sales and marketing efforts for our products in their particular region are not successful, our business would be materially and adversely affected. Locating, qualifying and engaging additional distribution partners with local industry experience and knowledge will be necessary in at least the short to mid-term to effectively market and sell our platform in certain countries outside the United States. We may not be successful in finding, attracting and retaining distribution partners, or we may not be able to enter into such arrangements on favorable terms.

Most of our distribution relationships are non-exclusive and permit such distributors to distribute competing products. As such, our distributors may not commit the necessary resources to market our products to the level of our expectations or may choose to favor marketing the products of our competitors. If current or future distributors do not perform adequately or we are unable to enter into effective arrangements with distributors in particular geographic areas, we may not realize long-term international revenue growth.

The recent global COVID-19 outbreak has significantly affected our business and operations.

The COVID-19 pandemic and efforts to control its spread have significantly curtailed the movement of people, goods and services worldwide. In light of the uncertain and rapidly evolving situation relating to the spread of COVID-19, we have taken precautionary measures intended to minimize the risk of the virus to our employees, our customers and the communities in which we operate. These measures include temporarily closing our offices to visitors and limiting the number of employees in our offices to those that are deemed essential for manufacturing and research purposes, as well as virtualizing, postponing or canceling customer, employee and industry events.

The COVID-19 pandemic has also created many negative headwinds that present risks to our business and results of operations. For example, it has generally disrupted the operations of our customers and prospective customers, and may continue to disrupt their operations, including as a result of travel restrictions and/or business shutdowns, uncertainty in the financial markets or other harm to their business and financial results. These disruptions have caused reduced capital spend by our existing customers and potential new customers, which has have negatively impacted our ZipChip Interface and consumables sales, resulting in a decrease in ZipChip Interface sales from the nine months ended September 30, 2019 compared to the nine months ended September 30, 2020. While this decrease did not significantly impact our total revenue in the nine months ended September 30, 2020, the impact could be more significant in the future. These disruptions could result in further reductions to capital expenditure budgets, delayed purchasing decisions, longer sales cycles, extended payment

terms or missed payments, and postponed or canceled projects, any of which would negatively impact our business and operating results, including sales and cash flows. We do not yet know the net impact that the COVID-19 pandemic may have on our business and cannot guarantee that it will not be materially negative. Although we continue to monitor the situation and may adjust our current policies as more information and public health guidance become available, the ongoing effects of the COVID-19 pandemic and/or the precautionary measures that we have adopted may create operational and other challenges, any of which could harm our business and results of operations.

Historically, a significant portion of our field sales, customer training events and other application services have been conducted in person, and the rollout of our new products has historically been supported by our participation at industry conferences. Currently, as a result of the work and travel restrictions related to the COVID-19 pandemic, and the precautionary measures that we have adopted, substantially all of our field sales and professional services activities are being conducted remotely, which has resulted in a decrease in our travel expenditures. However, we expect our travel expenditures to increase in the future, which could negatively impact our financial condition and results of operations. As of the date of this prospectus, we do not yet know the extent of the negative impact of such restrictions and precautionary measures on our ability to attract new customers or retain and expand our relationships with existing customers over the near and long term.

In addition, many of our suppliers are experiencing operational challenges as a result of COVID-19, which in turn may destabilize our supply chain or otherwise have an adverse effect on our ability to provide products to our customers. For example, global demand for ventilators and other respiratory care products has reached previously unseen levels as a result of the COVID-19 outbreak. This has, in turn, resulted in shortages and longer lead times for certain of our critical components. Our suppliers may have to temporarily close a facility for disinfecting after employees tested positive for COVID-19, face staffing shortages from employees who are sick or apprehensive about coming to work or be overwhelmed by unexpected demand. Currently, the difficulties experienced by our suppliers have had minimal impact on our ability to ship products to our customers; however, if the COVID-19 pandemic continues, it may negatively affect our inventory and delay delivery to our customers, which in turn will adversely affect our revenue and results of operations. If our suppliers are unable to deliver the components and subassemblies we require on a timely basis, we cannot guarantee that we will be able to locate alternative sources of supply for our products on acceptable terms, or at all. If we are unable to adequately purchase appropriate amounts of inventory, our business and results of operations may be materially and adversely affected.

Additionally, the COVID-19 pandemic has impacted, and may continue to impact, our headquarters, which is our primary corporate office, sales and marketing center and manufacturing location, including through the effects of facility closures, reductions in operating hours and other social distancing efforts. For example, if even a small number of our employees who work in clusters relating to critical functions such as manufacturing, procurement, supply chain, and research and development, test positive for COVID-19, the entire business function could be temporarily shut down to ensure the safety of our employees and the effectiveness of business would be severely impacted. Additionally, we cannot predict whether these conditions and concerns will continue or whether we will experience more significant or frequent disruptions in the future, including the complete closure of one or more of our facilities. Furthermore, as a result of the COVID-19 pandemic, we have required all employees who are able to do so to work remotely on a full-time or partial basis. It is possible that widespread remote work arrangements may have a negative impact on our operations, the execution of our business plans, the productivity and availability of key personnel and other employees necessary to conduct our business, and on third party service providers who perform critical services for us, or otherwise cause operational failures due to changes in our normal business practices necessitated by the outbreak and related governmental actions. If a natural disaster, power outage, connectivity issue or other event occurred that impacted our employees' ability to work remotely, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. The increase in remote working may also result in increased consumer privacy, data security and fraud risks, and our understanding of applicable legal and regulatory requirements, as well as the latest guidance from regulatory authorities in connection with the COVID-19 pandemic, may be subject to legal or regulatory challenge, particularly as regulatory guidance evolves in response to future developments.

More generally, the COVID-19 pandemic has had, and is expected to continue to have, an adverse effect on economies and financial markets globally, leading to a continued economic downturn, which is expected to decrease technology spending generally and could adversely affect demand for our platforms and services. It is not possible at this time to estimate the full impact that COVID-19 will have on our business, as the impact will depend on future developments, which are highly uncertain and cannot be predicted.

To the extent the COVID-19 pandemic adversely affects our business, financial condition and results of operations, it may also have the effect of heightening many of the other risks described in this “*Risk Factors*” section, including but not limited to, those related to our ability to increase sales to existing and new customers, continue to perform on existing contracts, develop and deploy new technologies, expand our marketing capabilities and sales organization, generate sufficient cash flow to service our indebtedness, and comply with the covenants in the agreements that govern our indebtedness.

We face intense and growing competition from leading technology companies as well as from emerging companies. Our inability to compete effectively with any or all of these competitors could affect our ability to achieve our anticipated market penetration and achieve or sustain profitability.

The markets we serve are highly competitive, and we expect competition to intensify in the future. This competition may make it more difficult for us to sell our products, and may result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses and failure to increase, or the loss of, market share, any of which would likely seriously harm our business, operating results and financial condition.

We face substantial competition from very large and experienced enterprises, both public and privately held, including Agilent Technologies, Bruker Corporation, Danaher Corporation, Inficon, Flir Systems, PerkinElmer, Shimadzu Corporation, Thermo Fisher Scientific, and Waters Corp. Our competitors also include many smaller companies, including companies established to pursue new and emerging technologies. We also expect additional competition in the future from new and existing companies with whom we do not currently compete directly. As our industry evolves, our current and potential competitors may establish cooperative relationships among themselves or with third parties, including companies with whom we have partnerships and whose products interoperate with our own, that could acquire significant market share, which could adversely affect our business. Any of these competitive threats, alone or in combination with others, could seriously harm our business, operating results and financial condition.

Many of our competitors have greater market presence, longer operating histories, stronger name recognition, larger customer bases and significantly greater financial, technical, sales and marketing, manufacturing, distribution and other resources than we have. In addition, many of our competitors have broader product offerings than we do. These companies may attempt to use their greater resources to better position themselves in the market, including by pricing their products at a discount or bundling them with other products and services in an attempt to rapidly gain market share. Moreover, many of our competitors have more extensive customer and partner relationships than we do, and may therefore be in a better position to identify and respond to market developments or changes in customer demands, including successfully developing technologies that outperform our technologies. Potential customers may also prefer to purchase from their existing suppliers rather than a new supplier regardless of product performance or features. Our larger competitors may be able to better manage large or complex contracts and maintain a broader geographic presence. Our smaller competitors typically focus on one or a few products, and they are often well entrenched in their chosen markets. Any of these competitors may respond more quickly to new technology, market developments or pursue new sales opportunities more effectively than we can. We cannot assure you that we will be able to compete successfully against existing or new competitors. Accordingly, our business may not grow as expected and our business may suffer.

Currently, we derive the majority of our revenue from our handheld products and are actively growing the revenue we derive from our desktop products, focused today in the life science market. If we fail to maintain significant market acceptance in existing markets or fail to successfully increase our penetration in new and expanding markets, we will not generate expected revenue and our prospects may be harmed.

In 2019, approximately 69% of our product and service revenue was derived from sales of our handheld products, mainly the MX908. Today, this market consists primarily of first responders, firefighters, local, state and federal law enforcement, as well as military, customs and homeland security customers. Continued market acceptance of the products we sell to these organizations is critical to our future success, and the adoption of our products by these organizations worldwide is a key part of our growth strategy. If market demand for our MX908 product declines, if our products fail to maintain or achieve greater market acceptance, or if we fail to execute on our sales and customer service efforts in the field forensics market, we will not be able to grow our revenue sufficiently to achieve or maintain profitability.

We also derive a significant and growing portion of our revenue from our desktop devices, primarily in the life science market, specifically the antibody therapeutics, cell and gene therapy and synbio markets. In 2019, approximately 29% of our product and service revenue came from biopharmaceutical companies and research institutions, collectively. We recently introduced our Rebel product line and our future success will partially depend on our ability to successfully commercialize this product line. The life sciences scientific community is comprised of a small number of early adopters and key opinion leaders who significantly influence the rest of the community. The success of life sciences products is due, in large part, to acceptance by the scientific community and their adoption of certain products as best practice in the applicable field of research.

The sizes of the markets for our solutions 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 markets for our products are rapidly evolving, making it difficult to predict with any accuracy the sizes of the markets for our current and future solutions. Our estimates of the annual total addressable market for our current and future solutions are based on a number of internal and third party estimates and assumptions. In addition, our growth strategy involves launching new solutions and expanding sales of existing solutions into new markets in which we have limited or no experience. Sales of new or existing solutions into new market opportunities may take several years to develop and mature, and we cannot be certain that these market opportunities will develop as we expect. For example, new life sciences technology is often not adopted by the relevant market until a sufficient amount of research conducted using such technology has been published in peer-reviewed publications. While we believe our assumptions and the data underlying our estimates of the total annual addressable market for our solutions 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 annual total addressable market for our solutions may be incorrect.

We rely on assumptions and estimates and data to calculate certain of our key metrics, and real or perceived inaccuracies in such metrics may harm our reputation and negatively affect our business.

In addition to our financial results, our management regularly reviews a number of operating and financial metrics, including a breakdown of product and service revenue into device sales and consumables and service revenue (recurring revenue), product placements, cumulative product placements, revenue by customer market (government, pharmaceutical/biotechnology and academia), and status of pipeline opportunities that represent customers in test, trials, pilots and full deployments, to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. As both the industry in which we operate and our businesses continue to evolve, so too might the metrics by which we evaluate our businesses and the company. In addition, while the calculation of the metrics we use is based on what we believe to be reasonable estimates, our internal tools are not independently verified by a third party and have a number of limitations and, furthermore, our methodologies for tracking these metrics may change over

time, for example, the industry breakdown of our customer revenue by government, pharma/bio and academia sales. Accordingly, investors should not place undue reliance on these metrics.

Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense, which contribute to the unpredictability and variability of our financial performance and may adversely affect our profitability.

The timing of our revenue is difficult to predict as we experience extended sales cycles, due in part to our need to educate our customers about our products, the significant purchase price of our products, the desire of some of our customers to do extended product testing and evaluations, including pilot studies, and our customers' willingness to replace their existing solutions and supplier relationships. Product purchases by our customers are often subject to a variety of other considerations that may extend the length of our sales cycle, including timing of their budget cycles and approval processes, budget constraints, extended negotiations, user surveys, administrative processing and other delays. In particular, government departments and agencies, both in the U.S. and in other countries, generally evaluate our products for critical, strategic applications. As a result, the piloting, testing and evaluation process can be extensive, and orders are often dependent on the availability of sufficient budgeted funds. The procurement processes for orders by government agencies may involve complex and time-consuming competitive bidding processes. Bid specifications and contract awards are subject to challenge by competitors, which can further extend the sales cycle. Furthermore, U.S. state and local hazardous material, emergency management and police organizations must often apply for grants to obtain the funds needed to procure our products, a process which is lengthy and unpredictable, particularly as to when and whether a grant will be awarded. As a result, our sales cycle ranges from several months to over a year, and it is difficult to predict when or if a sale to a potential customer will occur. All of these factors can contribute to fluctuations in our quarterly financial performance and increase the likelihood that our operating results in a particular quarter will fall below investor expectations. If we are unsuccessful in closing sales after expending significant resources, or if we experience delays for any of the reasons discussed above, our future revenue and operating expenses may be materially adversely affected.

Due to the significant resources required to enable access in new markets, we must make strategic and operational decisions to prioritize certain markets, technology offerings or partnerships and there can be no assurance that we will expend our resources in a way that results in meaningful revenue or capitalizes on potential new markets.

We believe our platform has potential applications across a wide range of markets and we have targeted certain markets in which we believe we have a higher probability of success or revenue opportunity or for which the path to commercialize products and realizing or achieving revenue is shorter. For example, in 2018 we entered into agreements regarding a specific government program opportunity to develop an aerosol vapor detector, and more recently we entered into several engagements related to the evaluation of our products within the cell therapy and gene therapy markets. We seek to continue to prioritize opportunities and allocate our resources among our programs to maintain a balance between advancing near-term opportunities and exploring additional markets for our technology. However, due to the significant resources required for the development of workflows for new markets, we must make decisions regarding which markets to pursue and the amount of resources to allocate to each. Our decisions concerning the allocation of research, development, collaboration, management and financial resources toward particular markets or workflows may not lead to the development of any viable product and may divert resources away from better opportunities. Similarly, our potential decisions to delay, terminate or collaborate with third parties in respect of certain markets may subsequently also prove to be suboptimal and could cause us to miss valuable opportunities. In particular, if we are unable to develop additional relevant products and applications for markets such as antibody therapeutics, cell therapy or the synbio market, it could slow or stop our business growth and negatively impact our business, financial condition, results of operations, and prospects.

If we market our products for clinical or diagnostic purposes, our products could become subject to onerous regulation by the U.S. Food and Drug Administration, or FDA, or other regulatory agencies in the future, which could increase our costs and delay or prevent commercialization of our products, thereby materially and adversely affecting our business, financial condition, results of operations, and prospects.

We make our platform and devices, including our MX908, Rebel, and ZipChip Interface, available to customers as research-use-only, or RUO, products. Products that are labeled as RUO are exempt

from compliance with most FDA requirements, including premarket clearance or approval, manufacturing requirements, and others. A product labeled RUO but which is actually intended for clinical diagnostic use may be viewed by the FDA as adulterated and misbranded under the Federal Food, Drug, and Cosmetic Act, or FDCA, and subject to FDA enforcement action. The FDA has indicated that when determining the intended use of a product labeled RUO, the FDA will consider the totality of the circumstances surrounding distribution and use of the product, including how the product is marketed and to whom. The FDA could disagree with our assessment that our products are properly marketed as RUOs, or could conclude that products labeled as RUO are actually intended for clinical diagnostic use, and could take enforcement action against us, including requiring us to stop distribution of our products until we are in compliance with applicable regulations, which would reduce our revenue, increase our costs and adversely affect our business, prospects, results of operations and financial condition. In the event that the FDA requires us to obtain marketing authorization of our RUO products in the future, there can be no assurance that the FDA will grant any clearance or approval requested by us in a timely manner, or at all. Furthermore, although we currently market our products as RUO, we may in the future make the decision to market them for clinical or diagnostic purposes, or may develop other different products intended for clinical or diagnostic purposes, which would result in the application of a more onerous set of regulatory requirements.

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 on our ability to recruit, train, retain and motivate key personnel, including our senior management, research and development, manufacturing and sales, customer service and marketing personnel. In particular, Dr. Knopp, our Chief Executive Officer and one of our co-founders, and Dr. Brown, our Chief Technology Officer and one of our co-founders, are critical to our vision, strategic direction, culture and products. Each of our employees may terminate his or her relationship with us at any time and the loss of the services of such persons could have an adverse effect on our business. We rely on our senior management to manage our existing business operations and to identify and pursue new growth opportunities. The loss of any member of senior management could significantly delay or prevent the achievement of our business objectives and their replacement would likely involve significant time and expense.

As we continue to scale our business, we may find that certain of our products, certain customers or certain markets, including the biopharmaceutical market, may require a dedicated sales force or sales personnel with different experience than those whom we currently employ. Our continued growth will depend, in part, on attracting, retaining and motivating highly-trained sales personnel with the necessary scientific background and technical ability to understand our systems and effectively identify and sell to potential new customers. Identifying, recruiting and training additional qualified personnel will require significant time, expense and attention. In addition, the continued development of complementary software tools, such as our analysis tools and visualization software, requires us to compete for highly trained software engineers in the Boston area and for highly trained customer service personnel globally.

We do not have 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, subject to the terms of their confidentiality, non-solicitation and intellectual property assignment agreements. Because of the complex and technical nature of our products and the dynamic market in which we compete, any failure to attract, train, retain and motivate qualified personnel could materially harm our operating results and growth prospects.

We may be unable to consistently manufacture our devices and consumables to the necessary specifications or in quantities necessary to meet demand at an acceptable cost or at an acceptable performance level.

Our products are integrated solutions with many different components that work together. As such, a quality defect in a single component can compromise the performance of the entire solution. As we continue to grow and introduce 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 manufacturers will be able to continue to manufacture our products so that they consistently achieve the product specifications and quality that our customers expect. Any future design issues, unforeseen manufacturing

problems, such as contamination of our or such third party 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, financial condition and operating results and could result in us or our third party manufacturers losing International Organization for Standardization, or ISO, quality management certifications. If we or our third party manufacturers fail to maintain ISO quality management certifications, our customers might choose not to purchase products from us. Furthermore, we or our third party manufacturers may not be able to increase manufacturing to meet anticipated demand or may experience downtime.

In order to meet our customers' needs, we attempt to forecast demand for our products and components used for the manufacture of our products. If we fail to accurately forecast this demand, we could incur additional costs or experience manufacturing delays and may experience lost sales or significant inventory carrying costs.

The risk of manufacturing defects or quality control issues is generally higher for new products, whether produced by us or a third party manufacturer, products that are transitioned from one manufacturer to another, particularly if manufacturing is transitioned or initiated with a manufacturer we have not worked with in the past, and products that are transferred from one manufacturing facility to another. We cannot assure investors that we and our third party manufacturers will be able to launch new products on time, transition manufacturing of existing products to new manufacturers, transition our manufacturing capabilities to a new location or transition manufacturing of any additional consumables in-house without manufacturing defects. An inability to manufacture products and components that consistently meet specifications, in necessary quantities and at commercially acceptable costs will have a negative impact and may have a material adverse effect on our business, financial condition and results of operations.

We depend on a continued supply of components and raw materials for our products from third party suppliers, and if shortages of these components or raw materials arise, we may not be able to secure enough components to build new products to meet customer demand or we may be forced to pay higher prices for these components.

We rely on a limited number of suppliers for several key components utilized in the assembly of our products, and in some cases, such as the glass in our microfluidic chips, swab samplers, and sensors within our products, we rely on a single supplier for a particular component, subassembly or consumable. Although in many cases we use standard components for our products, in some cases, components may only be purchased from a limited number of suppliers. In particular, we are dependent on single suppliers for our Rebel autosampler subassemblies and our MX908 consumables. If, for any reason, our access to these swab samplers is limited or delayed, we would need to quickly identify and qualify an alternate source of swab samplers. Identifying and qualifying an alternate source may take time and involve additional expense, and there is no guarantee that the alternate source will perform as expected. If our customers experienced a shortage or delay in consumables, such as swab samplers, microfluidic chips, or assay kits, or if these consumables do not perform at the levels our customers expect, our business could be materially and adversely impacted.

In addition, we maintain relatively low inventory and acquire components based upon anticipated annual demand. Neither we nor our contract manufacturers enter into long-term supply contracts for these components, and none of our third party suppliers is obligated to supply products to us for any specific period or in any specific quantities, except as may be provided in a particular purchase order. We are not a major customer of many of our suppliers, and these suppliers may therefore give other customers' needs higher priority than ours. Our industry has experienced component shortages and delivery delays in the past, and we may experience shortages or delays of critical components in the future as a result of strong demand in the industry or other factors. Many of the other components required to build our systems are also occasionally in short supply. Therefore, if shortages or delays arise, we may not be able to secure enough components at reasonable prices or of acceptable quality to build new products, resulting in an inability to meet customer demand or our own operating goals, which could adversely affect our customer relationships, business, operating results and financial condition.

Additionally, damage to a manufacturing facility or other property of any of our suppliers, due to fire, flood or other natural disaster or casualty event may have a material adverse effect on our business, financial condition and results of operations.

Our current research and development efforts may not produce significant revenue for several years, if at all.

Developing our products is expensive, and the investment in product development may involve a long payback cycle. Our investment in research and development may not result in marketable products or may result in products that take longer to generate revenue, or generate less revenue, than we anticipate. For the year ended December 31, 2019 and the nine months ended September 30, 2020, our research and development expenses were \$9.0 million, or 50% of our total revenue, and \$6.0 million, or 28% of our total revenue, respectively. Our future plans include significant investments in research and development of product opportunities for expansion of our handheld products and new application areas for our desktop products. We believe that we must continue to dedicate a significant amount of resources for our research and development efforts to maintain our competitive position. However, we may not receive significant revenue from these investments for several years, if at all.

Undetected errors or defects in our products, or errors made by the end users of our products, could harm our reputation and decrease market acceptance of our products.

Our devices and consumables, as well as the software that accompanies them, may contain undetected errors or defects when first introduced or as new versions are released. Disruptions or other performance problems with our products or software may adversely impact our customers' research or business, harm our reputation and result in reduced revenue or increased costs associated with product repairs or replacements. Further, in the event that an end user makes an error or fails to analyze a particular substance correctly, our product may be associated with a failure to identify a substance that ultimately turns out to be harmful, or, conversely, be associated with a false alarm raised over a substance that turns out to be benign. We also provide customer support services, such as in connection with our "Reachback" program described in the "Business" section of this prospectus. It is possible that incorrect or inaccurate information may be delivered to a customer in the context of one or more support consultations. If any such errors or mistakes occur, we may also incur significant costs, the attention of our key personnel could be diverted or other significant customer relations problems may arise. We may also be subject to unwanted media attention, warranty claims or breach of contract for damages related to errors or defects in our products and solutions.

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

We 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 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. 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 significant efforts to create security barriers to such threats, it is virtually impossible for us to entirely mitigate these risks. If our security measures are compromised 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 may be harmed 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, it could negatively impact our ability to serve our customers, which could adversely impact our business. 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 (e.g., employees) or external bad actors (attacks of which are becoming increasingly sophisticated, including social

engineering and phishing scams), which could lead to the exposure of personal data, sensitive data and confidential information to unauthorized persons. 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. 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.

The cost of investigating, mitigating and responding to potential data security breaches and complying with applicable breach notification obligations to individuals, regulators, partners and others can be significant. 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. Further, defending a suit, regardless of its merit, could be costly, divert management attention and harm our reputation.

Our international operations may raise additional risks, which could have an adverse effect on our operating results.

For the year ended December 31, 2019 and the nine-month period ended September 30, 2020, international revenue accounted for 24% and 14%, respectively, of our total revenue. We expect our international revenue and operations will continue to expand in the future. Our international operations are subject to a variety of risks that we do not face in the United States, including:

- the difficulty of increased travel, infrastructure and legal compliance costs associated with developing international revenue;
- difficulties in enforcing contracts, collecting accounts receivable and longer payment cycles, especially in emerging markets;
- many, if not most, foreign governments are investing less in safety and security and in technology to detect dangerous chemicals than the U.S. government;
- general economic conditions in the countries in which we operate;
- additional withholding taxes or other taxes on our foreign income, and tariffs or other restrictions on foreign trade or investment;
- compliance with privacy and data security requirements in foreign jurisdictions in which we operate;
- imposition of, or unexpected adverse changes in, foreign laws or regulatory requirements, many of which differ from those in the United States;
- costs and delays associated with developing products or technology in multiple languages, such as the software embedded in our products and the products' built-in library of chemical substances;
- compliance with foreign technical standards;
- increased length of time for shipping and acceptance of our products;
- increased exposure to foreign currency exchange rate risk;
- reduced protection for intellectual property rights in some countries; and
- political unrest, war, incidents of terrorism, or responses to such events.

As we continue to expand our business globally, our success will depend, in large part, on our ability to anticipate and effectively manage these and other risks associated with our international operations.

Our overall success in international markets depends, in part, on our ability to succeed in differing legal, regulatory, economic, social and political conditions. We may not be successful in developing and implementing policies and strategies that will be effective in managing these risks in each country where we do business. Our failure to manage these risks successfully could harm our international operations, reduce our international sales and increase our costs, thus adversely affecting our business, operating results and financial condition.

Compliance with global privacy and data security requirements could result in additional costs and liabilities to us or inhibit our ability to collect and process data globally, and the failure to comply with such requirements could subject us to significant fines and penalties, which may have a material adverse effect on our business, financial condition or results of operations.

The regulatory framework for the collection, use, safeguarding, sharing, transfer and other processing of information worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Internationally, laws, regulations and standards in many jurisdictions apply broadly to the collection, use, retention, security, disclosure, transfer and other processing of personal information. For example, the European General Data Protection Regulation, or the GDPR, which took effect across all member states of the European Economic Area, or the EEA, in May 2018, greatly increased the European Commission's jurisdictional reach of its laws and adds a broad array of requirements for handling personal data. The GDPR, together with national legislation, regulations and guidelines of the EEA member states and the United Kingdom governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, use, retain, protect, disclose, transfer and otherwise process personal data. In particular, the GDPR includes obligations and restrictions concerning the consent and rights of individuals to whom the personal data relates, the transfer of personal data out of the European Economic Area or the United Kingdom, security breach notifications and the security and confidentiality of personal data. The GDPR authorizes fines for certain violations of up to 4% of global annual revenue or €20 million, whichever is greater.

All of these evolving compliance and operational requirements may require us to modify our data processing practices and policies, which in turn could distract management or divert resources from other initiatives and projects. Any failure or perceived failure by us to comply with any applicable laws and regulations relating to data privacy and security could result in damage to our reputation, as well as proceedings or litigation by governmental agencies or other third parties, including class action privacy litigation in certain jurisdictions, which would subject us to significant fines, sanctions, awards, penalties or judgments, all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

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

On August 29, 2019, we entered into a loan and security agreement, which was subsequently amended, with Signature Bank, pursuant to which the Signature Bank agreed to provide us a \$15.0 million term loan facility with a maturity date of August 1, 2023. The full amount of the loan was funded on August 29, 2019. Until we have repaid such indebtedness, the loan and security agreement subjects us to various customary covenants, including requirements as to financial reporting, financial covenants (including unrestricted minimum cash levels) and insurance and restrictions on our ability to dispose of our business or property, to change our line of business, to liquidate or dissolve, to enter into any change in control transaction, to merge or consolidate with any other entity or to acquire all or substantially all the capital stock or property of another entity, to incur additional indebtedness, to incur liens on our property, to pay any dividends or make other distributions on capital stock other than dividends payable solely in capital stock, to redeem capital stock, to enter into in-bound licensing agreements, to engage in transactions with affiliates, and to encumber our intellectual property. Our business may be adversely affected by these restrictions on our ability to operate our business.

We are permitted to make interest-only payments on the loan facility through February 2021, at which time principal amortization begins. However, we may be required to repay the outstanding indebtedness under the loan facility if an event of default occurs under the loan and security agreement. An event of default will occur if, among other things, we fail to make required payments under the loan

and security agreement; we breach any of our covenants under the loan and security agreement, subject to specified cure periods with respect to certain breaches; the lender determines that a material adverse change (as defined in the loan and security agreement) has occurred; we or our assets become subject to certain legal proceedings, such as bankruptcy proceedings; we are unable to pay our debts as they become due; or we default on contracts with third parties which would permit the third party to accelerate the maturity of such indebtedness or that could have a material adverse change on us. We may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time any such event of default occurs. In such a case, we may be required to delay, limit, reduce or terminate our product development or operations or grant to others rights to develop and market products that we would otherwise prefer to develop and market ourselves. The lender could also exercise its rights as secured lender to take possession of and to dispose of the collateral securing the term loan, which collateral includes substantially all of our property (excluding intellectual property, which is subject to a negative pledge). Our business, financial condition, results of operations, and prospects could be materially adversely affected as a result of any of these events.

The majority of our operations are currently conducted at a single location and any disruption at our facility could negatively impact our operations and increase our expenses.

Our headquarters in Boston, Massachusetts contains nearly all of our corporate and administrative functions, the majority of our research, and all of our in-house manufacturing. A natural or other disaster, such as a fire or flood, could cause substantial delays in our operations, damage or destroy our manufacturing equipment or inventory, and cause us to incur additional expenses. The insurance we maintain against fires, floods and other natural disasters may not be adequate to cover our losses in any particular case. With or without insurance, damage to our manufacturing facility or our other property, or to any of our suppliers, due to fire, flood or other natural disaster or casualty event may have a material adverse effect on our business, financial condition and results of operations.

Risks related to sales of products to the U.S. Government

For the year ended December 31, 2019 and the nine months ended September 30, 2020, revenue from government customers accounted for 67% and 77%, respectively, of our product and service revenue. The majority of these product and service revenue were generated from agencies and departments of the U.S. government. In addition, substantially all of our revenue from license and contracts revenue are derived from contracts or sub-contracts related to the U.S. government. We expect significant revenue from U.S. government contracts for the foreseeable future. There is considerable risk associated with deriving a material portion of our revenue from sales to the U.S. government, including the risks described below.

A significant portion of our business depends on sales to the public sector, and our failure to receive and maintain government contracts or changes in the contracting or fiscal policies of the public sector could have a material adverse effect on our business.

We derive a significant portion of our revenue from contracts that we have, either directly or through distribution partners, with federal, state, local and foreign governments and government agencies, and we believe that the success and growth of our business will continue to depend on our successful procurement of government contracts. For example, we have historically derived, and expect to continue to derive, a significant portion of our revenue from sales to agencies of the U.S. federal government, either directly by us or through other distribution partners.

Sales to such government agencies are subject to a number of challenges and risks. Selling to government agencies can be highly competitive, expensive and time-consuming, often requiring significant upfront time and expense, without any assurance that these efforts will generate a sale. We also must comply with laws and regulations relating to the formation, administration and performance of contracts, which provide public sector customers certain rights that are not typically found in commercial contracts.

Accordingly, our business, financial condition, results of operations, and prospects may be adversely affected by certain events or activities, including, but not limited to:

- changes in fiscal or contracting policies or decrease in available government funding;

- changes in government programs or applicable requirements;
- changes in the political environment, including before or after a change to the leadership within the government administration, and any resulting uncertainty or changes in policy or priorities and resultant funding;
- appeals, disputes or litigation relating to government procurement, including but not limited to bid protests by unsuccessful bidders on potential or actual awards of contracts to us or our partners by the government;
- the adoption of new laws or regulations or changes to existing laws or regulations;
- budgetary constraints, including automatic reductions as a result of? "sequestration" or similar measures and constraints imposed by lapses in appropriations for the federal government or certain of its departments and agencies;
- influence by, or competition from, third parties with respect to pending, new or existing contracts with government customers;
- potential delays or changes in the government appropriations or procurement processes, including as a result of events such as war, incidents of terrorism, natural disasters, and public health concerns or epidemics, such as the recent COVID-19 outbreak; and
- increased or unexpected costs or unanticipated delays caused by other factors outside of our control, such as performance failures of our partners and subcontractors.

Any such event or activity, among others, could cause governments and governmental agencies to delay or refrain from purchasing our products and services in the future, reduce the size or payment amounts of purchases from existing or new government customers, or otherwise have an adverse effect on our business, results of operations, financial condition and prospects.

U.S. government programs are limited by budgetary constraints and political considerations and are subject to uncertain future funding levels that could result in the termination of programs.

U.S. government agency and department purchases are often strategic in nature and large in size. Therefore, reductions in federal funding levels that impact our customers could negatively affect the size of our customers' orders or lead to cancellation of orders. Government contracts are often subject to more extensive scrutiny and publicity than commercial contracts. The number and terms of new government contracts signed can be affected significantly by political and economic factors, such as pending elections and revisions to government tax policies. Negative publicity related to our government contracts, regardless of its accuracy, may damage our business by affecting our ability to compete for new contracts. A decline in security-related government spending for any reason, or a shift away from programs that we address, could hurt our sales, put pressure on our prices and reduce our revenue and margins.

A multi-year U.S. government program may be implemented through the award of many different individual contracts, grants, cooperative agreements and subcontracts or other subawards. For U.S. government programs, program funding is subject to Congressional appropriations. Congress generally appropriates funds on a fiscal year basis even though a program may continue for several years. Government programs are often only partially funded initially, and additional funds are committed only as Congress makes further appropriations. The termination of a program or failure to commit funds to a program would result in a loss of anticipated future revenue attributable to that program, which could materially harm our business.

Our contracts with the U.S. government may impose requirements that may be unfavorable to us and that may have a material adverse effect on our growth prospects and operating results.

There are inherent risks in contracting with the U.S. government. The U.S. government can typically terminate, reduce orders under or otherwise modify any of its contracts with us for its convenience (*i.e.*, without cause) whether or not we have failed to perform under the terms of the applicable contract. In such case, the government would not be required to pay us for the lost profits for the unperformed work. A termination arising out of our default could expose us to liability and harm our ability to compete for future contracts and orders. In addition to unfavorable termination provisions, our U.S. government contracts and related regulations contain provisions that allow the U.S. government to unilaterally suspend us from receiving new contracts pending resolution of alleged

violations of procurement laws or regulations, reduce the value of existing contracts, issue modifications to a contract and potentially restrict exports of our products, services and associated materials.

Our contracts with government agencies may subject us to other risks and give the government additional rights and remedies not typically found in commercial contracts, including rights that allow the government to, for example:

- obtain detailed cost or pricing information;
- receive “most favored customer” pricing;
- perform routine audits;
- impose equal employment and hiring standards;
- require products to be manufactured in specified countries;
- restrict non-U.S. ownership or investment in our company; and/or
- pursue administrative, civil or criminal remedies for contractual violations.

These rights and remedies have the potential to limit our sales to, and increase our costs of, doing business with both government and commercial customers, which could materially adversely affect our growth prospects and operating results.

We are subject to audits by the U.S. government which could adversely affect our business.

U.S. government agencies routinely audit and investigate government contractors to monitor performance, cost allocations, cost accounting and compliance with applicable laws, regulations and standards. Since some of our contracts provide for cost reimbursement, the U.S. government has the right to audit our costs even after job completion and after we have billed and recognized the corresponding revenue. The U.S. government also may review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems. Any costs found to be improperly allowed or improperly allocated to a specific contract will not be reimbursed, and any such costs that have already been reimbursed must be refunded, which would affect associated revenue that had already been recognized. While we intend to implement uniform procurement and compliance programs for all of our business, we may be subject to more risks from these audits until we are able to implement such a program effectively.

Responding to governmental audits, inquiries or investigations may involve significant expense and divert the attention of our management. If a government review or investigation uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, damages, fines and suspension or debarment from doing business with U.S. government agencies. In addition, our reputation could be seriously harmed by allegations of impropriety, even if unfounded. Our internal controls may not prevent or detect all improper or illegal activities.

Our business is subject to laws and regulations that are more restrictive because we are a contractor and subcontractor to the U.S. government.

As a contractor and subcontractor to the U.S. government, we are subject to various laws and regulations that are more restrictive than those applicable to non-government contractors, including the Federal Acquisition Regulations and its supplements, which comprehensively regulate the formation, administration and performance of U.S. government contracts, and the Truth in Negotiations Act and various other laws, which require certain certifications and disclosures. These laws and regulations, among other things:

- require that we obtain and maintain material governmental authorizations and approvals to conduct our business as it is currently conducted;
- require certification and disclosure of cost and pricing data in connection with certain contract negotiations;
- impose rules that define allowable and unallowable costs and otherwise govern our right to reimbursement under certain cost-based U.S. government contracts;
- restrict the use and dissemination of information classified for national security purposes and the export of certain products and technical data; and

- impose requirements relating to ethics and business practices, which carry penalties for noncompliance ranging from monetary fines and damages to loss of the ability to do business with the U.S. government as a prime contractor or subcontractor.

In addition, we may be subject to industrial security regulations of the U.S. Department of Defense and other federal agencies that are designed to safeguard against unauthorized access by foreigners and others to classified and other sensitive U.S. government information. If we were to come under foreign ownership, control or influence, our U.S. government customers could terminate, or decide not to renew, our contracts, or we may be subjected to burdensome industrial security compliance measures. Such a situation could impair our ability to obtain new contracts and subcontracts. The government may also change its procurement practices or adopt new contracting rules and regulations that could be costly to satisfy or that could impair our ability to obtain new contracts.

Risks related to litigation and our intellectual property

We rely on in-bound licenses granted to us from third parties. If we lose these rights, our business may be materially adversely affected, our ability to develop improvements to our existing products and to develop new products may be negatively and substantially impacted, and if disputes arise, we may be subjected to future litigation as well as the potential loss of or limitations on our ability to develop and commercialize products and technology covered by these license agreements.

We are party to royalty-bearing license agreements and we may need to obtain additional licenses from others to advance our research, development and commercialization activities. Our current license agreements impose, and we expect that any future exclusive in-bound license agreements will impose, various development, diligence, commercialization and other obligations on us. We have also entered into engagements in the past, and may enter into engagements in the future, with other partners and customers under which we obtain certain intellectual property rights relating to our platform and technology. These engagements take the form of exclusive licenses, non-exclusive licenses, or assignment of actual ownership of intellectual property rights or technology from third parties. Our rights to use the technology we license are subject to the continuation of and compliance with the terms of those agreements. In some cases, we may not control the prosecution, maintenance or filing of the patents and patent applications to which we hold licenses, or the enforcement of those patents against third parties.

Moreover, disputes may arise with respect to our licensing or other upstream agreements, including:

- the scope of rights granted under the agreements and other interpretation-related issues;
- the extent to which our systems and consumables, technology and processes infringe on intellectual property rights of the licensor that are not licensed under the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreements and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In spite of our efforts to comply with our obligations under our in-bound license agreements, our licensors might conclude that we have materially breached our obligations under our license agreements and might therefore, including in connection with any aforementioned disputes, terminate the relevant license agreement, thereby removing or limiting our ability to develop and commercialize products and technology covered by these license agreements. If any such in-bound license is terminated, or if the licensed patents fail to provide the scope of exclusivity expected, competitors or other third parties might have the freedom to market, develop, or commercialize products similar to ours. In addition, absent the rights granted to us under such license agreements, we may infringe the intellectual property rights that are the subject of those agreements, we may be subject to litigation by the licensor, and if such litigation by the licensor is successful we may be required to pay damages to our licensor, or we may be required to cease our development and commercialization activities which are deemed infringing,

and in such event we may ultimately need to modify our activities or products to design around such infringement, which may be time- and resource-consuming, and which may not be ultimately successful. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, and prospects.

In addition, our rights to certain technologies are licensed to us on a non-exclusive basis. The owners of these non-exclusively licensed technologies are therefore free to license them to third parties, including our competitors, on terms that may be superior to those offered to us, which could place us at a competitive disadvantage. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights. In addition, certain of our agreements with third parties may provide that intellectual property arising under these agreements, such as data that could be valuable to our business, will be owned by the counterparty, in which case, we may not have adequate rights to use such data or have exclusivity with respect to the use of such data, which could result in third parties, including our competitors, being able to use such data to compete with us.

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

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our products are obtained, once the patent life has expired, we may be open to competition from competitive products. If one of our products requires extended development, testing, regulatory review and/or examination by a patent granting authority, 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.

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 U.S. Patent and Trademark Office, or the USPTO, and various governmental patent agencies outside of the United States at several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we engage an outside service and rely on our outside counsel to pay these fees due to non-U.S. patent agencies. 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. We employ reputable law firms and other professionals to help us comply, and in some 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 may have a material adverse effect on our business.

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

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

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

The America Invents Act also includes a number of significant changes that affect the way patent applications are prosecuted and also affects patent litigation. These include allowing third party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, *inter partes* review and derivation proceedings. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid, even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our owned or in-bound licensed patent applications and the enforcement or defense of our owned or in-bound licensed issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

In addition, the patent position of companies in the biotechnology field is particularly uncertain. Various courts, including the United States Supreme Court have rendered decisions that affect the scope of patentability of certain inventions or discoveries relating to biotechnology. These decisions state, among other things, that a patent claim that recites an abstract idea, natural phenomenon or law of nature are not themselves patentable. Precisely what constitutes a law of nature or abstract idea is uncertain, and it is possible that certain aspects of our technology could be considered natural laws. Accordingly, the evolving case law in the United States may adversely affect our ability to obtain patents and may facilitate third party challenges to any owned or licensed patents.

Our ability to compete and the success of our business could be jeopardized if we are unable to protect our intellectual property adequately.

Our success depends to a degree upon the protection of our proprietary technology and obtaining, maintaining and enforcing our intellectual property and other proprietary rights. We rely on a combination of trade secrets, patents, copyrights, trademarks and contractual provisions with employees, contract manufacturers, consultants, customers and other third parties to establish and protect our intellectual property rights, all of which offer only limited protection. Other parties may not comply with the terms of their agreements with us, and we may not be able to enforce our rights adequately against these parties.

Although we enter into confidentiality, assignments of proprietary rights and license agreements, as appropriate, with our employees and third parties, including our contract manufacturers, contract engineering firms, and generally control access to and distribution of our technologies, documentation and other proprietary information, we cannot be certain that the steps we take to prevent unauthorized use of our intellectual property rights are sufficient to prevent their misappropriation, particularly in foreign countries where laws or law enforcement practices may not protect our intellectual property rights as fully as in the United States. In addition, we rely on trade secrets to protect certain of our technologies, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. Although we use reasonable efforts to protect our trade secrets, our employees and third parties to whom our trade secrets are disclosed may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third-party entity illegally obtained

and is using any of our trade secrets is expensive and time-consuming, and the outcome is unpredictable. In addition, courts outside the U.S. are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

If competitors are able to use our technology, our ability to compete effectively could be harmed. For example, if a competitor were to gain use of certain of our proprietary technology, it might be able to develop and manufacture similarly designed solutions at a reduced cost, which would result in a decrease in demand for our products.

Furthermore, we have adopted a strategy of seeking limited patent protection both in the United States and in foreign countries with respect to the technologies used in or relating to our products. We do not know whether any of our pending patent applications will result in the issuance of patents or whether the examination process will require us to narrow our claims, and even if patents are issued, they may be contested, circumvented or invalidated over the course of our business. Moreover, the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages, and, as with any technology, competitors may be able to develop and obtain patents for technologies that are similar to or superior to our technologies. If that happens, we may need to license these technologies and we may not be able to obtain licenses on reasonable terms, if at all, thereby causing great harm to our business. Additionally, the determination that a patent application or patent claim meets all of the requirements for patentability is a subjective determination based on the application of law and jurisprudence. The ultimate determination by the USPTO or by a court or other trier of fact in the U.S., or corresponding foreign national patent offices or courts, on whether a claim meets all requirements of patentability cannot be assured. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or patent applications, in our licensed patents or patent applications or in third-party patents.

Even in those instances where we have determined that another party is breaching our intellectual property and other proprietary rights, enforcing our legal rights with respect to such breach may be expensive and difficult. We may need to engage in litigation to enforce or defend our intellectual property and other proprietary rights, which could result in substantial costs and diversion of management resources. Further, many of our current and potential competitors are substantially larger than we are and have the ability to dedicate substantially greater resources to defending any claims by us that they have breached our intellectual property rights.

Failure to protect our intellectual property could affect our ability to secure additional contracts or preserve market advantages when we commercialize our products.

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

Filing, prosecuting and defending patents on our products 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. In addition, 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 may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we may not be able to prevent third parties from practicing our inventions in some or all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products 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 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, particularly those relating to

biotechnology, 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. Proceedings to enforce our 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 patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, or that are initiated against us, 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.

We may be obligated to disclose our proprietary technology to our customers, which may limit our ability to protect our intellectual property.

Certain customer agreements contain provisions permitting the customer to become a party to, or a beneficiary of, a technology escrow agreement under which we place proprietary know-how and source code for our products in escrow with a third party. Under these escrow agreements, the know-how and source code to the applicable product may be released to the customer, typically for its use to further develop, maintain, modify and enhance the product, upon the occurrence of specified events, such as our filing for bankruptcy and breaching our representations, warranties or covenants of our agreements with our customers. Disclosing this know-how and source code may limit the intellectual property protection we can obtain or maintain for that know-how or source code or the products embodying or containing that know-how or source code, and may facilitate intellectual property infringement claims against us. Each of these could harm our business, results of operations and financial condition.

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

Although patents granted by the USPTO or other patent granting authority are generally entitled to a presumption of validity and enforceability, a granted patent's scope, validity or enforceability can still be challenged. Some of our patents or patent applications (including in-bound licensed patents) have been or may be challenged at a future point in time in opposition, derivation, reexamination, *inter partes* review, post-grant review or interference. 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 harm our business. In addition, in patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. If a defendant 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 platform technologies. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop, 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. Moreover, we may not search for or identify all relevant third party patents or we may incorrectly interpret the relevance, scope or expiration of a third-party patent of which we are aware. 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 that could result in substantial cost to us. The outcome of such proceedings is uncertain. No assurance can be given that other patent applications will not have priority over our patent applications. In addition, changes to the patent laws of the United States allow for various post-grant opposition proceedings that have not been extensively tested, and their outcome is therefore uncertain. Furthermore, if third parties bring these proceedings against our patents, we could experience significant costs and management distraction.

Claims by other parties that we infringe or misuse their proprietary technology could subject us to significant liability and could force us to redesign our products or to incur significant costs.

Our competitors protect their intellectual property rights by means such as trade secrets, patents, copyrights and trademarks. Although we have not been involved in any litigation related to intellectual property rights of others, from time to time we receive letters from other parties alleging, or inquiring about, breaches of their intellectual property rights. Any party asserting that our products infringe their proprietary rights would force us to defend ourselves, and possibly our customers, against the alleged infringement. These claims and any resulting lawsuit, if successful, could subject us to significant liability for damages and invalidation of our proprietary rights. The risk of such a lawsuit will likely increase as our size and the number and scope of our products increase, as our geographic presence and market share expand and as the number of competitors in our market increases. Any such claims or litigation could:

- be time-consuming and expensive to defend, whether meritorious or not;
- require us to stop selling, incorporating or using our products that use the other party's intellectual property;
- divert the attention of our technical and managerial resources;
- require us to enter into royalty or licensing agreements with third parties, which may not be available on terms that we deem acceptable, if at all;
- prevent us from operating all or a portion of our business or force us to redesign our products, which could be difficult and expensive and may degrade performance of our products, or withdraw one or more of our products altogether;
- subject us to significant liability for damages or result in significant settlement payments;
- require us to indemnify our customers, distribution partners or suppliers; and
- refund deposits and other amounts received for allegedly infringing technology or products.

Intellectual property litigation can be costly. Even if we prevail, the cost of such litigation could deplete our financial resources. Litigation is also time-consuming and could divert management's attention and resources away from our business. Furthermore, during the course of litigation, confidential information may be disclosed in the form of documents or testimony in connection with discovery requests, depositions or trial testimony. Disclosure of our confidential information and our involvement in intellectual property litigation could materially adversely affect our business. Some of our competitors may be able to sustain the costs of complex intellectual property litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could significantly limit our ability to continue our operations. Any of the foregoing could disrupt our business and have a material adverse effect on our operating results and financial condition.

In the future we may be involved in litigation related to intellectual property, which could be time-intensive and costly and may adversely affect our business, financial condition, results of operations, and prospects.

In recent years, there has been significant litigation in the United States involving intellectual property rights. We may in the future be, involved with litigation or actions at the USPTO or a foreign patent office with various third parties that claim we or our partners or customers using our solutions and services have misappropriated or misused other parties' intellectual property rights. We expect that the number of such claims may increase as the number of our systems, workflows, consumables and kits, and the level of competition in our industry segments, grow. Any infringement claim, regardless of its validity, could harm our business by, among other things, resulting in time-consuming and costly litigation, diverting management's time and attention from the development of the business, requiring the payment of monetary damages (including treble damages, attorneys' fees, costs and expenses) or royalty payments, or result in potential or existing customers delaying purchases of our products or entering into engagements with us pending resolution of the dispute.

As we move into new markets and applications for our products, incumbent participants in such markets may assert their patents and other proprietary rights against us as a means of slowing our entry into such markets or as a means to extract substantial license and royalty payments from us. Our competitors and others may now and in the future have significantly larger and more mature patent

portfolios than we currently have. In addition, future litigation may involve patent holding companies or other adverse patent owners who have no relevant product or service revenue and against whom our own patents may provide little or no deterrence or protection. Therefore, our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties, or the invalidity of such patents or proprietary rights.

Our research, development and commercialization activities may in the future be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. There is a substantial amount of litigation and other patent challenges, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology industry, including patent infringement lawsuits, interferences, oppositions and *inter partes* review proceedings before the USPTO, and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing products. As the biotechnology industry expands and more patents are issued, the risk increases that our products may be subject to claims of infringement of the patent rights of third parties. Numerous significant intellectual property issues have been litigated, are being litigated and will likely continue to be litigated, between existing and new participants in our existing and targeted markets, and one or more third parties may assert that our products or services infringe their intellectual property rights as part of a business strategy to impede our successful entry into or growth in those markets.

There can be no assurance that we will prevail in any suit initiated against us by third parties, successfully settle or otherwise resolve patent infringement claims. Third parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products or services, and could result in the award of substantial damages against us, including treble damages, attorneys' fees, costs and expenses if we are found to have willfully infringed. In the event of a successful claim of infringement against us, we may be required to pay damages and ongoing royalties, and obtain one or more licenses from third parties, or be prohibited from selling certain products or services. We may not be able to obtain these licenses on acceptable or commercially reasonable terms, if at all, or these licenses may be non-exclusive, which could result in our competitors gaining access to the same intellectual property. In addition, we could encounter delays and incur significant costs, in product or service introductions while we attempt to develop alternative products or services, or redesign our products or services, to avoid infringing third party patents or proprietary rights. Defense of any lawsuit or failure to obtain any of these licenses or to develop a workaround could prevent us from commercializing products or services, and the prohibition of sale or the threat of the prohibition of sale of any of our products or services could materially affect our business and our ability to gain market acceptance for our products or services.

In addition, our agreements with some of our customers, suppliers or other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in infringement claims, including the types of claims described above. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, financial condition, results of operations, and prospects.

Our use of open source software could compromise our ability to offer our services and subject us to possible litigation.

We use open source software in connection with our products and services. Companies that incorporate open source software into their products have, from time to time, faced claims challenging their use of open source software and compliance with open source license terms. As a result, we could be subject to lawsuits and other allegations by parties claiming ownership of what we believe to be open source software or claiming noncompliance with open source licensing terms. Some open source software licenses require users who distribute software containing open source software to publicly disclose all or part of the source code to the licensee's software that incorporates, links or uses such open source software, and make available to third parties for no cost, any derivative works of the open source code created by the licensee, which could include the licensee's own valuable proprietary

code. While we monitor our use of open source software and try to ensure that none is used in a manner that would require us to disclose our proprietary source code or that would otherwise breach the terms of an open source agreement, such use could inadvertently occur, or could be claimed to have occurred, in part because open source license terms can be ambiguous. Legal precedent in this area is not well established and any actual or claimed requirement to disclose our proprietary source code or pay damages for breach of contract could harm our business and could help third parties, including our competitors, develop products and services that are similar to or better than ours. Any of the foregoing could harm our business, financial condition, results of operations, and prospects.

General risks related to our business

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

We differentiate ourselves from our competition through our commitment to an exceptional customer experience. Accordingly, high quality customer service is important for the growth of our business and any failure to maintain such standards of customer service, or a related market perception, could affect our ability to sell products to existing and prospective customers. The number of our customers has grown significantly and such growth, as well as any future growth, will put additional pressure on our customer service organization. We may be unable to hire qualified staff quickly enough or to the extent necessary to accommodate increases in demand. Providing an exceptional customer experience requires significant time and resources from our customer service team. Therefore, failure to scale our customer service organization adequately may adversely impact our business results and financial condition.

Customers utilize our service teams and online content for help with a variety of topics, including how to use our products efficiently, how to integrate our products into existing workflows, and how to resolve technical, analysis, and operational issues if and when they arise. While we have developed significant resources for remote training, including an extensive library of online videos, we may need to rely more on these resources for future customer training, or we may experience increased expenses to enhance our online and remote solutions. If our customers do not adopt these resources, we may be required to increase the staffing of our customer service team, which would increase our costs. Also, as our business scales, we may need to engage third party customer service providers, which could increase our costs and negatively impact the quality of the customer experience if such third parties are unable to provide service levels equivalent to ours.

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

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

The marketing, sale and use of our products could lead to the filing of product liability claims were someone to allege that our products identified inaccurate or incomplete information regarding the cells analyzed or otherwise failed to perform as designed. We may also be subject to liability for errors in, a misunderstanding of or inappropriate reliance upon, the information we provide in the ordinary course of our business activities. A product liability claim could result in substantial damages and be costly and time-consuming for us to defend. We maintain product liability insurance, but this insurance may not fully protect us from the financial impact of defending against product liability claims. Any product liability claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. Additionally, any product liability lawsuit could damage our reputation, or cause current customers to terminate existing agreements and potential clinical partners to seek other partners, any of which could impact our business, financial condition, results of operations, and prospects.

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

We provide a one-year assurance-type warranty on our products and consumables. Existing and future warranties place us at the risk of incurring future repair and/or replacement costs. At the time

revenue is recognized, we establish an accrual for estimated warranty expenses based on historical data and trends. We exercise judgment in estimating the expected product warranty costs, using data such as the actual and projected product failure rates, estimated repair costs, freight, material, labor and overhead costs. While we believe that historical experience provides a reliable basis for estimating such warranty costs, unforeseen quality issues or component failure rates could result in future costs in excess of such estimates, or alternatively, improved quality and reliability in our products and consumables could result in actual expenses that are below those currently estimated. As of September 30, 2020, we had accrued expenses of \$1.2 million relating to product warranty accruals. Substantial amounts of warranty claims could have a material adverse effect on our business, financial condition, and results of operations.

Our business has inherent operational risks that cannot be adequately covered by insurance or indemnity.

We may face unanticipated risks of legal liability for damages caused by the actual or alleged failure of our products. Our products may be deployed in response to an emergency or terrorist attack, which may increase our exposure to third party claims. While we have attempted to secure business liability insurance coverage at appropriate cost, it is impossible to insure against all risks inherent in our industry, nor can we assure you that our insurers will pay a particular claim, or that we will be able to maintain coverage at reasonable rates in the future. Our insurance policies also contain deductibles, limitations and exclusions, which increase our costs in the event of a claim. Substantial claims resulting from an accident in excess of or not otherwise covered by indemnity or insurance could harm our financial condition and operating results.

We may be subject to governmental export controls that could impair our ability to compete in international markets.

We are subject to governmental export controls that could impair our ability to compete in international markets.

Our products are or may be subject to U.S. export controls, including the International Traffic in Arms Regulations, or ITAR, the Export Administration Regulations, or EAR, the Office of Foreign Assets Control, or OFAC, and other similar laws and regulations of our products and associated technology. Obtaining export licenses can be a costly and time-consuming process, often three to six months in duration. In addition, in some cases, a license might not be granted for shipment to a particular customer in a particular country. Further, ascertaining the proper export classifications for our products is time-consuming and may lead to unpredictable results. A product's export classification may be very broad with export licenses required for only a small number of countries or very restrictive with licenses required for many countries. It is also possible that a competitor may obtain a less restrictive classification than we do for a competitive product, giving them a significant competitive advantage in international markets. Changes in our products or changes in export regulations may require reclassification and create delays in the introduction and sale of our products in international markets, prevent our customers with international operations from deploying our products throughout their global systems or, in some cases, constrain in some way the export of our products to additional countries. Any change in export regulations or related legislation, shift in approach to the enforcement or scope of existing regulations or change in the countries, persons or technologies targeted by these regulations could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers with international operations.

We may also be required to obtain licenses from the U.S. government before we can work with foreign entities on the development of our products.

Export control laws may also inhibit the free interchange of technical discussions among our employees. Absent license authorization from the appropriate agency, some technical information related to our products and technologies cannot be discussed with or otherwise disclosed to our foreign national employees, or with our foreign distributors. Export licensing requirements may delay product development and other engineering activities.

Violations of export control requirements are subject to criminal, civil and administrative penalties. Export control agencies are authorized to impose monetary penalties or even to suspend export

privileges. While such actions have not been taken against our company to date, such risks exist in this highly regulated field, and we cannot entirely eliminate the possibility that such agency action may occur in the future.

We could be adversely affected by violations of the Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, and the anti-bribery and anti-corruption laws of the United States or other countries.

We are subject to the FCPA, which among other things prohibits companies and their intermediaries from making payments in violation of law to non-U.S. government officials for the purpose of obtaining or retaining business or securing any other improper advantage. We have engaged independent distributors in the past and currently use independent distributors to sell our products outside of the United States. Our reliance on independent distributors to sell our products internationally demands a high degree of vigilance in maintaining our policy against participation in corrupt activity, because these distributors could be deemed to be our agents and we could be held responsible for their actions. Other U.S. companies in our markets have faced criminal penalties under the FCPA for allowing their agents to deviate from appropriate practices in doing business with these individuals. We are also subject to similar anti-bribery laws in the jurisdictions in which we operate, including the United Kingdom's Bribery Act of 2010, which also prohibits commercial bribery and makes it a crime for companies to fail to prevent bribery, and the People's Republic of China anti-bribery laws, including the PRC Anti-Unfair Competition Law amended in 2017 and the PRC Criminal Law amended in 2017. These laws are complex and far-reaching in nature, and, as a result, we cannot assure you that we would not be required in the future to alter one or more of our practices to be in compliance with these laws or any changes in these laws or the interpretation thereof. Any violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction, involve significant costs and expenses, including legal fees, and could result in a material adverse effect on our business, financial condition, results of operations, and prospects. We could also suffer severe penalties, including criminal and civil penalties, disgorgement, and other remedial measures.

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

We are exposed to the risk of fraud or other misconduct by our employees, consultants, distributors, and commercial partners. Misconduct by these parties could include intentional failures to comply with the applicable laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, and other business arrangements. Such misconduct could result in legal or regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and any other precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant civil, criminal and administrative penalties, which could have a significant impact on our business. Whether or not we are successful in defending against such actions or investigations, we could incur substantial costs, including legal fees, and divert the attention of management in defending ourselves against any of these claims or investigations.

Our business is subject to environmental regulation and regulations relating to the protection of health and safety matters that could result in compliance costs. Any violation or liability under environmental laws or health and safety regulations could harm our business.

We are subject to environmental and safety laws and regulations governing the use, storage and disposal of hazardous substances or wastes and imposing liability for the cleanup of contamination from these substances. We handle hazardous substances in our manufacturing processes and in the compilation of our chemical library, and we could be liable for any improper use, storage, or disposal of such substances. We cannot completely eliminate the risk of contamination or injury from hazardous substances or wastes, and, in the event of such an incident, we could be held liable for any damages that result. In addition, we may be required to incur significant additional costs to comply with environmental laws and regulations in the future.

The Occupational Safety and Health Act of 1970, or OSHA, establishes certain employer responsibilities, including maintenance of a workplace free of recognized hazards likely to cause death or serious injury, compliance with standards promulgated by the Occupational Safety and Health Administration and various record keeping, disclosure and procedural requirements. Various OSHA standards may apply to our operations. We have incurred, and will continue to incur, capital and operating expenditures and other costs in the ordinary course of our business in complying with OSHA and other state and local laws and regulations.

The failure to comply with these regulations could result in fines by government authorities and payment of damages to private litigants, which could harm our business.

If we fail to maintain effective internal control over financial reporting and effective disclosure controls and procedures, we may not be able to accurately report our financial results in a timely manner or prevent fraud, which may adversely affect investor confidence in our company.

We are not currently required to comply with the rules of the SEC implementing Section 404 of the Sarbanes-Oxley Act and, therefore, we are not required to make a formal assessment of the effectiveness of our internal control over financial reporting for that purpose. Upon becoming a public company, we will be required to comply with the SEC's rules implementing Sections 302 and 404 of the Sarbanes-Oxley Act, which require management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of controls over financial reporting. Although we will be required to disclose changes made in our internal controls and procedures on a quarterly basis, we are not required to make our first annual assessment of our internal control over financial reporting pursuant to Section 404 until the year following our first annual report required to be filed with the SEC. As an emerging growth company, our independent registered public accounting firm will not be required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 until the later of the year following our first annual report required to be filed with the SEC or the date we are no longer an emerging growth company. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating.

To comply with the requirements of being a public company, we may need to undertake actions, such as implementing new internal controls and procedures and hiring additional accounting or internal audit staff. Testing and maintaining internal control can divert our management's attention from other matters that are important to the operation of our business. In addition, when evaluating our internal control over financial reporting, we may identify material weaknesses that we may not be able to remediate in time to meet the applicable deadline imposed upon us for compliance with the requirements of Section 404. If we identify any material weaknesses in our internal controls over financial reporting or we are unable to comply with the requirements of Section 404 in a timely manner or 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 once we are no longer an emerging growth company, investors may lose confidence in the accuracy and completeness of our financial reports. As a result, the market price of our common stock could be materially adversely affected.

We may need additional capital in the future, which may not be available to us, and if it is available, may dilute your ownership of our common stock and have a material adverse effect on our business, operating results and financial condition.

We may need to raise additional funds in the future, through public or private debt or equity financings, if we are presented with unforeseen circumstances or opportunities in order to, among other things:

- develop or enhance our products;
- support additional capital expenditures;
- respond to competitive pressures;
- fund operating losses in future periods; or
- take advantage of acquisition or expansion opportunities.

Any required additional financing may not be available on terms acceptable to us, or at all. A failure to obtain additional funding could prevent us from making expenditures that may be required to grow or maintain our operations.

If we raise additional funds by issuing equity securities, you may experience significant dilution of your ownership interest, and the newly-issued securities may have rights senior to those of the holders of our common stock. If we raise additional funds by obtaining loans from third parties, the terms of those financing arrangements may include negative covenants or other restrictions on our business that could impair our operational flexibility and would also require us to fund additional interest expense, which could harm our profitability. Holders of debt would also have rights, preferences or privileges senior to those of holders of our common stock.

We may engage in future acquisitions that could disrupt our business, cause dilution to our stockholders and harm our financial condition and operating results.

In the future, we may acquire companies, assets or technologies in an effort to complement our existing offerings or enhance our market position. We have not made any acquisitions to date and we currently have no plans, proposals or arrangements with respect to any acquisition. We may not be able to find suitable acquisition candidates and we may not be able to complete acquisitions on favorable terms, if at all. Any future acquisitions we make could subject us to a number of risks, including:

- the purchase price we pay could significantly deplete our cash reserves, impair our future operating flexibility or result in dilution to our existing stockholders;
- we may find that the acquired company, assets or technology does not further improve our financial and strategic position as planned;
- we may find that we overpaid for the company, asset or technology, or that the economic conditions underlying our acquisition have changed;
- we may have difficulty integrating the operations and personnel of the acquired company;
- we may have difficulty retaining the employees with the technical skills needed to enhance and provide services with respect to the acquired assets or technologies;
- the acquisition may be viewed negatively by customers, financial markets, or investors;
- we may have difficulty incorporating the acquired technologies or products with our existing products;
- we may encounter difficulty entering and competing in new product or geographic markets;
- we may encounter a competitive response, including price competition or intellectual property litigation;
- we may have product liability, customer liability or intellectual property liability associated with the sale of the acquired company's products;
- we may be subject to litigation by terminated employees or third parties;
- we may incur debt and restructuring charges;
- we may acquire goodwill and other intangible assets that are subject to impairment tests, which could result in future impairment charges;
- our ongoing business and management's attention may be disrupted or diverted by transition or integration issues and the complexity of managing geographically or culturally diverse enterprises; and
- our due diligence process may fail to identify significant existing issues with the target company's product quality, product architecture, financial disclosures, accounting practices, internal controls, legal contingencies, intellectual property and other matters.

Any acquisitions of businesses, technologies, products or services may not generate sufficient revenue to offset the associated costs of the acquisitions or may result in other adverse effects, which could have a material adverse effect on our business, operating results, and financial condition.

In addition, negotiations for acquisitions or investments that are not ultimately consummated could result in significant diversion of management time, as well as substantial out-of-pocket costs, any of which could have a material adverse effect on our business, operating results and financial condition.

We may face exposure to foreign currency exchange rate fluctuation.

Our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates, particularly changes in the Euro, the GBP and the Chinese Yuan. We expect our non-U.S. operations to continue to grow in the near term and we are continually monitoring our foreign currency exposure to determine if we should consider a hedging program. Today, our non-U.S. contracts are denominated in either U.S. dollars or local currency, while our non-U.S. operating expenses are often denominated in local currencies. Additionally, as we expand our non-U.S. operations, a larger portion of our operating expenses may be denominated in local currencies. Therefore, increases in the value of the U.S. dollar and decreases in the value of foreign currencies could result in the dollar equivalent of our revenue being lower.

We generally recognize revenue from extended warranty and service contracts over the contract term, and changes in sales of such contracts may not be immediately reflected in our operating results.

We offer our customers the option to purchase extended warranty and service for regular system maintenance and system optimization on a fixed fee basis. We generally recognize revenue from our extended warranty and service plans ratably over the contract terms, which typically range from one additional year to four additional years and could in some cases be subject to an early termination right. A portion of the revenue we report in each quarter is derived from the recognition of deferred revenue relating to extended warranty and service contracts entered into during previous quarters. Consequently, a decline in new or renewed extended warranty and service contracts by our customers in any one quarter may not be immediately reflected in our revenue for that quarter. Such a decline, however, will negatively affect our revenue in future quarters. Accordingly, the effect of significant downturns in sales and market acceptance of our services and potential changes in our rate of renewals may not be fully reflected in our operating results until future periods.

Our ability to use our net operating losses and certain other tax attributes may be limited.

Under legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act, as modified by the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, unused federal net operating losses, or NOLs, generated in tax years beginning after December 31, 2017, will not expire and may be carried forward indefinitely, and generally may not be carried back to prior taxable years, except that under the CARES Act, net operating losses generated in 2018, 2019 and 2020 may be carried back five taxable years. Additionally, the deductibility of such federal NOLs in tax years beginning after December 31, 2020, is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to the Tax Cuts and Jobs Act, or the CARES Act. In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change," generally defined as a cumulative change of more than 50 percentage points (by value) in its equity ownership by certain stockholders over a three-year period, the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes may be limited. We may experience ownership changes in the future as a result of shifts in our stock ownership (some of which may be outside our control), including in connection with this offering. As a result, if we earn net taxable income, our ability to use our pre-change NOL carryforwards to offset such taxable income may be subject to limitations. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. For example, California recently imposed limits on the usability of California state NOLs to offset taxable income in tax years beginning after 2019 and before 2023. As a result, even if we attain profitability, we may be unable to use a material portion of our NOL carryforwards and other tax attributes, which could adversely affect our future cash flows.

Changes in tax laws or regulations that are applied adversely to us or our customers may have a material adverse effect on our business, cash flow, financial condition or results of operations.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could affect the tax treatment of our domestic and foreign earnings. Any new taxes could adversely affect our domestic and international business operations and our business and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, the Tax Cuts and Jobs Act significantly revised the Code. Future guidance from the Internal Revenue Service and other tax

authorities with respect to the Tax Cuts and Jobs Act may affect us, and certain aspects of the Tax Cuts and Jobs Act could be repealed or modified in future legislation. For example, the CARES Act modified certain provisions of the Tax Cuts and Jobs Act. In addition, it is uncertain if and to what extent various states will conform to the Tax Cuts and Jobs Act, the CARES Act, or any newly enacted federal tax legislation. Changes in corporate tax rates, the realization of net deferred tax assets relating to our operations, the taxation of foreign earnings, and the deductibility of expenses under the Tax Cuts and Jobs Act or future tax reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges, and could increase our future U.S. tax expense.

We are subject to risks related to taxation in the United States.

Significant judgments based on interpretations of existing tax laws or regulations are required in determining our provision for income taxes. Our effective income tax rate could be adversely affected by various factors, including, but not limited to, changes in the mix of earnings in tax jurisdictions with different statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in existing tax policies, laws, regulations or rates, changes in the level of non-deductible expenses (including share-based compensation), changes in the location of our operations, changes in our future levels of research and development spending, mergers and acquisitions or the result of examinations by various tax authorities. Although we believe our tax estimates are reasonable, if the United States Internal Revenue Service or other taxing authority disagrees with the positions taken on our tax returns, we could have additional tax liability, including interest and penalties. If material, payment of such additional amounts upon final adjudication of any disputes could have a material impact on our results of operations and financial position.

Future interpretations of existing accounting standards could adversely affect our operating results.

Generally accepted accounting principles in the United States, or GAAP, are subject to interpretation by the Financial Accounting Standards Board, or FASB, the American Institute of Certified Public Accountants, or AICPA, the SEC and various other bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results, and they could affect the reporting of transactions completed before the announcement of a change.

Risks related to this offering and ownership of our common stock

An active trading market for our common stock may not develop, and you may not be able to sell your common stock at or above the initial public offering price.

Prior to this offering, there has been no public market for shares of our common stock. Although our common stock has been approved to be listed on the Nasdaq Global Market, an active trading market for shares of our common stock may never develop or be sustained following this offering. If no trading market develops, securities analysts may not initiate or maintain research coverage of our company, which could further depress the market for our common stock. As a result, you may not be able to sell your shares of our common stock at or above the initial public offering price or at all.

If securities or industry analysts do not publish research or reports about our business or if they issue unfavorable commentary or downgrade our common stock, the price of our common stock could decline.

The trading market for our common stock will rely in part on the research and reports that equity research analysts publish about us and our business. The price of our stock could decline if one or more equity analysts downgrade our stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business.

The trading market for our common stock will depend in part on any research reports that securities or industry analysts publish about us or our business. We do not control these analysts. After this offering, if no securities or industry analysts initiate coverage of our company, the trading price for our stock may be negatively affected. In the event securities or industry analysts cover our company and one or more of these analysts downgrade our stock or publish unfavorable reports about our business, our stock price would likely decline. In addition, if any securities or industry analysts cease coverage of our

company or fail to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price to decline.

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

Our common stock has no prior trading history. The initial public offering price for our common stock was determined through negotiations with the underwriters. The trading prices of the securities of newly-public companies have often been highly volatile and may vary significantly from the initial public offering price. In addition, the trading price of our common stock will be susceptible to fluctuations in the market due to numerous factors, many of which may be beyond our control, including:

- actual or anticipated fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;
- fluctuations in our revenue as a result of our revenue recognition policy, even during periods of significant sales activity;
- the financial guidance that we may provide to the public, any changes in such guidance, or our failure to meet such guidance;
- changes in financial estimates by securities analysts, our failure to meet such estimates, or failure of analysts to initiate or maintain coverage of our stock;
- the public's response to our press releases or other public announcements by us, including our filings with the SEC;
- announcements by us or our competitors of significant technical innovations, products, contracts, acquisitions, strategic partnerships, joint ventures, or capital commitments;
- failure of any of our products to achieve or maintain market acceptance;
- introduction of technologies or product enhancements that reduce the need for our products;
- changes in our capital structure, such as future issuances of securities or the incurrence of debt;
- regulatory developments in the United States, foreign countries or both;
- litigation involving our company, our general industry or both;
- additions or departures of key personnel;
- changes in market valuations of similar companies in reaction to industry events, even if these events do not directly affect us;
- investors' general perception of us;
- changes in general economic, industry and market conditions including those resulting from political unrest, war, incidents of terrorism, or responses to such events;
- the development and sustainability of an active trading market for our common stock; and
- future sales of our common stock by our officers or directors.

In addition, if the market for technology stocks or the stock market in general experiences a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, financial condition or results of operations. If any of the foregoing occurs, it could cause our stock price to fall and may expose us to class action lawsuits that, even if unsuccessful, could be costly to defend and divert management's attention and resources.

Our actual operating results may differ significantly from any operating guidance we may provide.

From time to time, we may release guidance in our quarterly or annual earnings conference calls, quarterly or annual earnings releases, or otherwise, regarding our future performance that represents our management's estimates as of the date of release. This guidance, which will include forward-looking statements, will be based on projections prepared by our management. These projections may not be prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, or AICPA, and neither our independent registered public accounting firm nor any other independent expert or outside party compiles or examines the projections. Accordingly, no such person will express any opinion or any other form of assurance with respect to the projections.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. The principal reason that we may release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such third parties.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results may vary from our guidance and the variations may be material. Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in this "Risk Factors" section of this prospectus could result in actual operating results being different from our guidance, and the differences may be adverse and material.

Our management will have broad discretion as to the use of the net proceeds from this offering and might not apply the proceeds in ways that increase the value of your investment or in ways with which you agree.

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 "Use of Proceeds" section of this prospectus. Accordingly, you will have to rely upon the judgment of our management with respect to the use of the proceeds, with only limited information concerning management's specific intentions. While it is the intention of our management to use the net proceeds from the offering in the best interests of the company, our management might not apply the net proceeds from this offering in ways that increase the value of your investment or in ways with which you agree. In addition, the market price of our common stock may fall if the market does not view our use of the net proceeds from this offering favorably. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Insiders will continue to own a significant portion of our outstanding common stock following this offering and will therefore have substantial control over us and will be able to influence corporate matters.

Upon completion of this offering, our executive officers, directors and their affiliates will beneficially own, in the aggregate, approximately 49.0% of our outstanding common stock. As a result, these stockholders, if they act together, will be able to influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, such as a merger or other sale of our company or its assets. This concentration of ownership could limit your ability to influence corporate matters and may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

Raising additional capital may cause dilution to our existing stockholders or restrict our operations.

We anticipate that we will seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements in the future to fund our operations. We, and indirectly, our stockholders, will bear the cost of issuing and servicing such securities. Because our decision to issue debt or equity securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing, or nature of any future offerings. Our decision to issue debt or equity securities will also depend on contractual, legal, and other restrictions that may limit our ability to raise additional capital. For example, the terms of our Loan and Security Agreement prohibit, subject to certain exceptions, our ability to incur additional indebtedness. To the extent that we raise additional capital through the sale of equity or debt securities, your ownership interest will be diluted and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of indebtedness would result in increased fixed payment obligations and could involve restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license

intellectual property rights, and other operating restrictions that could adversely impact our ability to conduct our business. Certain of the foregoing transactions may require us to obtain stockholder approval, which we may not be able to obtain.

A significant portion of our total outstanding shares may be sold into the public market in the near future, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time after the expiration of the lock-up agreements described in the “Underwriters” section of this prospectus. These sales, or the market perception that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. After this offering, we will have 26,200,762 shares of common stock outstanding based on the number of shares outstanding as of October 31, 2020. This includes the 6,500,000 shares that we are selling in this offering, which may be resold in the public market immediately. The remaining 19,700,762 shares, or 75.2% of our outstanding shares after this offering, are currently restricted as a result of securities laws or lock-up agreements but will be able to be sold, subject to any applicable volume limitations under federal securities laws, in the near future as set forth below.

<u>Number of shares and % of total outstanding</u>	<u>?? Date available for sale into public market</u>	<u>?</u>
76,000 shares, or 0.3%	??90 days after the date of this prospectus	?
19,624,762 shares, or 74.9%	??180 days after the date of this prospectus, subject to ? extension in specified instances, due to lock-up agreements between the holders of these shares and the underwriters. However, Cowen and Company, LLC and SVB Leerink LLC can waive the provisions of these lock-up agreements and allow these stockholders to sell their shares at any time	?

In addition, as of October 31, 2020, there were 154,634 shares of common stock subject to outstanding warrants, based on warrants for preferred stock becoming warrants for common stock upon the closing of this offering, and 3,264,022 shares subject to outstanding options that will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements, the lock-up agreements and Rules 144 and 701 under the Securities Act of 1933. Moreover, after this offering, holders of an aggregate of 17,222,141 shares of our common stock as of October 31, 2020, will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register all shares of common stock that we may issue under our equity incentive plans, including 2,353,136 shares reserved for future issuance under our equity incentive plans. Once we register and issue these shares, they can be freely sold in the public market upon issuance, subject to the lock-up agreements.

As a new investor, you will experience immediate and substantial dilution as a result of this offering.

If you purchase common stock in this offering, you will incur immediate and substantial dilution of \$15.25 per share, representing the difference between the initial public offering price of \$20.00 per share and our pro forma as adjusted net tangible book value per share after the automatic conversion of all outstanding shares of our redeemable convertible preferred stock upon the closing of this offering. In addition, investors who purchase shares in this offering will contribute approximately 64.7% of the total amount of equity capital raised by us through the date of this offering, but such investors will only own approximately 24.8% of our outstanding shares. This dilution is due to the fact that our earlier investors paid substantially less than the initial public offering price when they purchased their shares of the company. Moreover, we issued options in the past to acquire common stock at prices significantly below the initial public offering price. As of October 31, 2020, there were 154,634 shares subject to outstanding warrants, based on warrants for preferred stock becoming warrants for common stock upon the closing of this offering, with a weighted average exercise price of \$7.92 per share and 3,264,022

shares subject to outstanding options with a weighted average exercise price of? \$1.72 per share. To the extent that these warrants or outstanding options are ultimately exercised, you will incur further dilution.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and we do not currently expect to pay any cash dividends for the foreseeable future. Our loan agreements with our lenders contain provisions prohibiting us from paying any dividends during the term of the agreements without our lenders' prior written consent. We intend to use our future earnings, if any, in the operation and expansion of our business. Accordingly, you are not likely to receive any dividends on your common stock for the foreseeable future, and your ability to achieve a return on your investment will, therefore, depend on appreciation in the price of our common stock.

We will incur significant increased costs to implement an effective system of internal controls and as a result of operating as a public company, and our management will be required to devote substantial time to public company compliance initiatives. If we are unable to absorb these increased costs or maintain management focus on development and sales of our product offerings and services, we may not be able to achieve our business plan.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and Nasdaq, impose a variety of corporate governance requirements on public companies. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these rules and regulations will make it more difficult and expensive for us to obtain director and officer liability insurance, and we will be required to incur substantial costs to maintain the same or similar coverage.

In addition, the Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, after we are no longer an "emerging growth company," we must perform system and process evaluation and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, or Section 404. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities, which would require additional financial and management resources.

The increased costs associated with operating as a public company may decrease our net income or increase our net loss and may require us to reduce costs in other areas of our business or increase the prices of our products or services. Additionally, if these requirements divert our management's attention from other business concerns, they could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We are an "emerging growth company" and the reduced disclosure requirements applicable to "emerging growth companies" may make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we may take advantage of certain exemptions and relief from various reporting requirements that are applicable to other public companies that are not "emerging growth companies." In particular, while we are an "emerging growth

company,” we will not be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act; we will be exempt from any rules that could be adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotations or a supplement to the auditor’s report on financial statements; we will be subject to reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and we will not be required to hold nonbinding advisory votes on executive compensation or stockholder approval of any golden parachute payments not previously approved.

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 not to “opt out” of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we will adopt the new or revised standard at the time private companies adopt the new or revised standard and will do so until such time that we either (i) irrevocably elect to “opt out” of such extended transition period or (ii) no longer qualify as an emerging growth company.

We may be an “emerging growth company” until the fiscal year-end following the fifth anniversary of the completion of this initial public offering, though we may cease to be an “emerging growth company” earlier under certain circumstances, including if: (i) we have more than \$1.07 billion in annual revenue in any fiscal year, (ii) the market value of our common stock that is held by non-affiliates exceeds \$700 million as of any June 30 or (iii) we issue more than \$1.0 billion of non-convertible debt over a three-year period.

The exact implications of the JOBS Act are subject to interpretation and guidance by the SEC and other regulatory agencies, and we cannot assure you that we will be able to take advantage of all of the benefits of the JOBS Act. In addition, investors may find our common stock less attractive to the extent we rely on the exemptions and relief granted by the JOBS Act. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may decline or become more volatile.

Provisions in our certificate of incorporation, our by-laws or Delaware law might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Provisions of our certificate of incorporation, our by-laws or Delaware law may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions:

- establish a classified board of directors so that not all members of our board are elected at one time;
- place limitations on the removal of directors;
- eliminate the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which has the effect of requiring all stockholder actions to be taken at a meeting of stockholders;
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings; and
- enable our board of directors to designate the terms of and issue new series of preferred stock without stockholder approval, which could be used to institute a rights plan, or a poison pill, that would work to dilute the stock ownership of a potential hostile acquirer, likely preventing acquisitions that have not been approved by our board of directors.

In addition, Section 203 of the Delaware General Corporation Law may discourage, delay or prevent a change in control of our company by prohibiting stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us during a specified period unless certain approvals are obtained.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

Our sixth amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for certain disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our 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 Court of Chancery of the State of Delaware will be the sole and exclusive forum for most legal actions involving actions brought against us by stockholders; provided that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Our amended and restated certificate of incorporation will also provide that the federal district courts of the United States will be the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act. We believe these provisions may benefit us by providing increased consistency in the application of Delaware law and federal securities laws by chancellors and judges, as applicable, particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. However, these provisions may have the effect of discouraging lawsuits against our directors and officers. The choice of forum provision requiring that the Court of Chancery of the State of Delaware be the exclusive forum for certain actions would not apply to suits brought to enforce any liability or duty created by the Exchange Act.

There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. If a court were to find these types of provisions to be inapplicable or unenforceable, and if a court were to find the exclusive forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could materially adversely affect our business.

Our fourth amended and restated bylaws designate specific courts in as the exclusive forum for certain litigation that may be initiated by the Company's stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our fourth amended and restated bylaws, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for state law claims for (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders; (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or our sixth amended and restated certificate of incorporation or fourth amended and restated bylaws; (4) any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws; or (5) any action asserting a claim governed by the internal affairs doctrine, or the Delaware Forum Provision. The Delaware Forum Provision will not apply to any causes of action arising under the Securities Act or the Exchange Act. Our amended and restated bylaws further provide that unless we consent in writing to the selection of an alternative forum, the United States District Court for the District of Massachusetts shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, or the Federal Forum Provision, as our headquarters are located in Boston, Massachusetts. In addition, our amended and restated bylaws provide that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock is deemed to have notice of and consented to the Delaware

Forum Provision and the Federal Forum Provision; provided, however, that stockholders cannot and will not be deemed to have waived our compliance with the U.S. federal securities laws and the rules and regulations thereunder.

The Delaware Forum Provision and the Federal Forum Provision in our bylaws may impose additional litigation costs on stockholders in pursuing any such claims. Additionally, these forum selection clauses may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage the filing of lawsuits against us and our directors, officers and employees, even though an action, if successful, might benefit our stockholders. In addition, while the Delaware Supreme Court ruled in March 2020 that federal forum selection provisions purporting to require claims under the Securities Act be brought in federal court are "facially valid" under Delaware law, there is uncertainty as to whether other courts will enforce our Federal Forum Provision. If the Federal Forum Provision is found to be unenforceable, we may incur additional costs associated with resolving such matters. The Federal Forum Provision may also impose additional litigation costs on stockholders who assert that the provision is not enforceable or invalid. The Court of Chancery of the State of Delaware and the United States District Court for the District of Massachusetts may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than to our stockholders.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that are based on management's beliefs and assumptions and on information currently available to management. Some of the statements in the section captioned "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business" and elsewhere in this prospectus contain forward-looking statements. In some cases, you can identify forward-looking statements by the following words: "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words.

These statements involve risks, uncertainties and other factors that may cause actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. Forward-looking statements 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;
- the implementation of our business model and strategic plans for our products, new applications, and technologies;
- our expectations regarding the rate and degree of market acceptance of our platform;
- our ability to hire and retain key personnel, including sales and marketing personnel, and to manage our future growth effectively;
- competitive companies and technologies and our industry;
- our ability to manage and grow our business by expanding our sales to existing customers or introducing our products and workflows to new customers;
- our ability to develop and commercialize new products and applications;
- our ability to establish and maintain intellectual property protection for our products and workflows or avoid or defend claims of infringement;
- the performance of third party distributors, suppliers and manufacturers;
- the potential effects of government regulation;
- the severity and impact of COVID-19 and actions to contain the outbreak or treat its impact;
- our ability to obtain additional financing in this or future offerings;
- the volatility of the trading price of our common stock;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- our expectations regarding use of proceeds from this offering; and
- our expectations about market trends.

In addition, you should refer to the "Risk Factors" section of this prospectus for a discussion of other important factors that may cause actual results to differ materially from those expressed or implied by the forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

INDUSTRY AND MARKET DATA

The market data and certain other statistical information used throughout this prospectus are based on independent industry publications, governmental publications, reports by market research firms or other independent sources that we believe to be reliable sources. Industry publications and third party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. We are responsible for all of the disclosure contained in this prospectus, and we believe these industry publications and third party research, surveys and studies are reliable. While we are not aware of any misstatements regarding any third party information presented in this prospectus, their estimates, in particular, as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties and are subject to change based on various factors, including those discussed under the section entitled “Risk Factors” and elsewhere in this prospectus. Some data are also based on our good faith estimates.

USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the shares of our common stock in this offering will be approximately \$118.2 million, or approximately \$136.3 million if the underwriters exercise their option to purchase additional shares in full, based upon the initial public offering price of? \$20.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We currently expect to use the net proceeds from this offering, together with our existing cash, for working capital and general corporate purposes, including: (1) approximately \$25.0 million to expand our commercial operations to grow and support the installed base of our products among life sciences research customers in the United States and internationally; and (2) approximately \$20.0 million to fund our research and development efforts to expand the applications of our current devices and to create enhanced products with our platform of technologies. We may also use a portion of the remaining net proceeds, if any, to acquire complementary businesses, products, services or technologies, including scientific expertise. However, we do not have agreements or commitments for any acquisitions at this time.

We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering. Due to uncertainties inherent in the development process, it is difficult to estimate the exact amounts of the net proceeds that will be used for any particular purpose. We may use our existing cash and the future payments, if any, generated from any future collaboration agreements to fund our operations, any of which may alter the amount of net proceeds used for a particular purpose. In addition, the amount, allocation and timing of our actual expenditures will depend upon numerous factors, for example, the results of our research and development efforts. Accordingly, we will have broad discretion in using these proceeds.

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

DIVIDEND POLICY

We have never declared or paid any cash dividends on our common stock or any other securities. We anticipate that we will retain all available funds and any future earnings, if any, for use in the operation of our business and do not anticipate paying cash dividends in the foreseeable future. Our ability to pay cash dividends is currently restricted by the terms of our loan and security agreement, dated August 29, 2019, with Signature Bank. In addition, the terms of any future debt instruments may also materially restrict our ability to pay dividends on our common stock. Payment of future cash dividends, if any, will be at the discretion of the board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the board of directors deems relevant.

CAPITALIZATION

The following table sets forth our cash and our capitalization as of September 30, 2020:

- on an actual basis;
- on a pro forma basis to give effect to (i) the conversion of all outstanding shares of redeemable convertible preferred stock of into an aggregate of 14,691,929 shares of common stock (ii) all outstanding warrants to purchase shares of redeemable convertible preferred stock becoming warrants to purchase shares of common stock and (iii) the filing and effectiveness of our restated articles of organization; and
- on a pro forma as adjusted basis to give further effect to our issuance and sale of 6,500,000 shares of our common stock in this offering at the initial public offering price of? \$20.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information below is illustrative only. You should read the information in this table together with our financial statements and the related notes included elsewhere in this prospectus and the “Selected Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of this prospectus.

	As of September 30, 2020							
	Actual	Pro Forma	Pro Forma As Adjusted					
	(in thousands, except share and per share data)							
Cash	\$ 19,712	\$ 19,712	\$137,912					
Long-term debt, net of discount, including current portion	\$ 14,817	\$ 14,817	\$ 14,817					
Commercial services agreement liability	375	375	375					
Preferred stock warrant liability—related party	754	—	—					
Redeemable convertible preferred stock, \$0.001 par value; 24,156,877 shares authorized, 23,905,267 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	71,091	—	—					
Stockholders' equity (deficit)								
Preferred stock, \$0.001 par value; no shares authorized, issued or outstanding, actual; 5,000,000 shares authorized and no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	—					
Common stock, \$0.001 par value; 36,976,630 shares authorized, 5,001,312 shares issued and outstanding at September 30, 2020, actual; 100,000,000 shares authorized, 19,693,241 shares issued and outstanding, pro forma; 100,000,000 shares authorized, 26,193,241 shares issued and outstanding, pro forma as adjusted	5	20	26					
Additional paid-in capital	2,629	74,459	192,653					
Accumulated deficit	(68,242)	(68,242)	(68,242)					
Total stockholders' equity (deficit)	(65,608)	6,237	124,437					
Total capitalization	\$ 21,429	\$ 21,429	\$139,629					

The table above does not include:

- 154,634 shares of common stock issuable upon the exercise of warrants to purchase shares of redeemable convertible preferred stock that will become warrants to purchase shares of common stock outstanding as of September 30, 2020, with a weighted average exercise price of? \$7.92 per share;

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- 3,271,703 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2020 under our 2012 Stock Option and Grant Plan, or the 2012 Plan, at a weighted average exercise price of? \$1.72 per share;
- 220,348 shares of common stock available for future issuance as of September 30, 2020 under our 2012 Plan, which became available for issuance under our 2020 Stock Option and Incentive Plan, or our 2020 Plan, upon effectiveness of the 2020 Plan;
- 1,843,771 shares of common stock that became available for future issuance under our 2020 Plan upon the effectiveness of the registration statement of which this prospectus forms a part; and
- 288,857 shares of our common stock that became available for future issuance under our Employee Stock Purchase Plan upon the effectiveness of the registration statement of which this prospectus forms a part.

DILUTION

If you invest in our 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 common stock and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

Our historical net tangible book value (deficit) as of September 30, 2020 was \$(66.5) million, or \$(13.29) per share of common stock. Our historical net tangible book value (deficit) is the amount of our total tangible assets less our total liabilities and the carrying value of our redeemable convertible preferred stock, which is not included within stockholders' equity (deficit). Historical net tangible book value (deficit) per share represents historical net tangible book value (deficit) divided by the 5,001,312 shares of common stock outstanding as of September 30, 2020.

Our pro forma net tangible book value as of September 30, 2020 was \$5.4 million, or \$0.27 per share of common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to (i) the conversion of all outstanding shares of redeemable convertible preferred stock of into an aggregate of 14,691,929 shares of common stock and (ii) all outstanding warrants to purchase shares of redeemable convertible preferred stock becoming warrants to purchase shares of common stock. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding as of September 30, 2020, after giving effect to the pro forma adjustments described above.

After giving further effect to our issuance and sale of 6,500,000 shares of our common stock in this offering at the initial public offering price of? \$20.00 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2020 would have been \$124.4 million, or \$4.75 per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of? \$4.48 to existing stockholders and immediate dilution of? \$15.25 in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Initial public offering price per share	????	?????	\$20.00??
Historical net tangible book value (deficit) per share as of September 30, 2020	???	\$(13.29)???	???
Increase per share attributable to the pro forma adjustments described above	???	13.56???	???
Pro forma net tangible book value per share as of September 30, 2020	???	0.27???	???
Increase in pro forma as adjusted net tangible book value per share attributable to new investors purchasing common stock in this offering	???	4.48???	???
Pro forma as adjusted net tangible book value per share after this offering	???	???	4.75??
Dilution per share to new investors purchasing common stock in this offering	???	???	\$15.25??

If the underwriters exercise their option to purchase additional shares in full, our pro forma as adjusted net tangible book value per share after this offering would be \$5.25, representing an immediate increase in pro forma as adjusted net tangible book value per share of? \$4.98 to existing stockholders and immediate dilution in pro forma as adjusted net tangible book value per share of? \$14.75 to new investors purchasing common stock in this offering, at the initial public offering price of? \$20.00 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, as of September 30, 2020, on the pro forma as adjusted basis described above, the total number of shares of common stock purchased from us on an as converted to common stock basis, the total consideration paid or to be paid and the average price per share paid or to be paid by existing stockholders and by new investors in this offering at the initial public offering

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price of \$20.00 per share before deducting underwriting discounts and commissions and estimated offering expenses payable by us. As the table shows, new investors purchasing common stock in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percentage	
Existing stockholders	19,693,241	75.2%	\$ 70,974,639	35.3%	\$ 3.60
Investors participating in this offering	6,500,000	24.8%	130,000,000	64.7%	\$20.00
Total	26,193,241	100.0%	200,974,639	100.0%	

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters' option to purchase additional shares is exercised in full, the number of shares of our common stock held by existing stockholders would be reduced to 72.5% 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 purchasing common stock in this offering would be increased to 27.5% of the total number of shares of our common stock outstanding after this offering.

The tables and discussion above are based on the number of shares of our common stock outstanding as of September 30, 2020, and exclude:

- 154,634 shares of common stock issuable upon the exercise of warrants to purchase shares of redeemable convertible preferred stock that will become warrants to purchase shares of common stock outstanding as of September 30, 2020, with a weighted average exercise price of \$7.92 per share;
- 3,271,703 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2020 under our 2012 Stock Option and Grant Plan, or the 2012 Plan, at a weighted average exercise price of \$1.72 per share;
- 220,348 shares of common stock available for future issuance as of September 30, 2020 under our 2012 Plan, which became available for issuance under our 2020 Stock Option and Incentive Plan, or our 2020 Plan, upon effectiveness of the 2020 Plan;
- 1,843,771 shares of common stock that became available for future issuance under our 2020 Plan upon the effectiveness of the registration statement of which this prospectus forms a part; and
- 288,857 shares of our common stock that became available for future issuance under our Employee Stock Purchase Plan upon the effectiveness of the registration statement of which this prospectus forms a part.

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

SELECTED FINANCIAL DATA

You should read the following selected financial data together with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes included elsewhere in this prospectus. The 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. The selected statements of operations data for the nine months ended September 30, 2019 and 2020, and the selected balance sheet data as of September 30, 2020 are derived from our unaudited interim financial statements and related notes included elsewhere in this prospectus. Our unaudited interim financial statements were prepared on the same basis as our audited financial statements and include, in the opinion of management, all adjustments, consisting of normal recurring adjustments, that are necessary for the fair presentation of the financial information set forth in those financial statements. Our historical results are not necessarily indicative of our future results.

	Year Ended December 31,		Nine Months Ended	
	2018	2019	2019	2020
	(in thousands, except per share data)			
Statement of Operations Data:				
Revenue:				
Product and service revenue	\$13,738	\$15,344	\$8,292	\$18,844
License and contract revenue	8,316	2,628	1,332	2,333
Total revenue	\$22,054	\$17,972	\$9,624	\$21,177
Cost of revenue:				
Product and service cost of revenue	9,002	9,098	5,397	8,121
License and contract cost of revenue	659	731	418	712
Total cost of revenue	9,661	9,829	5,815	8,833
Gross profit	\$12,393	\$8,143	\$3,809	\$12,344
Operating expenses:				
Research and development	9,528	8,993	7,020	5,953
Selling, general and administrative	9,304	11,294	8,624	8,320
Total operating expenses	\$18,832	\$20,287	\$15,644	\$14,273
Loss from operations	\$(6,439)	\$(12,144)	\$(11,835)	\$(1,929)
Other income (expense):				
Interest expense	\$(1,147)	\$(1,530)	\$(1,276)	\$(732)
Other income (expense), net	50	301	227	68
Total other expense, net	\$(1,097)	\$(1,229)	\$(1,049)	\$(664)
Net loss and comprehensive loss	\$(7,536)	\$(13,373)	\$(12,884)	\$(2,593)
Accretion of redeemable convertible preferred stock to redemption value	(76)	(109)	(79)	(74)
Net loss attributable to common stockholders(1)	\$(7,612)	\$(13,482)	\$(12,963)	\$(2,667)
Net loss per share attributable to common stockholders, basic and diluted(1)	\$(1.55)	\$(2.70)	\$(2.60)	\$(0.53)
Weighted average common shares outstanding, basic and diluted(1)	4,907	4,990	4,990	4,996
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)(1)	\$(0.71)			\$(0.13)
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)(1)		18,983		19,688

(1) See Note 13 to our audited financial statements included elsewhere in this prospectus for details on the calculation of basic and diluted net loss per share attributable to common stockholders and unaudited basic and diluted pro forma net loss per share attributable to common stockholders.

	As of December 31,		As of September 30,	
	2018	2019	2020	
	(in thousands)			
Balance Sheet Data:				
Cash and cash equivalents	\$ 7,072	\$ 17,913	\$ 19,712	
Working capital(1)	12,444	22,526	22,071	
Total assets	27,748	37,662	43,404	
Deferred revenue, including current portion	1,313	2,061	9,256	
Long-term debt, net of discount, including current portion	9,650	14,769	14,817	
Commercial services agreement liability—related party	750	750	375	
Preferred stock warrant liability	1,341	728	754	
Redeemable convertible preferred stock	53,089	71,017	71,091	
Total stockholders' deficit	(50,176)	(63,168)	(65,608)	

(1) We define working capital as current assets less 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 "Selected Financial Data" section of this prospectus and our financial statements and related notes appearing elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We have developed an innovative suite of purpose-built handheld and desktop mass spectrometry, or Mass Spec, devices for the point-of-need. Leveraging our proprietary platform technology, we make the extraordinary analytical power of Mass Spec available in devices that are significantly smaller and more accessible than conventional laboratory instruments. Our Mass Spec devices are used at the point-of-need to interrogate unknown and invisible materials and provide quick, actionable answers to directly address some of the most critical problems in life sciences research, bioprocessing, industrial biotech, forensics and adjacent markets.

We create simplified measurement devices that our customers can use as accurate tools where and when their work needs to be done, rather than overly complex and centralized analytical instrumentation. We believe the insights and answers our devices provide will accelerate workflows, reduce costs, and offer transformational opportunities for our end users.

Front-line workers rely upon our handheld devices to combat the opioid crisis and detect counterfeit pharmaceuticals and illicit materials in the air or on surfaces at levels 1,000 times below their lethal dose. Our desktop devices are accelerating development and production of biotherapeutics by identifying and quantifying extracellular species in bioprocessing critical to cell health and productivity. They sit alongside bioreactors and fermenters producing drug candidates, functional proteins, cell and gene therapies, and synthetic biology, or synbio, derived products. We believe the insights and answers our devices provide accelerate workflows, reduce costs, and offer transformational opportunities for our end users. The term "products" as used in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" refers to the MX908, Rebel and ZipChip Interface.

Since inception, we have focused substantially all of our resources on designing, developing and building our proprietary Mass Spec platform and associated technologies, supporting software improvements and data analysis, organizing and staffing our company, planning our business, raising capital, and providing general and administrative support for these operations. To date, we have funded our operations primarily with proceeds from sales of preferred stock and borrowings under loan agreements.

Since our inception, we have incurred significant operating losses. Our ability to generate revenue sufficient to achieve profitability will depend on the successful further development and commercialization of our products. We generated revenue of? \$22.1 million and \$18.0 million for the years ended December 31, 2018 and 2019, respectively, and incurred net losses of? \$7.5 million and \$13.4 million for those same years. We generated revenue of? \$21.2 million and incurred a net loss of? \$2.6 million for the nine months ended September 30, 2020. As of September 30, 2020, we had an accumulated deficit of? \$68.2 million. We expect to continue to incur net losses as we focus on growing commercial sales of our products in both the United States and international markets, including growing our sales teams, scaling our manufacturing operations, continuing research and development efforts to develop new products and further enhance our existing products. Further, following the closing of this offering, we expect to incur additional costs associated with operating as a public company. As a result, we will need substantial additional funding for expenses related to our operating activities, including selling, general and administrative expenses and research and development expenses.

Because of the numerous risks and uncertainties associated with product development and commercialization, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve or maintain profitability. Until such time, if ever, as we can generate substantial revenue sufficient to achieve profitability, we expect to finance our operations through a combination of equity offerings, debt financings and strategic alliances. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we are unable to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back or discontinue the further development and commercialization efforts of one or more of our products, or may be forced to reduce or terminate our operations.

We believe that the net proceeds from this offering, together with our existing cash, will enable us to fund our operating expenses, capital expenditure requirements and debt service payments into 2023. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. See *"Liquidity and Capital Resources."*

COVID-19

In December 2019, a novel strain of coronavirus, or COVID-19, emerged in Wuhan, Hubei Province, China. Less than four months later, in March 2020, the World Health Organization declared COVID-19 a pandemic, and the virus has now spread to many other countries and regions and every state within the United States, including Massachusetts, where our primary offices and manufacturing facility are located. The impact of this pandemic has been and will likely continue to be extensive in many aspects of society, which has resulted in and will likely continue to result in significant disruptions to the global economy, as well as businesses and capital markets around the world.

Impacts in 2020 to our business as a result of COVID-19 include disruptions to our manufacturing operations and supply chain caused by facility closures, reductions in operating hours, staggered shifts and other social distancing efforts, decreased productivity and unavailability of materials or components, limitations on our employees' and customers' ability to travel, and delays in product installations, trainings or shipments to and from affected countries and within the United States. In light of the uncertain and rapidly evolving situation relating to the spread of COVID-19, we have taken precautionary measures intended to minimize the risk of the virus to our employees, our customers and the communities in which we operate, including temporarily closing our offices to visitors and limiting the number of employees in our offices to those that are deemed essential for manufacturing and research purposes, as well as virtualizing, postponing or canceling customer, employee and industry events. In addition, we temporarily reduced the manufacturing and distribution of our products at our facility in Boston, Massachusetts.

Disruptions in our customers' operations have impacted and may continue to impact our business. For example, laboratory shutdowns and reduced capital spend have negatively impacted our ZipChip Interface and consumables sales, resulting in a decrease in ZipChip Interface sales from the nine months ended September 30, 2019 compared to the nine months ended September 30, 2020. While this decrease did not significantly impact our total revenue in the nine months ended September 30, 2020, the impact could be more significant in the future. We are focused on navigating the challenges presented by COVID-19, with a primary focus on preserving our liquidity and managing our cash flows by taking preemptive action to enhance our ability to meet our short-term liquidity needs. To address actual and expected reductions in revenue and cash flows, we reduced our discretionary spending and reduced payroll costs through temporary employee furloughs and salary reductions. Starting in July 2020, we reinstated our furloughed employees and pay rates.

We do not yet know the net impact that the COVID-19 pandemic may have on our business and cannot guarantee that it will not be materially negative. Although we continue to monitor the situation and may adjust our current policies as more information and public health guidance become available, the ongoing effects of the COVID-19 pandemic and/or the precautionary measures that we have adopted may create operational and other challenges, any of which could harm our business and results of operations. While we maintain an inventory of finished products and raw materials used in our products, a prolonged pandemic could lead to shortages in the raw materials necessary to manufacture our products. If we experience a prolonged disruption in our manufacturing, supply chains or commercial operations, or if demand for our products is significantly reduced as a result of the COVID-19

pandemic, we would expect to experience a material adverse impact on our business, financial condition, results of operations and prospects.

Historically, a significant portion of our field sales, customer training events and other application services have been conducted in person, and the rollout of our new products has historically been supported by our participation at industry conferences. Currently, as a result of the work and travel restrictions related to the COVID-19 pandemic, and the precautionary measures that we have adopted, substantially all of our field sales and professional services activities are being conducted remotely, which has resulted in a decrease in our travel expenditures. However, we expect our travel expenditures to increase in the future, which could negatively impact our financial condition and results of operations. As of the date of this prospectus, we do not yet know the extent of the negative impact of such restrictions and precautionary measures on our ability to attract new customers or retain and expand our relationships with existing customers over the near and long term.

Factors affecting our performance

We believe that our financial performance has been and in the foreseeable future will continue to be primarily driven by the following factors. While each of these factors presents significant opportunities for our business, they also pose important challenges that we must successfully address in order to sustain our growth and improve our results of operations. Our ability to successfully address the factors below is subject to various risks and uncertainties, including those described under the heading “*Risk Factors*.”

Device sales

Our financial performance has largely been driven by, and in the future will continue to be impacted by, the rate of sales of our handheld and desktop devices. Management focuses on device sales as an indicator of current business success and a leading indicator of likely future recurring revenue from consumables and services. We expect our device sales to continue to grow as we increase penetration in our existing markets and expand into, or offer new features and solutions that appeal to, new markets.

We plan to grow our device sales in the coming years through multiple strategies including expanding our sales efforts domestically and globally and continuing to enhance the underlying technology and applications for life sciences research related to our Rebel and ZipChip Interface. As part of this strategy and in an effort to increase the rate of sales of our devices, we increased our sales force by 60% from January 1, 2019 through September 30, 2020, with 16 commissionable sales representatives as of September 30, 2020. We regularly solicit feedback from our customers and focus our research and development efforts on enhancing our devices and enabling our customers to use additional applications that address their needs, which we believe in turn helps to drive additional sales of our devices and consumables.

Our sales process varies considerably depending upon the type of customer to whom we are selling. Historically, our handheld devices have been used by state, federal and foreign governments and governmental agencies. Our sales process with government customers is often long and involves multiple levels of approvals, testing and, in some cases, trials. Device orders from a government customer are typically large orders and can be impacted by the timing of their capital budgets. As a result, the revenue for our handheld devices can vary significantly from period-to-period and has been and may continue to be concentrated in a small number of customers in any given period.

Our desktop devices are typically used by the pharmaceutical, biotechnology and academia markets. Our sales cycles within these markets tend to vary based on the size of the customer and the number of devices they purchase. Our shortest sales cycles are typically for small laboratories and individual researchers where, in some cases, we receive purchase orders from these customers within three months. Our sales process with other institutions can be longer with most customers submitting purchase orders within six to twelve months. Given the variability of our sales cycle, we have in the past experienced, and likely will in the future experience, fluctuations in our desktop device sales on a period-to-period basis. Additionally, we have experienced and may continue to experience the impact of laboratory shutdowns related to COVID-19 on device and consumable sales to these markets.

Recurring revenue

We regularly assess trends relating to recurring revenue which includes consumables and services based on our product offerings, our customer base and our understanding of how our customers use our products. Consumables and service revenue was 12% and 15% of total product and service revenue for the years ended December 31, 2018 and 2019, respectively, and 18% and 11% of total product and service revenue for the nine months ended September 30, 2019 and 2020, respectively. Our recurring revenue as a percentage of total product and service revenue will vary based upon new device placements in the period. As our device installed base expands, recurring revenue on an absolute basis is expected to increase and over time and should be an increasingly important contributor to our revenue.

Revenue from the sales of consumables will vary by type of device. We expect that consumables and service revenue as a percentage of the original device price to be higher for our desktop devices (Rebel and ZipChip Interface) than for our handheld device (MX908). While we sell single-use swab samplers for MX908 to be used in liquid and solid materials analysis, there are a number of other applications that the MX908 can be used for that do not require consumables. Rebel and ZipChip Interface require consumables kits for all areas of operations. Currently, Rebel customers are consuming on average one 200-sample kit per month; however, Rebel is a new product and purchasing patterns related to our consumables kits are evolving. We expect that the number of kits sold per month will vary over the short term. In time, we expect Rebel consumables kits sales to become more consistent as our installed base grows and our customers establish usage patterns. At maximum potential capacity, with continuous operation, the Rebel can consume approximately one 200-sample kit per day.

Revenue mix and gross margin

Our revenue is derived from sales of our devices, consumables and services. There will be fluctuations in mix between devices and consumables from period-to-period. Over time, as our device installed base grows and we see adoption of Rebel, we expect consumables revenue to constitute a larger percentage of product and service revenue. However, the percentage will be subject to fluctuation based upon our handheld sales in a period. In addition, our selling price and, consequently, our margins, are higher for those devices and consumables that we sell directly to customers as compared to those that we sell through distributors. While we expect the mix of direct sales as compared to sales through distributors to remain relatively constant in the near term, we are currently evaluating increasing our direct sales capabilities in certain geographies.

Future device and consumable selling prices and gross margins may fluctuate due to a variety of factors, including the introduction by others of competing products and solutions. We aim to mitigate downward pressure on our average selling prices by increasing the value proposition offered by our devices and consumables, primarily by expanding the applications for our devices and increasing the quantity and quality of data that can be obtained using our consumables.

Product adoption

We monitor our customers' stage of adoption of our products to provide insight into the timing of future potential sales and to help us formulate financial projections. Typical stages of adoption include testing, trials, pilot and deployment as follows:

- Testing—a customer is actively engaged with internal or external testing of our products. This may include an onsite or virtual demonstration with a salesperson, a customer submitting samples for testing in one of our facilities or testing by a third party.
- Trials—a customer has committed to a trial of one of our products, which may include a defined period to assess functionality of the device in their operational environment (in the field or onsite within the customer's facility).
- Pilot—a customer commits to the purchase of an initial quantity of devices to deploy in their operational environment to assess a broader opportunity that may grow to tens or hundreds of devices.
- Deployment—a customer has completed testing, a trial, and/or a pilot and intends to roll out the technology across their enterprise (either at a site or throughout the entire organization).

Key Business Metrics

We regularly review the number of product placements and cumulative product placement as key metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections, and make strategic decisions. We believe that these metrics are representative of our current business; however, we anticipate these will change or may be substituted for additional or different metrics as our business grows.

During the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020, our product placements (units recognized as revenue) by device type were as follows:

	Year Ended December 31,					Nine Months Ended September 30,				
	2018		2019			2019		2020		
Product Placements:										
MX908	187		192			100		280		
Rebel	—		13			—		18		
ZipChip Interface	29		43			25		21		
Total placements	216		248			125		319		

The number of product placements vary considerably from period-to-period due to the type and size of our customers and concentrations among larger government customers as described above. We also have been impacted by laboratory shutdowns related to COVID-19. We expect continued fluctuations in our period-to-period number of product placements.

As of December 31, 2018 and 2019 and September 30, 2020, our cumulative product placements consisted of the following number of devices:

	As of December 31,					As of September 30,				
	2018		2019			2020				
Cumulative Product Placements:										
MX908	635		827			1,107				
Rebel	—		13			31				
ZipChip Interface	88		131			152				
Cumulative product placements	723		971			1,290				

Components of Our Results of Operations

Revenue

Product and Service Revenue

We generate product and service revenue from the sale of our devices and recurring revenue from the sale of consumables and services. Device sales accounted for 88% and 85% of our product and service revenue for the years ended December 31, 2018 and 2019, respectively. Consumables and service revenue accounted for 12% and 15% of our product and service revenue for the years ended December 31, 2018 and 2019, respectively. Device sales accounted for 82% and 89% of our product and service revenue for the nine months ended September 30, 2019 and 2020, respectively. Consumables and service revenue accounted for 18% and 11% of our product and service revenue for the nine months ended September 30, 2019 and 2020, respectively.

- Our current device offerings include:
- Handheld devices—MX908; and
 - Desktop devices—Rebel and ZipChip Interface.

We sell our devices directly to customers and through distributors. Each of our device sales drives various streams of recurring revenue comprised of consumable product sales and service revenue. Our consumables consist of:

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- MX908—accessories and swabs;
- Rebel—consumables kit with a microfluidic chip and standards; and
- ZipChip Interface—microfluidic chip, reagent and assay kits.

Rebel and ZipChip Interface consumables can only be used with our devices and there are no alternative after-market options that can be used as a substitute. Each chip is used for a defined number of samples (or runs). We recognize revenue from the sale of consumables as the consumable products are shipped.

We also offer our customers extended warranty and service plans. Our extended warranty and service plans are offered for periods beyond the standard one-year warranty that all of our customers receive. These extended warranty and service plans generally have fixed fees and terms ranging from one additional year to four additional years. We recognize revenue from the sale of extended warranty and service plans over the respective coverage period, which approximates the service effort provided by us.

We expect consumables and service revenue to increase in future periods as our installed base grows and we are able to generate recurring sales.

Licenses and contract revenue

License and contract agreements are arrangements whereby we provide engineering services for the development of our technology platform for specific programs or new and expanding applications of our technologies for future commercial endeavors. Our license and contract agreements are with the U.S. government and commercial entities (who may be contracting with the government). Contracts typically include compensation for labor effort and materials incurred related to the deliverables under the contract. Our license and contract revenue was primarily related to one customer during the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020.

During the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020, our revenue was comprised of revenue from the following sources:

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
	(in thousands)			
Product and service revenue:				
Device sales revenue	\$12,094	\$13,038	\$6,819	\$16,766
Consumables and service revenue	1,644	2,306	1,473	2,078
Total product and service revenue	13,738	15,344	8,292	18,844
License and contract revenue	8,316	2,628	1,332	2,333
Total revenue	\$22,054	\$17,972	\$9,624	\$21,177

Our product and service revenue is comprised of sales of our handheld and desktop devices and related consumables and service contracts to end-users in the government, pharmaceuticals/ biotechnology and academia markets as follows:

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
	(in thousands)			
Product and Service Revenue by Device:				
Handheld	\$11,582	\$10,518	\$6,141	\$14,491
Desktop	2,156	4,826	2,151	4,353
Total product and service revenue	\$13,738	\$15,344	\$8,292	\$18,844

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	Year Ended December 31,			Nine Months Ended September 30,		
	2018	2019		2019	2020	
	(in thousands)					
Product and Service Revenue by Market:						
Government	\$11,443	\$10,324		\$6,226	\$14,475	
Pharmaceutical/Biotechnology	2,266	4,474		1,717	4,100	
Academia	29	546		349	269	
Total product and service revenue	\$13,738	\$15,344		\$8,292	\$18,844	

We sell our products primarily in the United States; however, we are expanding our global sales efforts as we see traction in our products and assess market needs. The majority of our international sales are through a distribution channel.

Cost of Revenue, Gross Profit and Gross Margin

Product cost of revenue primarily consists of costs for raw material parts and associated freight, shipping and handling costs, royalties, contract manufacturer costs, salaries and other personnel costs, overhead and other direct costs related to those sales recognized as product revenue in the period. Cost of revenue for services primarily consists of salaries and other personnel costs, travel related to services provided, facility costs associated with training, warranties and other costs of servicing equipment on a return-to-factory basis and at customer sites. License and contract cost of revenue primarily consists of salaries and other personnel costs, materials, travel and other direct costs related to the revenue recognized in the period. The license and contract cost of revenue will vary based upon the type of contract, including whether it is primarily for development services or for both materials and development services.

We expect that our cost of revenue will increase or decrease to the extent that our revenue increases and decreases and depending on how many contracts we have ongoing at any given point in time and the stage of those contracts.

Gross profit is calculated as revenue less cost of revenue. Gross profit margin is gross profit expressed as a percentage of revenue. Our gross profit in future periods will depend on a variety of factors, including: market conditions that may impact our pricing, sales mix among devices, sales mix changes among consumables, excess and obsolete inventories, our cost structure for manufacturing operations relative to volume, and product warranty obligations. Our gross profit in future periods will vary based upon our channel mix and may decrease based upon our distribution channels and the potential to establish original equipment manufacturing channels for certain components of our technology platform which would have a lower gross margin.

We expect that our gross profit margin for product and service will increase over the long term as our sales and production volumes increase and our cost per unit decreases due to efficiencies of scale. We intend to use our design, engineering and manufacturing capabilities to further advance and improve the efficiency of our manufacturing, which we believe will reduce costs and increase our gross margin. We expect that our gross profit margin for license and contract will remain consistent for our contracts that are cost reimbursement contracts.

Operating Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, product development, hardware and software engineering and consultant services and other costs associated with our technology platform and products, which include:

- employee-related expenses, including salaries, related benefits and stock-based compensation expense for employees engaged in research and hardware and software development functions;
- the cost of maintaining and improving our product designs, including third-party development costs for new products and materials for prototypes;
- research materials and supplies; and

- facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities and insurance.

We believe that our continued investment in research and development is essential to our long-term competitive position and expect these expenses to increase in future periods.

Selling, general and administrative expenses

Selling, general and administrative expenses consist primarily of salaries and other personnel costs, and stock-based compensation for our sales and marketing, finance, legal, human resources and general management, as well as professional services, such as legal, audit and accounting services. We expect selling, general and administrative expenses to increase in future periods as the number of sales, sales application specialists and marketing and administrative personnel grows and we continue to introduce new products, invest in demonstration equipment, broaden our customer base and grow our business. We also anticipate that we will incur increased accounting, audit, legal, regulatory, compliance and director and officer insurance costs as well as investor and public relations expenses associated with operating as a public company.

Other Income (Expense)

Interest expense

Interest expense consists of interest expense associated with outstanding borrowings under our loan and security agreements and the amortization of deferred financing costs and debt discounts associated with such arrangements. In 2019, our interest expense also included our loss on debt extinguishment resulting from the early repayment of debt and end of term payment with proceeds from a new debt facility.

Other Income (Expense), Net

Other income (expense), net consists primarily of the change in fair value of our redeemable convertible preferred stock warrants. We classify warrants for the purchase of shares of our redeemable convertible preferred stock as a liability on our balance sheet as these warrants are freestanding financial instruments that may require us to transfer assets upon exercise. The warrant liability is initially recorded at fair value upon the date of issuance of each warrant and is subsequently remeasured to fair value at each reporting date. Changes in the fair value of the warrant liability are recognized as a component of other income (expense), net in the statement of operations and comprehensive loss. Changes in the fair value of the preferred stock warrant liability will continue to be recognized until the warrants are exercised, expire or qualify for equity classification. Other income (expense), net also consists of miscellaneous other income and expense unrelated to our core operations.

Provision for Income Taxes

We have not recorded any U.S. federal or state income tax benefits for the net operating losses we have incurred in each year or for the research and development tax credits we generated in the United States, as we believe, based upon the weight of available evidence, that it is more likely than not that all of our net operating loss carryforwards and tax credits will not be realized. As of December 31, 2019, we had U.S. federal and state net operating loss carryforwards of \$53.0 million and \$31.7 million, respectively, which may be available to offset future taxable income and begin to expire in 2032 and 2025, respectively. As of December 31, 2019, we also had U.S. federal and state research and development tax credit carryforwards of \$4.0 million and \$2.1 million, respectively, which may be available to offset future tax liabilities and begin to expire in 2032 and 2029, respectively. We have recorded a full valuation allowance against our net deferred tax assets at each balance sheet date.

Results of Operations

The results of operations presented below should be reviewed in conjunction with the financial statements and notes included elsewhere in the prospectus. The following tables set forth our results of operations for the periods presented:

Comparison of the Nine Months Ended September 30, 2019 and 2020

	Nine Months Ended September 30,		Change	
	2019	2020	Amount	%
	(in thousands)			
Revenue:				
Product and service revenue	\$ 8,292	\$18,844	\$10,552	127%
License and contract revenue	1,332	2,333	1,001	75%
Total revenue	9,624	21,177	11,553	120%
Cost of revenue:				
Product and service cost of revenue	5,397	8,121	2,724	50%
License and contract cost of revenue	418	712	294	70%
Total cost of revenue	5,815	8,833	3,018	52%
Gross profit	3,809	12,344	8,535	224%
Operating expenses:				
Research and development	7,020	5,953	(1,067)	(15)%
Selling, general and administrative	8,624	8,320	(304)	(3)%
Total operating expenses	15,644	14,273	(1,371)	(9)%
Loss from operations	(11,835)	(1,929)	9,906	84%
Other income (expense):				
Interest expense	(1,276)	(732)	544	(42)%
Other income (expense), net	227	68	(159)	(70)%
Total other expense, net	(1,049)	(664)	385	(37)%
Net loss	\$(12,884)	\$(2,593)	\$10,291	79%

Revenue, Cost of Revenue and Gross profit*Product and service*

	Nine Months Ended September 30,		Change	
	2019	2020	Amount	%
	(dollars in thousands)			
Product and service revenue	\$8,292	\$18,844	\$10,552	127%
Product and service cost of revenue	\$5,397	\$8,121	\$2,724	50%
Gross profit	\$2,895	\$10,723	\$7,828	270%
Gross profit margin	35%	57%	22%	

Our product and service revenue is comprised of revenue from sales of devices and related consumables and service as follows:

	Nine Months Ended September 30,		Change	
	2019	2020	Amount	%
	(dollars in thousands)			
Device sales revenue	\$6,819	\$16,766	\$9,947	146%
Consumables and service revenue	\$1,473	\$2,078	\$605	41%
Total product and service revenue	\$8,292	\$18,844	\$10,552	127%

Product and service revenue increased by \$10.6 million, or 127%, for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019. Device sales accounted for 82% and 89% of our product and service revenue for the nine months ended September 30, 2019 and 2020, respectively. Consumables and service revenue accounted for 18% and 11% of our product

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and service revenue for the nine months ended September 30, 2019 and 2020, respectively. The increase in device sales of \$9.9 million was primarily due to an increase of \$8.2 million in handheld device sales driven by 180 MX908s delivered to a government customer in the nine months ended September 30, 2020. We also had a \$1.7 million increase in device sales related to our desktop products primarily due to the sale of 18 Rebels in the nine months ended September 30, 2020, partially offset by a decrease in sales of our ZipChip Interfaces. We commercially launched Rebel in the fourth quarter of 2019. The decrease of four ZipChip Interfaces was primarily a result of laboratory shutdowns and reduced capital spend related to COVID-19. Consumables and service revenue increased by \$0.6 million primarily due to an increase in service revenue of \$0.4 million and an increase in Rebel kit sales.

Product and service cost of revenue increased by \$2.7 million, or 50%, for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019. The increase in product and service cost of revenue was primarily related to a \$3.4 million increase in materials and manufacturing costs related to volume increases, partially offset by a \$0.5 million decrease in salaries and related costs as a result of our temporary furloughs related to COVID-19.

Product and service gross profit increased by \$7.8 million, or 270%, and gross profit margin increased by 22 percentage points for the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to MX908 sales volume which leveraged our fixed costs related to our manufacturing facility.

License and contract

	Nine Months Ended September 30,		Change	
	2019	2020	Amount	%
	(dollars in thousands)			
License and contract revenue	\$1,332	\$2,333	\$1,001	75%
License and contract cost of revenue	418	712	294	70%
Gross profit	\$ 914	\$1,621	\$ 707	77%
Gross profit margin	69%	69%	0%	

License and contract revenue increased by \$1.0 million, or 75%, for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019. The increase was primarily related to activities under our subcontract agreement with a commercial entity that holds a U.S. government prime contract being greater in the nine months ended September 30, 2020 than the comparable period in 2019. The increase in revenue from this contract was partially offset by a reduction in license revenue from a contract that ended in 2019.

License and contract cost of revenue increased \$0.3 million, or 70% for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019 due to the increase in costs incurred under our subcontract. Gross profit margin remained consistent during the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019.

Operating Expenses

Research and development

	Nine Months Ended September 30,		Change	
	2019	2020	Amount	%
	(dollars in thousands)			
Research and development expenses	\$7,020	\$5,953	\$(1,067)	(15)%
Percentage of total revenue	73%	28%		

Our research and development expenses were \$6.0 million for the nine months ended September 30, 2020, a decrease of \$1.1 million from research and development expenses of \$7.0 million for the nine months ended September 30, 2019. The decrease was due primarily to a \$0.4 million decrease in materials spend and consulting costs primarily associated with the development and testing of our Rebel as we commercially launched the Rebel in the fourth quarter of 2019, a \$0.2 million decrease in

salary and related costs mainly as a result of our temporary furloughs and salary reductions related to COVID-19 and a \$0.1 million decrease in travel expenses related to COVID-19.

Selling, general and administrative expenses

	Nine Months Ended September 30,		Change	
	2019	2020	Amount	%
	(dollars in thousands)			
Selling, general and administrative expenses	\$8,624	\$8,320	\$(304)	(4)%
Percentage of total revenue	90%	39%		

Our selling, general and administrative expenses were \$8.3 million for the nine months ended September 30, 2020, a decrease of \$0.3 million from selling, general and administrative expenses of \$8.6 million for the nine months ended September 30, 2019. The decrease was due primarily to a \$0.5 million decrease in travel expenses and a \$0.2 million decrease in tradeshow and related marketing, both mainly related to COVID-19, a \$0.3 million decrease in consulting costs as we shifted from consultants to employees, and a \$0.2 million reduction in legal fees related to an abandoned debt refinancing during the first quarter of 2019. We also decreased our commercial services agreement liability by \$0.4 million due to the decreased probability of payout. These reductions were partially offset by a \$0.8 million increase in professional fees related to our preparations to operate as a public company, supporting our growing business and market research support and a \$0.3 million increase in salaries and related costs as a result of expanding our sales force and sales commissions for increased product and service revenue during the nine months ended September 30, 2020.

Other income (expense)

Interest expense

Interest expense was \$0.7 million for the nine months ended September 30, 2020, a decrease of \$0.6 million from interest expense of \$1.3 million for the nine months ended September 30, 2019. Interest expense for the nine months ended September 30, 2019 included a loss on extinguishment of debt of \$0.3 million. Interest expense also decreased by \$0.3 million due to a lower interest rate on our new credit facility entered into in August 2019 compared to our previous debt facility, partially offset by an increase in debt. Our previous loan and security agreement was outstanding through August 2019, when we terminated and repaid in full the borrowings under that agreement of \$10.0 million and entered into a new credit agreement with Signature Bank for borrowings of \$15.0 million.

Other income (expense), net

Other income (expense), net included interest income of \$0.1 million for the nine months ended September 30, 2020, a decrease of \$0.1 million from interest income of \$0.2 million for the nine months ended September 30, 2019. Other income (expense), net also included other expense of less than \$0.1 million for the nine months ended September 30, 2020 and other income of \$0.1 million for the nine months ended September 30, 2019. The other income (expense), net was a result of the change in the fair value of our preferred stock warrant liability during the nine months ended September 30, 2020, and was due primarily to the changes in the fair value of our redeemable preferred stock.

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Comparison of the Years ended December 31, 2018 and 2019

?	??	Year Ended December 31,	??	???	???
?	??	2018	??	2019	?? Change ?
?	??	(in thousands)			?
Revenue:	?? ??	?	???	??	???
Product and service revenue	??	\$13,738	???	\$ 15,344	???
License and contract revenue	??	8,316	???	2,628	???
Total revenue	??	22,054	???	17,972	???
Cost of revenue:	?? ??	?	???	??	???
Product and service cost of revenue	??	9,002	???	9,098	???
License and contract cost of revenue	??	659	???	731	???
Total cost of revenue	??	9,661	???	9,829	???
Gross profit	??	12,393	???	8,143	???
Operating expenses:	?? ??	?	???	??	???
Research and development	??	9,528	???	8,993	???
Selling, general and administrative	??	9,304	???	11,294	???
Total operating expenses	??	18,832	???	20,287	???
Loss from operations	??	(6,439)	???	(12,144)	???
Other income (expense):	?? ??	?	???	??	???
Interest expense	??	(1,147)	???	(1,530)	???
Other income (expense), net	??	50	???	301	???
Total other expense, net	??	(1,097)	???	(1,229)	???
Net loss	??	\$ (7,536)	???	\$ (13,373)	???

Revenue, Cost of revenue and Gross profit

Product and service

?	??	Year Ended December 31,	??	Change	?
?	??	2018	??	2019	?? Amount ?? % ?
?	??	(dollars in thousands)			???
Product and service revenue	??	\$13,738	???	\$15,344	???
Product and service cost of revenue	??	9,002	???	9,098	???
Gross profit	??	\$ 4,736	???	\$ 6,246	???
Gross profit margin	??	34%	???	41%	???

Our product and service revenue is comprised of revenue from sales of devices and related consumables and service as follows:

?	??	Year Ended December 31,	??	Change	?
?	??	2018	??	2019	?? Amount ?? % ?
?	??	(dollars in thousands)			???
Device sales revenue	??	\$12,094	???	\$13,038	???
Consumables and service revenue	??	1,644	???	2,306	???
Total product and service revenue	??	\$13,738	???	\$15,344	???

Product and service revenue increased by \$1.6 million, or 12%, for the year ended December 31, 2019, compared to the year ended December 31, 2018. Device sales accounted for 88% and 85% of our product and service revenue for the years ended December 31, 2018 and 2019, respectively. Consumables and service revenue accounted for 12% and 15% of our product and service revenue for the years ended December 31, 2018 and 2019, respectively. The increase in device sales of \$0.9 million

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was primarily due to an increase of \$1.9 million in desktop device sales driven by the shipment of 13 Rebels in the fourth quarter of 2019, partially offset by a \$1.4 million decrease due to the conclusion of a product upgrade program that was in effect for 2017 and 2018, from the M908 to the newly launched MX908. Consumables and service revenue increased by \$0.7 million primarily due to the increase in sales of desktop devices.

Product and service cost of revenue was relatively flat in 2019 as compared to 2018. Increased costs related to higher sales were mostly offset by higher margin product sales as the product upgrade sales in 2018 were for lower margin product than our product sales in 2019. Product and service gross profit margin increased by \$1.5 million, or 32%, and gross profit increased by 7 percentage points for the year ended December 31, 2019, compared to the year ended December 31, 2018, primarily due to the lower cost base of our 2019 product sales.

License and contract

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(dollars in thousands)			
License and contract revenue	\$8,316	\$2,628	\$(5,688)	(68)%
License and contract cost of revenue	659	731	72	11%
Gross profit	\$7,657	\$1,897	\$(5,760)	(75)%
Gross profit margin	92%	72%	(20)%	

License and contract revenue decreased by \$5.7 million, or 68%, for the year ended December 31, 2019, compared to the year ended December 31, 2018. The decrease was primarily related to \$5.3 million of license and contract revenue recognized in 2018 following application of the cumulative catch-up method under an agreement where the transaction price was previously constrained.

License and contract cost of revenue increased \$0.1 million, or 11% for the year ended December 31, 2019, compared to the year ended December 31, 2018. The slight increase in license and contract cost of revenue is reflective of the mix of contracts in each period.

Operating Expenses

Research and development

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(dollars in thousands)			
Research and development expenses	\$9,528	\$8,993	\$(535)	(6)%
Percentage of total revenue	43%	50%	7%	

Our research and development expenses were \$9.0 million for the year ended December 31, 2019, a decrease of \$0.5 million from research and development expenses of \$9.5 million for the year ended December 31, 2018. The decrease was due primarily to a \$1.2 million decrease in materials spend and consulting costs, mainly associated with development and testing of our Rebel device as we commercially launched our Rebel device in the fourth quarter of 2019, partially offset by increased occupancy costs of \$0.5 million related to the move to our new facilities headquarters in October 2018 and a \$0.3 million increase in headcount in our research and development function.

Selling, general and administrative expenses

	Year Ended December 31,		Change	
	2018	2019	Amount	%
	(dollars in thousands)			
Selling, general and administrative expenses	\$9,304	\$11,294	\$1,990	21%
Percentage of total revenue	42%	63%	21%	

Our selling, general and administrative expenses were \$11.3 million for the year ended December 31, 2019, an increase of \$2.0 million from selling, general and administrative expenses of

\$9.3 million for the year ended December 31, 2018. The increase was due primarily to personnel and related costs of? \$1.3 million due to increased headcount in our sales and marketing department as we increased our resources focused on desktop device sales. In addition, our consulting costs increased by \$0.4 million related to international sales efforts for both our handheld and desktop products. Our travel and tradeshow expenses increased by \$0.5 million primarily related to international travel and our digital marketing efforts and events related to our desktop products. These increases were partially offset by a \$0.3 million decrease in material costs related to MX908s and consumables used in sales efforts.

Other Income (Expense)

Interest Expense

Interest expense was relatively flat for the years ended December 31, 2019 and 2018 as the increase in outstanding borrowings was offset by a decrease in the effective interest rate on our new facility. Our previous loan and security agreement was outstanding through August 2019, when we terminated and repaid in full the borrowings under that agreement of? \$10.0 million and entered into a new credit agreement with Signature Bank for borrowings of? \$15.0 million. Interest expense for the year ended December 31, 2019 also included a loss on extinguishment of debt of? \$0.3 million related to the repayment of outstanding debt and the end of term payment due under our previous debt facility, which we repaid in August 2019.

Other income (expense), net

Other income (expense), net included interest income of? \$0.2 million and \$0.1 million for the years ended December 31, 2019 and 2018, respectively. The increase in interest income in 2019 was due primarily to a higher invested cash balance due to our sale of Series E redeemable preferred stock in April 2019. Other income (expense), net also included other income of? \$0.1 million for the year ended December 31, 2019 and a loss of? \$0.1 million for the year ended December 31, 2018 related to the change in the fair value of our preferred stock warrant liability. The change in the fair value of our preferred stock warrant liability in both periods was due primarily to the changes in the fair value of our redeemable preferred stock.

Quarterly Results of Operations Data

The following table sets forth quarterly statement of operations data for each of the seven most recent quarters in the period ended September 30, 2020. We have prepared the quarterly statement of operations data on the same basis as the audited financial statements included in this prospectus. In our opinion, the quarterly financial data reflects all adjustments, consisting only of normal recurring adjustments, that we consider necessary for a fair statement of this data. This information should be read together with our financial statements and related notes included elsewhere in this prospectus. Our operating results may fluctuate due to a variety of factors. We have experienced some seasonality in our business from quarter to quarter based upon the timing of funding release related to the sale of handheld devices to our government customers as well as higher revenue in the fourth quarter of the calendar year related to our pharmaceutical/biotechnology customers. The results of historical periods are not necessarily indicative of the results to be expected for a full year or any future period.

	Three Months Ended							
	March 31, 2019	June 30, 2019	Sept. 30, 2019	Dec 31, 2019	March 31, 2020	June 30, 2020	Sept. 30, 2020	
	(in thousands)							
Revenue:	?? ??	? ?????	??????	??????	???? ??	? ?????	??????	???
Product and service revenue	?? ?\$2,340	????\$2,691	????\$3,261	????\$7,052	?? \$2,639	????\$10,378	????\$5,827	??
License and contract revenue	?? ? 640	????? 507	????? 185	?????1,296	?? ?1,362	????? 750	????? 221	??
Total revenue	?? ??2,980	?????3,198	?????3,446	?????8,348	?? ?4,001	?????11,128	?????6,048	??

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	Three Months Ended							
	March 31, 2019	June 30, 2019	Sept. 30, 2019	Dec 31, 2019	March 31, 2020	June 30, 2020	Sept. 30, 2020	
	(in thousands)							
Cost of revenue:								
Product and service cost of revenue	1,432	1,506	2,459	3,701	1,570	2,471	2,080	
License and contract cost of revenue	92	181	145	313	333	247	132	
Total cost of revenue	1,524	1,687	2,604	4,014	1,903	2,718	2,212	
Gross profit	1,456	1,511	842	4,334	2,098	2,610	3,836	
Operating expenses:								
Research and development	2,421	2,407	2,191	1,974	2,156	1,846	1,951	
Selling, general and administrative	2,748	3,035	2,840	2,671	2,706	2,436	3,178	
Total operating expenses	5,169	5,442	5,031	4,645	4,862	4,282	5,129	
Income (loss) from operations	(3,713)	(3,931)	(4,189)	(311)	(2,764)	(2,128)	(1,293)	
Total other expense, net	(231)	(228)	(591)	(179)	(202)	(33)	(429)	
Net income (loss)	\$(3,944)	\$(4,159)	\$(4,780)	\$ (490)	\$(2,966)	\$2,095	\$(1,722)	

Product and service revenue in the second and third quarters of 2020 includes the shipment of 150 MX908s and 30 MX908s, respectively, delivered to a distributor for sale to a government customer. Product and service revenue in the fourth quarter of 2019 includes the shipment of 13 Rebels related to the commercial launch as well as a shipment of 50 MX908s to an international distributor for a government customer in Europe.

Operating expenses decreased during the second quarter of 2020 related to our temporary furloughs and salary reductions and reduced travel related to COVID-19.

Liquidity and Capital Resources

Since our inception, we have incurred significant operating losses. To date, we have funded our operations primarily with proceeds from sales of redeemable preferred stock, borrowings under loan agreements and revenue from sales of our products and services and license and contract revenue. As of September 30, 2020, we had cash of \$19.7 million. We believe that the net proceeds from this offering, together with our existing cash will enable us to fund our operating expenses, capital expenditure requirements and debt service payments into 2023.

We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. Our future funding requirements will depend on many factors, including:

- market uptake of our products, including the Rebel, which we launched commercially in the fourth quarter of 2019;
- the cost and timing of establishing additional sales, marketing and distribution capabilities;
- the cost of our research and development activities and timely launch of new features and products
- the success of our existing collaborations and our ability to enter into additional collaborations in the future;
- the effect of competing technological and market developments; and
- the level of our selling, general and administrative expenses.

Without giving effect to the anticipated net proceeds from this offering, we expect that our existing cash will be sufficient to fund our operating expenses, capital expenditure requirements and debt service payments into the third quarter of 2021. We have concluded that this circumstance raises substantial doubt about our ability to continue as a going concern within one year after the October 2, 2020 issuance date of our financial statements for the year ended December 31, 2019 and the November 6, 2020

issuance date of our interim financial statements for the nine months ended September 30, 2020. See Note 1 to our financial statements included elsewhere in this prospectus for additional information on our assessment.

Similarly, in its report on our financial statements for the year ended December 31, 2019, our independent registered public accounting firm included an explanatory paragraph stating that our recurring losses from operations since inception and required additional funding to finance our operations raise substantial doubt about our ability to continue as a going concern.

We cannot assure you that we will be able to obtain additional funds on acceptable terms, or at all. If we raise additional funds by issuing equity or equity-linked securities, our stockholders may experience dilution. Future debt financing, if available, may involve covenants, in addition to our existing covenants, restricting our operations or our ability to incur additional debt or potentially limiting our ability to obtain new debt financing or the refinance of our existing debt. Any debt or equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we do not have or are not able to obtain sufficient funds, we may have to delay development or commercialization of our products. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations.

Cash Flows

The following table summarizes our sources and uses of cash for each of the periods presented:

	Year Ended December 31,		Nine Months Ended September 30,		
	2018	2019	2019	2020	
	(in thousands)				
Net cash provided by (used in) operating activities	\$(8,898)	\$(11,004)	\$(11,253)	\$1,799	
Net cash used in investing activities	\$(1,167)	(392)	(278)	(9)	
Net cash provided by financing activities	\$3,993	\$22,237	\$22,233	\$9	
Net increase (decrease) in cash and cash equivalents	\$(6,072)	\$10,841	\$10,702	\$1,799	

Operating Activities

During the nine months ended September 30, 2020, net cash provided by operating activities was \$1.8 million, primarily consisting of net cash provided by changes in our operating assets and liabilities of \$3.8 million and non-cash charges of \$0.6 million, partially offset by our net loss of \$2.6 million. Net cash provided by changes in our operating assets and liabilities for the nine months ended September 30, 2020 consisted primarily of an increase in deferred revenue of \$7.2 million and an increase in accounts payable and accrued expenses of \$1.1 million, partially offset by a \$4.3 million increase in accounts receivable, a \$0.3 million increase in prepaid expenses and other current and non-current assets and a less than \$0.1 million decrease in the net effect of our right-of-use operating assets and operating lease liabilities.

During the nine months ended September 30, 2019, operating activities used \$11.3 million of cash, primarily resulting from our net loss of \$12.9 million, partially offset by non-cash charges of \$1.3 million and net cash provided by changes in our operating assets and liabilities of \$0.4 million. Net cash provided by changes in our operating assets and liabilities for the nine months ended September 30, 2019 consisted primarily of a \$2.1 million decrease in unbilled receivables, a \$1.9 million increase in deferred revenue, a \$0.7 million increase in the net effect of our right-of-use operating assets and operating lease liabilities and a \$0.4 million increase in accounts payable and accrued expenses, partially offset by a \$2.7 million increase in inventory and a \$1.9 million increase in accounts receivable.

During the year ended December 31, 2019, operating activities used \$11.0 million of cash, primarily resulting from our net loss of \$13.4 million, partially offset by non-cash charges of \$1.6 million

and net cash provided by changes in our operating assets and liabilities of? \$0.7 million. Net cash provided by changes in our operating assets and liabilities for the year ended December 31, 2019 consisted primarily of a \$2.1 million decrease in unbilled receivables, an increase in deferred revenue of? \$0.7 million and a \$0.7 million increase in the net effect of our right-of-use operating assets and operating lease liabilities, partially offset by a \$1.9 million increase in inventory and a \$0.9 million increase in accounts receivable.

During the year ended December 31, 2018, operating activities used \$8.9 million of cash, primarily resulting from our net loss of? \$7.5 million and net cash used by changes in our operating assets and liabilities of? \$3.1 million, partially offset by non-cash charges of? \$1.8 million. Net cash used by changes in our operating assets and liabilities for the year ended December 31, 2018 consisted primarily of a \$2.1 million increase in unbilled receivables, a \$1.7 million decrease in deferred revenue, a \$1.0 million increase in inventory and a \$1.0 million decrease in accounts payable and accrued expenses, partially offset by a \$2.5 million decrease in accounts receivable and a \$0.1 million increase in the net effect of our right-of-use operating assets and operating lease liabilities.

Investing Activities

During the nine months ended September 30, 2020, net cash used in investing activities was less than \$0.1 million and during the nine months ended September 30, 2019, net cash used in investing activities was \$0.3 million, due to purchases of property and equipment.

During the years ended December 31, 2019 and 2018, net cash used in investing activities was \$0.4 million and \$1.2 million, respectively, due to purchases of property and equipment. The purchases of property and equipment during the year ended December 31, 2018 were related to investments in demo equipment, mainly related to the MX908, as well as laboratory equipment and furniture and fixture purchases for our new corporate headquarters, which we moved into in September 2018.

Financing Activities

Cash provided by financing activities during the nine months ended September 30, 2020 was less than \$0.1 million. We received proceeds from a Paycheck Protection Program loan of? \$2.2 million, which we then fully repaid in the same period.

During the nine months ended September 30, 2019, net cash provided by financing activities was \$22.2 million, consisting primarily of net proceeds of? \$17.3 million from the issuance of our Series E redeemable preferred stock and the net proceeds from borrowings under our credit agreement with Signature Bank of? \$15.0 million, partially offset by the repayment of our previously outstanding borrowings under our loan and security agreement of? \$10.0 million.

During the year ended December 31, 2019 net cash provided by financing activities was \$22.2 million, consisting primarily of net proceeds from the issuance of our Series E redeemable preferred stock of? \$17.3 million and net proceeds from borrowings under our credit agreement with Signature Bank of? \$15.0 million, partially offset by the repayment of our previously outstanding borrowings under our loan and security agreement of? \$10.0 million.

During the year ended December 31, 2018, net cash provided by financing activities was \$4.0 million, consisting primarily of net proceeds from the issuance of our Series D redeemable preferred stock.

Long-Term Debt

In August 2019, we entered into a new Loan and Security Agreement, or the 2019 Loan, with Signature Bank, or the Lender. The 2019 Loan provides for up to \$15.0 million in borrowings, of which the entire \$15.0 million was borrowed in 2019. The 2019 Loan calls for monthly interest-only payments through February 28, 2021, followed by 30 monthly payments of principal and interest commencing March 1, 2021. The 2019 Loan matures on August 1, 2023 and bears interest at a rate equal to the greater of? (i) 0.5% plus the Wall Street Journal prime rate, and (ii) 6.0%. The 2019 Loan is secured by a lien on our assets.

The 2019 Loan includes financial covenants requiring us to maintain a minimum liquidity ratio of unrestricted cash plus 50% of accounts receivable to debt outstanding under the 2019 Loan of at least

1.00 to 1.00. We are also required to maintain a balance of unrestricted cash at the Lender in an amount not less than \$3.0 million. Further, we and the Lender agree to amend the 2019 Loan to set financial covenants for 2020 and beyond. The 2019 Loan also contains negative covenants restricting our activities, including limitations on dispositions, mergers or acquisitions; encumbering or granted in a security interest in our intellectual property, incurring indebtedness or liens, paying dividends, making certain investments and certain other business transactions.

On March 15, 2020, we signed the first amendment to the 2019 Loan which set the covenants for the first half of 2020 and increased the balance of minimum unrestricted cash held at the lender to an amount not less than \$4.0 million. On August 7, 2020, we signed the second amendment to the 2019 Loan which set the covenants for the second half of 2020 to the achievement of either a minimum revenue amount or a defined liquidity ratio and the second amendment decreased the balance of minimum unrestricted cash held at the lender to an amount not less than \$3.0 million. As of December 31, 2019 and September 30, 2020, we were in compliance with all covenants under the 2019 Loan, as amended.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of December 31, 2019, and the effects that such obligations are expected to have on our liquidity and cash flows in future periods:

	Payments Due by Period				
	Total	Less Than 1 Year	1 to 3 Years	4 to 5 Years	More Than 5 Years
	(in thousands)				
Operating lease commitments(1)	\$10,478	\$1,792	\$3,540	\$3,711	\$1,435
Debt obligations(2)	\$17,213	900	\$12,223	\$4,090	—
Total	\$27,691	\$2,692	\$15,763	\$7,801	\$1,435

- (1) Amounts in the table reflect payments due for our lease of office and manufacturing space under operating lease agreements that expire at various dates through September 2025.
- (2) Amounts in the table reflect the contractually required principal and interest payments payable under our Loan and Security Agreement, under which borrowings bear interest at a variable rate. For purposes of this table, the interest due under the Credit Agreement was calculated using an assumed interest rate of 6.0% per annum, which was the interest rate in effect as of December 31, 2019.

Purchase orders or contracts for the purchase of supplies and other goods and services are not included in the table above. We are not able to determine the aggregate amount of such purchase orders that represent contractual obligations, as purchase orders may represent authorizations to purchase rather than binding agreements. Our purchase orders are based on our current procurement or development needs and are fulfilled by our vendors within short time horizons.

We have also entered into license agreements under which we are obligated to make royalty payments in the 2% to 5% range, subject to a minimum royalty fee of \$0.1 million annually. We have not included future payments under these agreements in the table of contractual obligations above since the payment obligations under these agreements are contingent upon generating product sales. We have not included annual minimum royalty payments in the table above because, although the amounts and timing are known, we cannot currently determine the final termination date of the agreement and, as a result, we cannot determine the total amounts of such payments we will be required to make under the agreements.

We have a commercial services agreement entered into in 2015 with one of our preferred stock investors under which we will pay the investor \$1.5 million upon the occurrence of a deemed liquidation event prior to a qualified public offering. We have not included this payment in the table of contractual obligations above since the payment obligation is contingent upon a deemed liquidation that may occur

prior to a qualified public offering. For additional details, refer to Note 3 in our financial statements included elsewhere in this prospectus.

Critical Accounting Policies and Significant Judgments and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of our financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, costs and expenses and the disclosure of contingent assets and liabilities in our financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are 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. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 2 to our financial statements included elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

We recognize revenue from sales to customers under Accounting Standards Codification 606, *Revenue from Contracts with Customers*, or ASC 606 by applying the following five steps: (1) identification of the contract, or contracts, with a customer, (2) identification of the performance obligations in the contract, (3) determination of the transaction price, (4) allocation of the transaction price to the performance obligations in the contract and (5) recognition of revenue when, or as, performance obligations are satisfied.

Product and Service Revenue

We derive revenue primarily from the sale of handheld and desktop products and related consumables and services. Revenue is recognized when control of the promised products consumables or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those products, consumables or services (the transaction price). A performance obligation is a promise in a contract to transfer a distinct product or service to a customer and is the unit of accounting under ASC 606. For devices and consumables sold by us, control transfers to the customer at a point in time. To indicate the transfer of control, we must have a present right to payment, legal title must have passed to the customer, the customer must have the significant risks and rewards of ownership, and where acceptance is other than perfunctory, the customer must have accepted the product or service. Our principal terms of sale are freight on board, or FOB, shipping point, or equivalent, and, as such, we primarily transfer control and record revenue for product sales upon shipment. Sales arrangements with delivery terms that are not FOB shipping point are not recognized upon shipment and the transfer of control for revenue recognition is evaluated based on the associated shipping terms and customer obligations. If a performance obligation to the customer with respect to a sales transaction remains to be fulfilled following shipment (typically installation or acceptance by the customer), revenue recognition for that performance obligation is deferred until such commitments have been fulfilled. For extended warranty and support, control transfers to the customer over the term of the arrangement. Revenue for extended warranty and support is recognized based upon the period of time elapsed under the arrangement as this period represents the transfer of benefits or services under the agreement.

For a contract with multiple performance obligations, we allocate the contract's transaction price to each performance obligation on a relative standalone selling price basis using our best estimate of the standalone selling price of each distinct product or service in the contract. The primary method used to estimate standalone selling price is the price observed in standalone sales to customers; however, when prices in standalone sales are not available we may use third-party pricing for similar products or services or estimate the standalone selling price, which is set by management. Allocation of the transaction price is determined at the contract's inception.

License and Contract Revenue

We generate revenue from short and long-term contracts associated with the design and development and delivery of detection devices or related design and support services. To date, these

contracts are primarily with the U.S. government or commercial entities contracting with the U.S. government, but we have also had such contracts with commercial partners. Our contracts with the U.S. government typically are subject to the Federal Acquisition Regulation, or FAR, and are priced based on estimated or actual costs of producing goods or providing services. The FAR provides guidance on the types of costs that are allowable in establishing prices for goods or services provided under U.S. government contracts. The pricing for non-U.S. government contracts is based on the specific negotiations with each customer.

Under the typical payment terms of U.S. government fixed-price contracts, the customer pays in accordance with the terms of the specific agreement, but generally through progress payments. If these progress payments are made in advance, these payments are recorded as a contract liability, classified as deferred revenue within the accompanying balance sheet, until we provide the underlying services. For U.S. government cost-type contracts, the customer generally pays for actual costs incurred within a short period of time. For contracts with commercial partners, payments are made in accordance with the terms of the specific agreement. For agreements which call for milestone payments, to the extent we do not conclude that it is probable that a significant reversal of cumulative revenue will occur, a contract asset is generated until we are permitted to bill for costs incurred, which is classified as unbilled receivables in the accompanying balance sheet. In some cases, payments received in advance under license agreements are recorded as deferred revenue and recognized over the respective contract term, absent any other performance obligations.

Generally, revenue for long-term contracts is recognized based upon the cost-to-cost measure of progress, provided that we meet the criteria associated with transferring control of the good or service over time such as not creating an asset with an alternative use and having an enforceable right to payment for completed performance. However, we evaluate the proper revenue recognition on a contract by contract basis, as each contract generally contains terms specific to the underlying agreement which result in differing performance obligations and payment terms (cost plus, fixed price agreements among others). We include the unconstrained amount of consideration in the transaction price. The amount included in the transaction price is constrained to the amount for which it is probable that a significant reversal of cumulative revenue recognized will not occur. At the end of each subsequent reporting period, as required by ASC 606, we re-evaluate the estimated consideration included in the transaction price and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis in the period of adjustment. For example, during the year ended December 31, 2018, we determined that \$6.4 million of consideration under a contract with a commercial entity was no longer constrained and we recognized \$5.3 million of contract revenue on a cumulative catch up basis that was determined based on the progress that had been made following the cost to cost model.

Distribution Channels

A majority of our revenue is generated by sales in conjunction with our distribution partners, such as our international distributors and in the United States for end customers where a government contract is required or a customer has a pre-existing relationship. When we transact with a distribution partner, our contractual arrangement is with the partner and not with the end-use customer. Whether we transact business with and receive the order from a distribution partner or directly from an end-use customer, our revenue recognition policy and resulting pattern of revenue recognition for the order are the same.

Stock-Based Compensation

We measure stock-based option awards granted to employees, consultants and directors based on their fair value on the date of grant using the Black-Scholes option-pricing model. Compensation expense for those awards is recognized, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. The straight-line method of expense recognition is applied to all awards with service-only conditions, while the graded vesting method is applied to all grants with both service and performance conditions.

The Black-Scholes option-pricing model uses as inputs the fair value of our common stock and assumptions we make for the volatility of our common stock, the expected term of our common stock options, the risk-free interest rate for a period that approximates the expected term of our common stock options, and our expected dividend yield.

Determination of Fair Value of Common Stock

As there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors as of the date of each option grant, with input from management, considering our most recently available third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Our common stock valuations were prepared using either an option pricing method, or OPM, or a hybrid method, both of which used market approaches and income approaches to estimate our enterprise value. The hybrid method is a probability-weighted expected return method, or PWERM, where the equity value in one or more of the scenarios is calculated using an OPM. The PWERM is a scenario-based methodology that estimates the fair value of common stock based upon an analysis of future values for the company, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock. A discount for lack of marketability of the common stock is then applied to arrive at an indication of value for the common stock. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceeded the value of the preferred stock liquidation preferences at the time of the liquidity event, such as a strategic sale or a merger. These third-party valuations were performed at various dates, which resulted in valuations of our common stock of? \$1.58 per share as of January 31, 2018, \$1.79 per share as of April 12, 2019, \$1.05 per share as of June 1, 2020, \$3.24 per share as of August 31, 2020 and \$7.91 per share as of October 31, 2020. In addition to considering the results of these third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, including:

- the prices at which we sold shares of preferred stock and the superior rights and preferences of the preferred stock relative to our common stock at the time of each grant;
- the progress of our research and development of our products;
- our stage of development and commercialization and our business strategy;
- external market conditions affecting the tools forensics and life sciences tools industry and trends within the industry;
- our financial position, including cash on hand, and our historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and our preferred stock;
- the likelihood of achieving a liquidity event, such as an initial public offering, or IPO, or sale of our company in light of prevailing market conditions; and
- the analysis of IPOs and the market performance of similar companies in the forensics and life sciences tools industry.

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

Once a public trading market for our common stock has been established in connection with the completion of this offering, it will no longer be necessary for our board of directors to estimate the fair value of our common stock in connection with our accounting for granted stock options and other such awards we may grant, as the fair value of our common stock will be determined based on the quoted market price of our common stock.

Options granted

The following table summarizes by grant date the number of shares subject to awards granted between January 1, 2019 and November 6, 2020, the per share exercise price of the options, the fair value of common stock on each grant date, and the per share estimated fair value of the awards:

Grant Date	Number of Shares Subject to Options Granted	Per Share Exercise Price of Options	Per Share Fair Value of Common Stock on Grant Date	Per Share Estimated Fair Value of Options
January 21, 2019	317,120	\$1.58	\$1.58	\$0.83
April 24, 2019	25,808	\$1.79	\$1.79	\$0.93
June 20, 2019	15,978	\$1.79	\$1.79	\$0.93
September 10, 2019	18,742	\$1.79	\$1.79	\$0.93
November 13, 2019	12,291	\$1.79	\$1.79	\$0.93
December 12, 2019	2,458	\$1.79	\$1.79	\$0.93
January 31, 2020	28,267	\$1.79	\$1.79	\$0.92
March 25, 2020	6,759	\$1.79	\$1.79	\$0.98
June 16, 2020	27,041	\$1.05	\$1.73(1)	\$1.14
July 28, 2020	2,458	\$1.05	\$1.73(1)	\$1.14
August 27, 2020	177,914	\$1.05	\$3.24(1)	\$2.51
September 14, 2020	386,570	\$3.24	\$3.24	\$1.79
September 21, 2020	314,669	\$3.24	\$3.24	\$1.79
September 30, 2020	107,553	\$3.24	\$3.24	\$1.79
November 3, 2020	125,376	\$7.91	\$7.91	\$4.40

- (1) At the time of the option grants, our board of directors determined that the fair value of our common stock of? \$1.05 per share calculated in the third-party valuation as of June 1, 2020 described above reasonably reflected the per share fair value of our common stock as of the grant date. However, as described below, the fair value of common stock at the date of this grant was retroactively adjusted for accounting purposes.

In preparing for the issuance of our unaudited financial statements for the nine months ended September 30, 2020, in September 2020, we performed a retrospective fair value assessment and concluded that the fair value of our common stock underlying stock options that we granted on June 16, 2020 and July 28, 2020 was \$1.73 per share for accounting purposes. We applied the fair value of our common stock from our retrospective fair value assessment to determine the fair value of these awards and calculate stock-based compensation expense for accounting purposes. This reassessed value was based, in part, upon a third-party valuation of our common stock prepared as of June 1, 2020 on a retrospective basis. The third-party valuation was prepared using the hybrid method and used market and income approaches to determine our enterprise value.

In preparing for our stock option grants in September 2020, we completed a fair value assessment as of August 31, 2020, which resulted in a fair value of our common stock of? \$3.24 per share. We applied the fair value of our common stock from our fair value assessment as of August 31, 2020 to determine the fair value of our August 27, 2020 grants and calculate stock-based compensation expense for accounting purposes.

Valuation of Warrants to Purchase Preferred Stock

We classify warrants to purchase shares of our redeemable preferred stock as liabilities on our balance sheets as these warrants are free-standing financial instruments that may require us to transfer assets upon exercise. The warrant liability associated with each of these warrants was initially recorded at fair value on the issuance date of each warrant and is subsequently remeasured to fair value at each balance sheet date. Changes in fair value of the warrants are recognized as a component of other

income (expense) in our statements of operations and comprehensive loss. We will continue to adjust the liability for changes in fair value until the warrants are exercised, expire or qualify for equity classification.

We utilize the Black-Scholes option-pricing model, which incorporates assumptions and estimates to value the preferred stock warrants. We assess these assumptions and estimates on a quarterly basis as additional information impacting the assumptions is obtained. Estimates and assumptions impacting the fair value measurement include the fair value per share of the underlying redeemable preferred stock, the remaining contractual term of the warrants, risk-free interest rate, expected dividend yield and expected volatility of the price of the underlying preferred stock. We determine the fair value per share of the underlying preferred stock by taking into consideration our most recent sales of our preferred stock as well as additional factors that we deem relevant. We have historically been a private company and lack company-specific historical and implied volatility information of our stock. Therefore, we estimate expected stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the remaining contractual term of the warrants. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrants. We have estimated a 0% dividend yield based on the expected dividend yield and the fact that we have never paid or declared dividends.

The table below quantifies the weighted average of the most significant inputs used for the warrants:

	December 31,		September 30,	
	2018	2019	2020	
Fair value of preferred stock	\$3.47	\$5.67	\$5.46	
Risk-free interest rate	2.6%	1.9%	0.5%	
Expected volatility	67%	51%	60%	
Expected dividend yield	—	—	—	
Remaining contractual term (in years)	4	8	7	

Valuation of Inventory

Inventory is valued at the lower of cost or net realizable value. Cost is computed using the first-in, first-out method. We regularly review inventory quantities on-hand for excess and obsolete inventory and, when circumstances indicate, record charges to write down inventories to their estimated net realizable value, after evaluating historical sales, future demand, market conditions and expected product life cycles. Such charges are classified as cost of revenue in the statement of operations and comprehensive loss. Any write-down of inventory to net realizable value creates a new cost basis.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position, results of operations or cash flows is disclosed in Note 2 to our financial statements included elsewhere in this prospectus.

Quantitative and Qualitative Disclosures about Market Risks

We are exposed to changes in interest rates because we finance certain operations through variable rate debt instruments. Changes in these rates may have an impact on future cash flows and earnings. We manage these risks through normal operating and financing activities.

Interest rate sensitivity

As of September 30, 2020, our cash is held on deposit with banks, thus we do not currently have exposure to interest rate risk. Declines in interest rates, however, may reduce future investment income if we invest our cash.

Borrowings under our loan and security agreement bear interest at a rate equal to the greater of (i) 0.50% plus the Wall Street Journal prime rate, and (ii) 6.00%. An immediate 10% change in the Wall Street Journal prime rate would not have a material impact on our debt-related obligations, financial position or results of operations.

Foreign currency exchange risk

We are not currently exposed to significant market risk related to changes in foreign currency exchange rates. Our operations may be subject to fluctuations in foreign currency exchange rates in the future.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition or results of operations.

Emerging Growth Company Status

The Jumpstart Our Business Startups Act of 2012 permits an “emerging growth company” such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have elected not to “opt out” of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we will adopt the new or revised standard at the time private companies adopt the new or revised standard and will do so until such time that we either (i) irrevocably elect to “opt out” of such extended transition period or (ii) no longer qualify as an emerging growth company.

BUSINESS

Analysis for Life

We are leading a revolution in measurement devices for chemical and biochemical analysis. We are democratizing laboratory mass spectrometry instruments with our simple handheld and desktop devices, addressing critical-to-life applications. We are reimagining where Mass Spec technology can be used if it is sufficiently small in size, low in cost, and simple to operate.

Overview

We have developed an innovative suite of purpose-built handheld and desktop mass spectrometry, or Mass Spec, devices for the point-of-need. Leveraging our proprietary platform technology, we make the extraordinary analytical power of Mass Spec available in devices that are significantly smaller and more accessible than conventional laboratory instruments. Our Mass Spec devices are used at the point-of-need to interrogate unknown and invisible materials and provide quick, actionable answers to directly address some of the most critical problems in life sciences research, bioprocessing, industrial biotech, forensics and adjacent markets.

We create simplified measurement devices that our customers can use as accurate tools where-and-when their work needs to be done, rather than overly complex and centralized analytical instrumentation. We believe the insights and answers our devices provide will accelerate workflows, reduce costs, and offer transformational opportunities for our end users.

Since the launch of our first device, we have sold more than 1,200 handheld and desktop devices to over 300 customers in 32 countries, including 18 of the top 20 pharmaceutical companies by 2019 revenue, as well as numerous domestic and foreign government agencies and leading academic institutions. We generated total revenue of? \$9.6 million and \$21.2 million in the nine months ended September 30, 2019 and 2020, respectively, representing 120% period-over-period growth, while incurring net losses of? \$12.9 million and \$2.6 million in the nine months ended September 30, 2019 and 2020, respectively. Historically, we have derived a majority of our revenue from government customers. While we cannot provide any assurance as to our future results or the success of our sales efforts, we believe we will continue to derive a significant portion of our revenue from the government sector.

Our current products are available for both battery powered handheld and desktop applications, including our flagship devices—MX908 and Rebel.



Front-line workers rely upon our handheld devices to combat the opioid crisis and detect counterfeit pharmaceuticals and illicit materials in the air or on surfaces at levels 1,000 times below their lethal dose. Our desktop devices are accelerating development and production of biotherapeutics by identifying and quantifying extracellular species in bioprocessing critical to cell health and productivity. They sit alongside bioreactors and fermenters producing drug candidates, functional proteins, cell and gene therapies, and synthetic biology-derived products. We believe the insights and answers our devices provide accelerate workflows, reduce costs, and offer transformational opportunities for our end users.

Mass Spec is the gold-standard analytical technology for laboratory-based molecular analysis and can identify and quantify sample components via molecular weight measurements. Mass Spec is highly regarded for its ability to provide an extraordinarily detailed analysis of a wide variety of samples—from small molecules to large complex proteins. While Mass Spec is an extremely powerful analytical tool, conventional Mass Spec instruments are very large, expensive, and highly complex, which has profoundly bottlenecked market opportunities and relegated them to the equivalent of mainframe computers in central facilities. We are seeking to reimagine where Mass Spec technology can be used *if* it is sufficiently small in size, low in cost, and simple to operate.

Our proprietary Mass Spec platform relies on extreme miniaturization of the core of Mass Spec—the ion trap and its vacuum system. Using semiconductor microfabrication techniques, we design and produce components that are more than a thousand fold smaller in volume when compared with most laboratory Mass Spec instruments and costs only dollars to manufacture. The vacuum system alone in a typical laboratory instrument weighs hundreds of pounds and requires several hundred watts of power, 24 hours per day, 365 days per year. Our miniaturized vacuum system weighs less than a pound, and our Mass Spec in total requires less power than a 20-watt LED light bulb. These landmark proprietary advances have enabled the first truly handheld Mass Spec devices and compact desktops.

Sample preparation and separation can be a painfully slow hours-long process, and we have invested heavily in the development of microfluidic sample preparation and microscale separation technologies to reduce preparation and separation time from hours to minutes. The size of a business card, our microfluidic capillary-electrophoresis, or CE, chip has demonstrated world-class performance and speed in separating everything from small molecules such as metabolites and drugs, to biopharmaceutical proteins, antibodies, and oligonucleotides.

Lastly, it is imperative that a point-of-need solution is operable by the widest possible user base. We have an industry-leading software automation and machine learning team comprised of five members, each with advanced scientific degrees, who have collective experience working on 30 commercial product launches and have won numerous research and innovation awards. They have applied advanced software automation and machine learning techniques to both control the hardware in our devices and interpret the incredibly rich and complex data streaming off of them. It is common for expert data interpretation from a laboratory Mass Spec instrument to take hours or days—we can provide answers immediately to maximize value to the customer in critical-to-life applications where minutes matter.

We fundamentally believe that the technology platform we have built and the investments we are making will allow people to answer chemical and biochemical questions in times and places that were previously inconceivable. Given the market opportunity, we expect to face substantial competition from large established manufacturers of Mass Spec laboratory-based instruments and from new entrants; however, our proprietary advances have enabled us to manufacture the first truly handheld Mass Spec devices and compact desktops and we believe we are well-positioned to face future competition.

As we democratize the extraordinary power of Mass Spec, we believe our technology platform can expand in future opportunities far beyond the current \$8 billion market for Mass Spec and associated front-end separations. We estimate our total addressable market, or TAM, for our devices to be \$4.8 billion in 2020 growing to an estimated \$22 billion over the next five years. The TAM for our handhelds is estimated to be \$1.5 billion in 2020 with expansion to over \$3 billion with software application extensions into GxP facilities for raw material inspection, counterfeit and adulteration inspection, contamination and cleaning validation, and other quality assurance and quality control assays. Our desktop devices supporting bioprocess development represent a TAM of \$260 million in 2020 expanding significantly to approximately \$12 billion with execution of our roadmap and the rapid growth of cell therapy. We see additional opportunity to address \$3.0 billion in 2020 across the research chromatography market space growing to more than \$6.9 billion with further market growth and roadmap expansion into complex proteomics by 2025. Our estimates of our TAM are based on potential customer research and development spending, addressable aspects of potential customers' end product development process, and potential platform usage. We also utilize estimated penetration and placement rates for our platform with potential customers in our target markets and historical patterns for consumables usage.

Our Strengths

We believe the following competitive strengths provide us the ability to address point-of-need applications in forensics, life sciences research, bioprocessing, industrial biotech, and synbio:

- Our proprietary microscale Mass Spec platform leverages well established, gold-standard technology.*** Mass Spec is already ubiquitous in the laboratory. Users do not need to take a risk on a completely unknown technology. We bring laboratory-grade capability to handhelds and desktops. We have developed a proprietary Mass Spec platform and approach that allow us to move the capabilities of conventional Mass Spec beyond the central laboratory. Our proprietary High-Pressure Mass Spec, or HPMS, technology enables us to produce significantly smaller, purpose-built Mass Spec devices that are much more ideal for use in point-of-need settings, in contrast to conventional mainframe Mass Spec solutions. The combination of HPMS, our proprietary microfluidic separation technology, and our data analytics, and machine-learning technology provides the foundations of an adaptable platform that can serve a growing number of new and adjacent applications and markets.
- Point-of-need technologies disrupting Mass Spec and creating new product categories.*** Leveraging our Mass Spec platform, we have developed a portfolio of desktop and handheld devices that are reinventing the Mass Spec industry by accessing a variety of point-of-need market segments that were historically considered impossible for conventional Mass Spec manufacturers. Our products are small, purpose-built devices that avoid the typical size and complexity issues related to conventional Mass Spec while also offering real-time, actionable answers to new classes of users. As we continue to expand the capabilities of our Mass Spec platform, we believe our devices will continue to penetrate new and adjacent opportunities in life sciences, quality assurance and control, diagnostics and applied markets.
- Highly attractive business model validated by rapidly growing installed base of devices.*** We have over 300 customers, including 18 of the top 20 pharmaceutical companies, academic and major government institutions, including the Department of Homeland Security, the U.S. Army and the U.S. Marine Corps and other international, federal and state agencies. These customers have validated our platform through the collective purchase of more than 1,200 devices, with 4,600 users trained on our devices. As we continue to grow our installed base, we expect to increase our recurring revenue derived from the sale of consumables and support services. For example, in the first nine months of 2020, over 75% of our MX908s were purchased with multiple years of warranty service.
- Talented team with significant domain expertise.*** We are a technology driven company that has built vertically integrated capabilities to design, manufacture, and commercial our products. We are led by a dedicated and highly experienced senior management team with significant industry experience and proven ability to deliver novel products. Each member of our senior management team has more than 20 years of relevant experience. Members of our technical team have been collectively responsible for numerous commercial product launches prior to joining the company, in varying markets such as point-of-care clinical diagnostics, handheld pharmaceutical inspection devices, high-throughput cell culture control systems, autonomous warehouse logistics, motion capture animation, high-volume telecom transmitters and receivers, and consumer wearables. The team possesses deep expertise in Mass Spec, system design and engineering, usability and ergonomics, thermal and mechanical engineering, software development, artificial intelligence and optical spectroscopy, as well as microfluidics and separations science. We have 39 full-time employees dedicated to research and development as of September 30, 2020. Of these, approximately 40% have advanced degrees in science and engineering.

Our Growth Strategy

We are pursuing the democratization of the gold-standard molecular analysis laboratory technique: Mass Spec. Just as mainframe computers transitioned to desktops, tablets, and mobile devices, we are leading a transformation of the Mass Spec market. Our growth strategy includes the following key elements:

- ***A continued focus on simplicity, speed, convenience and cost increases measurement consumption.*** We are a technology-driven company with significant core expertise in engineering, hard sciences and data analytics and a proven track record of delivering products that delight our customers by making things easy. We believe a relentless focus on these fundamentals drives consumption of consumables. We further believe broadscale democratization of Mass Spec is enabled by our progress on these same fundamentals.
- ***Drive enterprise adoption in our seeded accounts.*** We intend to continue to aggressively invest in and support our field applications team to accelerate the development of post-sale partnerships with customers and to drive broader adoption across the organization. We will focus on building upon our track record of leveraging our customers' success in trials and pilots into enterprise-wide adoption of both devices and consumables. As an example, for our handheld device, it is typical for government organizations to conduct a one week or longer trial prior to purchase to test our technology in their real-world setting. A trial generally results in budgeting for a pilot that can range in size from ten to more than 50 units. During the pilot, we support our customers closely to ensure their success. Data is compiled throughout to assist our customer in making a larger enterprise-wide justification, purchase and deployment. It is our belief that investment pre- and post-sale with prospects that have the potential for enterprise adoption creates a predictable pipeline of opportunity for our devices and their entrenchment as they become the organizational standard for our customers. Enterprise customers range from large government organizations with full fielding potential of more than 1,000 handheld devices to leading biopharma companies with capacity for ten or more desktop devices per site.
- ***Grow the installed base through expansion of commercial channels.*** Since the commercial launch of our first handheld, the installed base of our handheld and desktop devices has grown to more than 1,200 devices across 32 countries. Our desktop devices are now taking root in the United States, and we will focus on expanding our commercial channels to better serve the forensics, life sciences research, bioprocessing, industrial biotech, and synbio markets. We look to expand both our direct channel in the United States and our international reach. We anticipate growing our network of international distributors focused in regions with a concentrated and rapidly expanding life sciences presence, specifically, Europe, China, Japan, India, and South Korea. We look to have local application and support specialists and sales managers supporting our distribution partners.
- ***Deepen our footprint into the rapidly growing bioprocessing market.*** We designed our first desktop device to accelerate development and enhance production by identifying and quantifying extracellular species critical to cell health and productivity. They sit alongside bioreactors and fermenters producing drug candidates, functional proteins, cell and gene therapies, and synbio derived products. We look to expand our product line into broader extracellular panels, intracellular analysis, such as cellular flux, and pathway analysis. Consistent with our thesis of driving simplicity and convenience of measurement, we will progress from an at-line measurement tool to an on-line integrated device with comprehensive bioprocess analytics and control. We believe our technology platform can serve as the cornerstone of an integrated "bioprocess brain" by monitoring and managing the comprehensive extracellular environment.
- ***Expand our customer-driven pipeline of new point-of-need applications.*** We will continue to leverage our integrated sample preparation and microfluidic separations platform to expand our pipeline of new, customer-driven point-of-need applications that can be addressed by both our handheld and desktop devices. As our customers continue to prove out new applications in areas such as diagnostics and proteomics, we will look to incorporate select assays investigated by these customers into our handheld and desktop devices where those form factors can accelerate usage. We have already incorporated a number of customer-driven assays into both MX908 and Rebel and will continue to do so as we believe this will provide us with an expanding list of new point-of-need applications and market opportunities within forensics, life sciences research, bioprocessing, industrial biotech and synbio. In addition, we continue to make advancements in our core technologies to drive the evolution of our product portfolio beyond current applications and needs to enter new markets.

Our Industry Background

Conventional Mass Spec—The Mainframe Computer of the Analytical Laboratory

Mass Spec is the gold-standard analytical technique for molecular analysis. This technology is highly regarded for its ability to provide an extraordinarily detailed analysis of a wide variety of molecular samples—from small molecule chemicals to large complex proteins. Mass Spec instruments identify the components of samples via highly detailed mass-to-charge (m/z) measurements, and in some cases, can quantify those components. Together with its associated front-end separation technologies, Mass Spec can resolve and analyze the most complex of samples with high fidelity.

We believe Mass Spec has become the cornerstone of the chemical laboratory within academia, industry and government, serving an extremely wide range of markets including forensics, life sciences, environmental, and industrial. However, while Mass Spec is an extremely powerful analytical technique, the capabilities of conventional Mass Spec instruments are largely relegated to centralized laboratory settings due to their size, complexity, and high price. When compared in context to the computer industry, conventional Mass Spec instruments represent the mainframe computer of the analytical laboratory.

Mass Spec instruments contain three standard components: an ionization source, a mass analyzer and an ion detector. Utilizing these three components, the Mass Spec process is completed in three corresponding steps:

1. *Ionization:* First, the molecular sample must be ionized so that it takes on one or more positive or negative charges. This allows the charged molecule to be precisely manipulated by static or dynamic electric fields. The means of ionization itself also allows the user to selectively evaluate certain molecular classes, such as acids vs. bases, while ignoring others.
2. *Ion-Sorting:* Following ionization, the ions are trapped under vacuum, manipulated, and sorted based on their mass-to-charge ratio (m/z) within the mass analyzer. This is where the fine structural characteristics of the molecules begin to emerge with extraordinary levels of detail.
3. *Detection:* Finally, the detector converts the ion energy into electric signals as it carefully records the ion pattern representing the structure. The recorded data is then typically interpreted by a computer and then manipulated, studied and analyzed by a specialist.



Conventional “Mainframe” Laboratory Mass Spec instruments

Employing and building upon these three process steps, conventional Mass Spec instruments have penetrated almost every analytical laboratory. It is estimated there are thousands of laboratories

employing more than 50,000 Mass Spec instruments according to a recent third party report. As the needs of laboratory scientists have evolved, Mass Spec instrument manufacturers for decades have grown their franchise and stimulated capital equipment replacement cycles by orienting their research and development towards sustained improvements in raw analytical performance metrics such as resolution, sensitivity, and range. As a result, conventional Mass Spec instruments:

- are extremely large and not readily mobile;
- are expensive (often ranging from \$100,000 to \$1 million);
- require a dedicated fixed power source; and
- require onsite specialists to maintain and operate.

These significant limitations have profoundly bottlenecked market opportunities for conventional Mass Spec instruments. Despite this, the conventional Mass Spec and associated front-end separations market is significant, with estimated annual revenues of? \$8 billion.

The Democratization of Mass Spec—Handhelds and Desktops

Given the inherent limitations of conventional mainframe Mass Spec instruments, we believe there is a compelling opportunity for handheld and compact desktop Mass Spec devices. Analogous to the democratization of computer technologies, as price, access, and complexity are reduced, user space expands, utilization increases, and new applications emerge. While our expectation is that centralized laboratory Mass Spec instruments will continue to exist in laboratory settings—just as mainframes still exist today as supercomputers servicing the most challenging computational problems—we believe that the democratization of Mass Spec will open up new markets and applications. We also see many parallels with how next generation gene sequencing, or NGS, was democratized and has expanded the market for NGS through desktop devices.

Our Technology Platform

We have developed a technology platform designed to bring Mass Spec out of the confines of central laboratories and to the point-of-need. Our technology platform democratizes the Mass Spec market with high-fidelity handheld and desktop devices. We believe this democratization gives rise to:

- an expanded and more diverse set of users;
- more frequent measurements; and
- new use cases that were previously untenable.

These results are possible as our handheld and desktop devices are designed for extreme convenience and speed, requiring minimal training and maintenance. Our platform uses proprietary microscale Mass Spec and microfluidic technologies to prepare, separate, and characterize species at the molecular level, with integrated machine learning and analytics to automatically provide answers regarding identity, purity, and quantity. The core elements of our technology platform include:

- Our High-Pressure Mass Spec, or HPMS, approach enables Mass Spec at the point-of-need
- microfluidics enable convenient sample preparations and fast separations; and
- analytics and machine learning technology provide actionable answers versus raw data.

HPMS Approach Enables Mass Spec at the Point-of-Need

A key component of our technology is our proprietary microscale ion trap, which we estimate is 1,000 times smaller than those in conventional laboratory Mass Spec instruments. These microfabricated traps are able to operate a million times closer to atmospheric pressures than conventional Mass

Spec instruments. This HPMS approach results in devices with dramatically smaller size and lower cost-of-goods through a reduction of vacuum pump requirements and power consumption, and an overall simplification of the hardware topology.

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Conventional laboratory Mass Spec

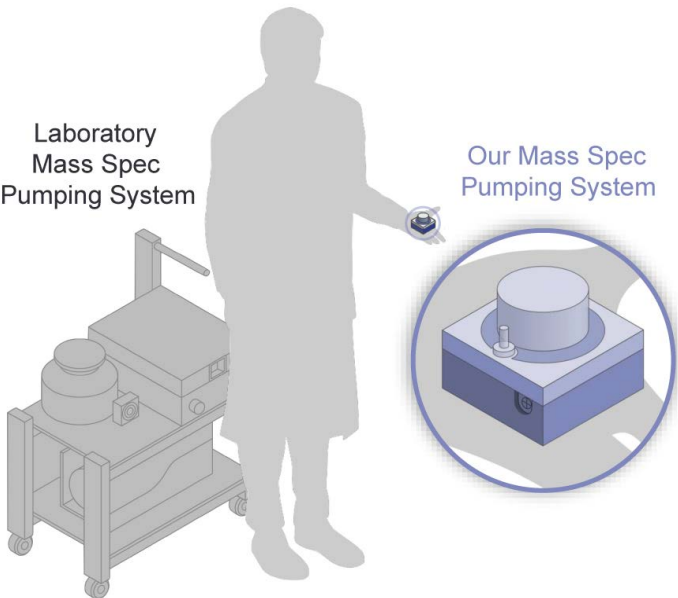
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Our Mass Spec

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HPMS allows us to build ultracompact, high-fidelity measurement devices that are purpose-built for specific applications and deployable at the point-of-need. HPMS allows us to circumvent the complexities associated with the conventional and much larger, general-purpose, central laboratory Mass Spec instruments.

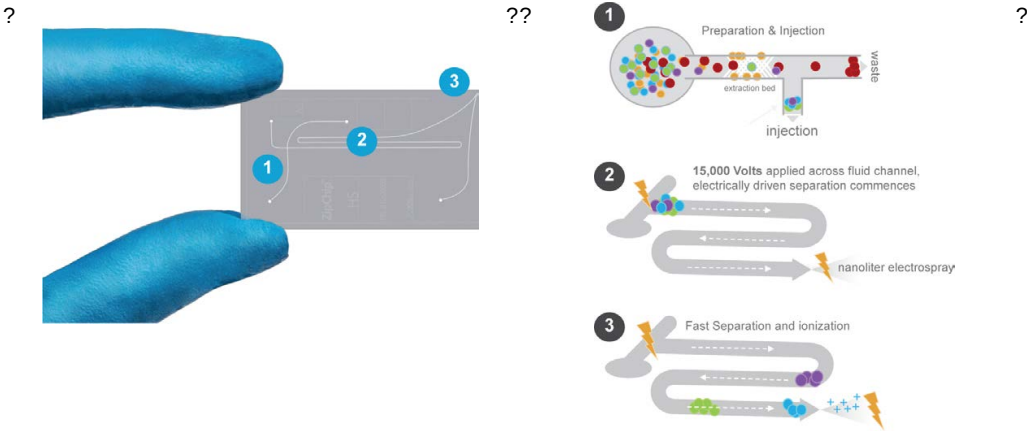
Our technology operates at size and cost scales that are multiple orders of magnitude smaller than conventional mainframe laboratory instruments. And while large, expensive, high maintenance vacuum systems have been a historical requirement for Mass Spec, our HPMS approach is capable of running with extreme efficiency on very small, robust, low-cost scroll pumps of our own proprietary designs. Our technology requires significantly less power than a 20-watt light bulb, allowing for up to 100x lower power consumption when compared to a competing product. The flexibility afforded by our approach provides access to existing and new market segments that were previously inconceivable for conventional Mass Spec instruments. We believe the insights and answers our devices provide will accelerate workflows, reduce costs and offer transformational opportunities for our end users.



Microfluidics Enable Convenient Sample Preparations and Fast Separations

Today, most central laboratory Mass Spec instruments are paired with large, complex solid and liquid handling systems for sample preparation and separation. Common examples include liquid chromatography stacks and robotic sample preparation systems. These systems are engineered for general applications and require large quantities of solvents, high level of maintenance, and expertly trained users, leading to higher operating costs.

Our approach integrates proprietary microfluidic sample preparation, separation, and ionization technologies on a single chip that can be produced efficiently at scale using semiconductor microfabrication techniques. These microfluidic chips can be paired with our microscale Mass Spec technology to create devices with extraordinary performance that are accessible and usable at the point-of-need by non-experts.



Our integrated microfluidics—sample injection, preparation, separation and electrospray simplified

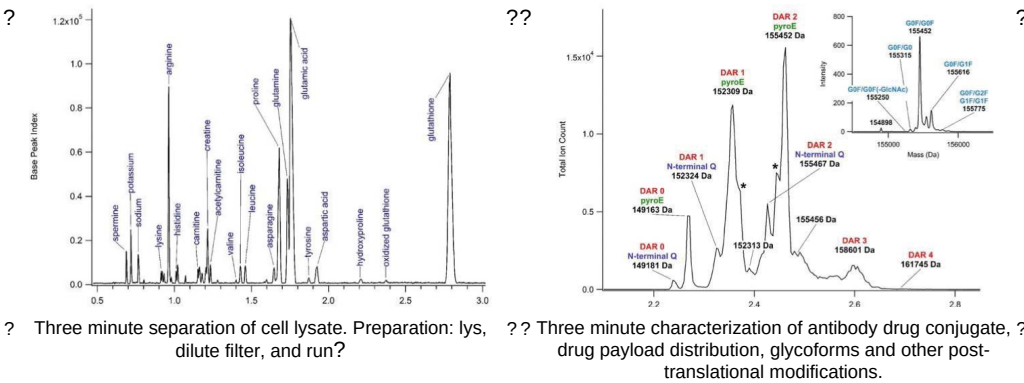
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Our integrated microfluidic chip brings the benefits of:

- highly controlled small sample injections at the nanoliter, or nL, scale;
- integrated preparation such as desalting;
- extractions and preconcentration by physical and chemical properties;
- capillary electrophoresis, or CE, for extremely high-resolution separations of complex samples; and
- integrated nanoscale electrospray ionization.

The integrated microfluidic CE can perform extremely high-performance separations of a wide range of molecular species from small molecule metabolites, amino acids, and vitamins, to intact antibodies and other proteins. Importantly for our platform, microfluidic CE is *electrically* driven and requires no bulky liquid pumping and valving systems. The microfluidic chip consumes only 100-200 nL of electrolyte per minute making it remarkably efficient with source and waste fluids. Microfluidic CE separations can be an order of magnitude or faster than similar chromatography separations. This allows for highly complex separations with high resolution to be completed in minutes.

Examples shown below illustrate the versatility of our microfluidic CE chip and include separation of cell lysate with minimal sample preparation and a highly detailed characterization of an antibody drug conjugate:



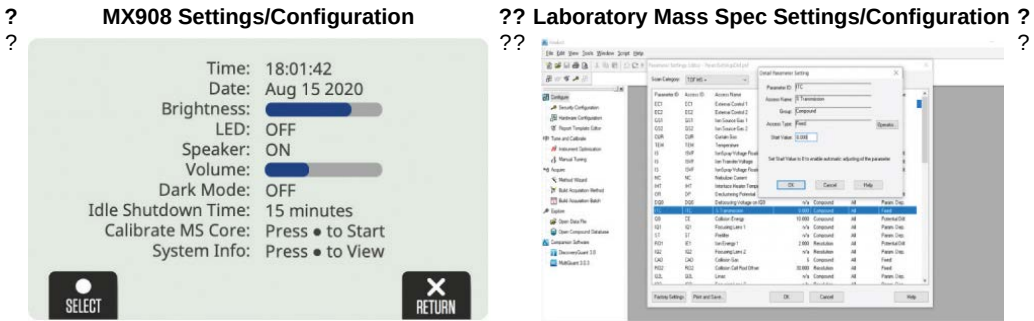
Faster high resolution separations attainable in minutes using our microfluidic CE chip

Analytics and Machine Learning Technology Provide Actionable Answers, Not Just Raw Data

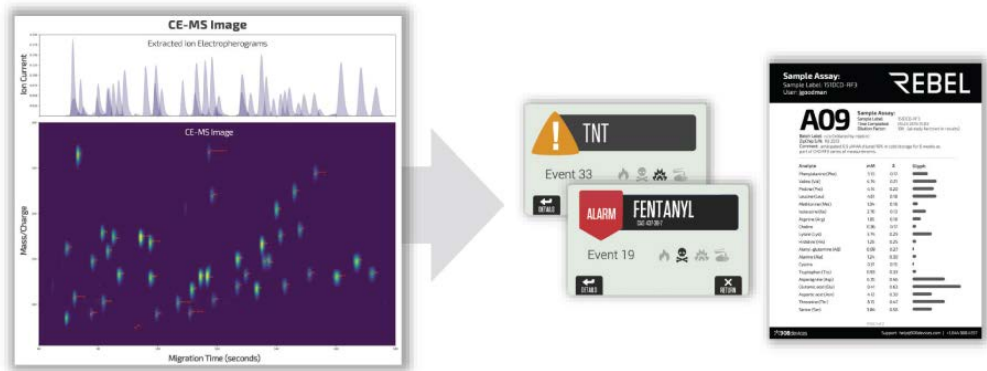
The third crucial element of our technology platform is holistic device design with embedded analytics and machine learning. Our development team designs devices for a *specific purpose*, rather than for a *wide scope of often disparate needs*. Conventional Mass Spec manufacturers focus their attention on canonical analytical specifications such as “instrument resolution” or “detection limit” or “data rate” in the hopes of appealing to a wide range of laboratory specialist needs. Our devices are designed to do a job quickly, easily, and cost effectively. Achieving that aim requires very sophisticated autonomous and adaptive control systems and the machine learning engine to interpret the data and produce a clear, accurate result.

Control/optimization: Conventional Mass Spec configuration and tuning is highly complex. An example of such a configuration panel is shown on the right below. Our devices need to manage themselves autonomously for maximum value to the customer. They can manage themselves by adapting to environmental factors like elevation, humidity, temperature, and vibration, and by optimizing themselves for the analytical objectives of the user, such as looking for traces of potent drug substances or sniffing for airborne hazards. This ability to automatically control the system reduces or eliminates the user’s responsibility and opportunity for error in set up, optimization, and troubleshooting. Our product’s “settings” screen shown below on the left looks very simple, but the embedded analytics and machine learning system controls and optimizes more than a hundred parameters continuously in real-time.

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Machine learning/embedded analytics: The integrated analysis of our platform's data is also critical to our customers' success. Conventional platforms may give the user basic tools to view data, and some limited analysis functionality, but they fall far short of completing the analysis loop. "Out of the box" machine and statistical learning methods are not really applicable to complex analytical sensor data and real-life molecular systems. Our data team has a commercial track record of embedding a "scientist in the box" with highly customized statistical and machine learning methods for our platforms to complete the customer experience. Several examples of these elements are highlighted below in the "Our Products" section.



Our devices are designed to provide fast, statistically-rigorous answers by providing autonomous control systems and applying rigorous machine learning methods.

Our Products

We were founded on a vision to deliver high quality Mass Spec to a broad set of users at the point-of-need. We offer handheld and desktop devices, each of which are capable of providing quick, high-fidelity and actionable results. These aspects are important to our customers, who previously have had to choose between a slow and thorough analysis by Mass Spec in a laboratory or a point-of-need result that may have been more timely but provided only a partial measurement picture prone to false-positives. For instance, forensics customers who do not have access to laboratory-based Mass Spec instruments have at best had access to the field techniques of Ion-mobility spectrometry and Raman/FTIR spectroscopy, each with its own severe limitation of specificity (ability to distinguish one chemical from another) and sensitivity (ability to detect minute amounts), respectively. Our bioprocess customers have likewise only had access to a cropped measurement picture by largely relying on simple enzymatic and electrochemical sensors that can measure just a few simple gases and other analytes with poor accuracy. Our devices are changing this paradigm and providing laboratory-like results at the point-of-need.

MX908®

Launched in June 2017, MX908 is a handheld, battery-powered, Mass Spec device designed for rapid analysis of gas, liquid and solid materials of unknown identity. It is an agile, multi-purpose device utilized by a wide spectrum of user segments for a variety of forensic field applications such as chemical, explosive, priority drug and HazMat operations, detecting materials at the trace level.

We have sold approximately 1,000 MX908s into every U.S. State, in 32 countries and across five continents. More than 4,000 operators, including in numerous domestic and foreign government agencies, have been trained to use the MX908.



When a civilian or military first responder, customs agent, or front-line worker is presented with residue on a package, a powder in the ER, pills at a border crossing, an apparent overdosing individual, or a mass casualty event, immediate actionable information is needed. The U.S. opioid crisis in particular is driving demand for broadly capable point-of-need measurement devices that can detect a multitude of hazards at trace quantities.

The MX908 detects trace quantities of more than 100 named dangerous materials, including fentanyl and its many derivatives, explosives, and hazardous chemical agents with sensitivity comparable to existing field-based technologies, but with much higher specificity. This allows users to conduct rapid field analysis for a broad range of unknown substances at trace levels that would typically lead to confusion and false positives in other instruments. The device is also able to identify a far greater number of substances than other trace technologies and with one million times the dynamic range of those other handheld or mobile technologies. Compared to a leading transportable Mass Spec product, the MX908 is up to 15x faster, up to 10x smaller and up to 2x cheaper. The MX908 is able to start up in less than a minute, completing analysis of gas and vapor materials in less than ten seconds, and solids and liquids in less than a minute.

The MX908 was designed to operate in harsh outdoor environments such as pervasive rain and dust, and scorching to freezing temperatures in a nimble 4.3 kg (approximately 10 lb) handheld form factor. Our systems also undergo extensive mechanical shock, drop, vibration, and environmental testing as part of the development and certification process.

Designed with the non-technical user in mind, the user interface on the MX908 requires no Mass Spec knowledge for navigation, operation or interpretation of results. The MX908 user interface is very mission driven. These mission modes provide a categorization of functionality, allow the device to guide operators through proper procedures with visual cues, and present results in a manner most relevant for that operational intent. The mission modes also allow the software to optimize the *hardware* operation of the MX908 to maximize sensitivity and specificity for a given class of chemicals, much as a laboratory chemist would do by changing the settings on their conventional Mass Spec.

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The MX908's machine-learning software, enabled by our proprietary technology platform, serves as a critical element of the device. For example, one of the challenges associated with analyzing fentanyl derivatives is that there are potentially thousands of pharmacologically-active variants for this same compound. However, MX908 is pre-programmed to evaluate against the dozen most common fentanyl variants and is then able to utilize a machine learning classifier to look for characteristic mass fragment loss patterns that are suggestive of the more than 2,000 fentanyl analogs.

Since introducing the MX908, we have continued to expand the device's capability through mission add-ons via software updates, and we will continue to do so as we expand the product's capabilities. We are currently working to expand the MX908's mission add-ons to support the detection of adulterated and counterfeit pharmaceuticals, detection of pesticide residues, and applications in quality control and quality assurance such as raw material purity and GxP cleaning validation.

Services and Consumables

Our MX908 comes with a standard warranty for up to one year from purchase. Our customers also can purchase extended warranty service plans, which include hardware repair and replacement coverage, technical support, and software updates. We designed the MX908 to be intuitive and easy-to-use, while ensuring that the MX908 is operating as it is intended is critical to our customers. The annual and extended warranty service plans provide the customer the ability to contact us to assist in validating their results given the severity and context of the situations in which our devices operate. Our technical support, also known as our Reachback program, allows any participating MX908 user to email, text, or call a 908 Devices Scientific Support Team member to receive support 24 hours per day, 365 days per year to ensure the MX908 is working as intended. The Scientific Support Team is staffed by M.Sc. and Ph.D. chemists and forensic scientists expert in the operation of the MX908 and other field analytical technologies. Our extended warranty service plans are sold with multiyear commitments, which allows us to deepen our relationship with customers and provides us with an upfront payment, a predictable recurring revenue stream, and an opportunity to offer additional future services. In the first nine months of 2020, over 75% of our MX908s were purchased with an extended warranty service plan.

For simplicity and convenience, we also sell single-use swab samplers for the analysis of liquid and solid materials. These swab samplers are most heavily used today by customers who are evaluating drug substances. However, we designed the MX908 so that it does not require swab samplers or any other consumables for a number of other applications. Our customers value the low-logistics tail of our MX908.

Rebel™

The Rebel is a small desktop analyzer providing real-time information on the extracellular environment in bioprocesses. Compared to a traditional central laboratory high-performance liquid chromatography, or HPLC, Mass Spec assay, Rebel's price per sample is up to 10 times lower, at approximately one-third of the capital cost, and delivers answers up to 2,000 times faster. Rebel provides results within seven minutes, enabling critical on-the-spot decisions regarding bioprocess media

optimization, accelerating process-development cycles and maximizing bioreactor efficiency. Customers are using Rebel in environments subject to FDA and other regulatory guidelines regarding biological and pharmaceutical product quality, or GxP environments, to evaluate fresh media for conformity to standards, track the extracellular environment and metabolic flux during growth cycles, monitor performance during stress experiments, and characterize spent media.

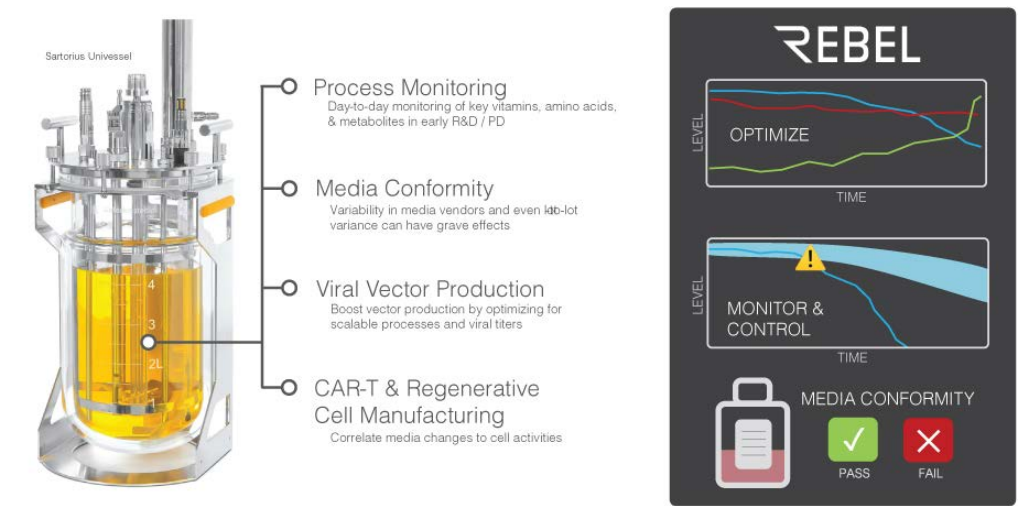


Since the launch of the Rebel in November 2019, we have sold 31 units and 13 of those units have been placed with some of the top-20 pharmaceutical companies by revenue. Three organizations have already purchased multiple units. Our focus has been on increasing U.S. placements, but we also have a meaningful international opportunity and have recently sold Rebels in China, Japan, and Europe.

Cells have been harnessed to serve as microscopic factories producing myriad molecular species large and small. The markets for cellular-derived products include therapeutics, including cell therapy and personalized medicine, new and sustainable foods and beverages, and industrial materials. Many of these products, such as protein-based therapeutics, can only be economically produced by cells in a bioreactor. Making these products in an efficient and reproducible way remains a challenge to our customers in bioprocessing. Cell culture media forms the critical growth environment for the cell. Our

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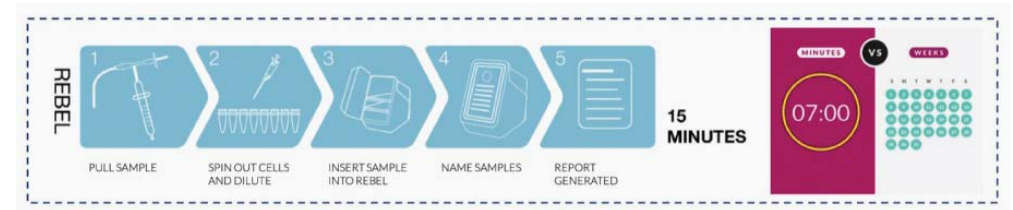
customers’ measurement of this extracellular environment in bioprocesses is critical to their development and operational efficiency.



However, it is rare that researchers conducting these types of experiments have analytical tools for extracellular media characterization on their local bench, which means samples need to be frozen, packaged, and transported to core laboratories for analysis with large HPLC Mass Spec instruments. This adds substantial delays and cost and typically takes three to six weeks to produce lab reports equivalent to those produced by the Rebel in only 15 minutes. The following graphics illustrate the complexity and processing time of a traditional HPLC Mass Spec analysis compared to the Rebel process.



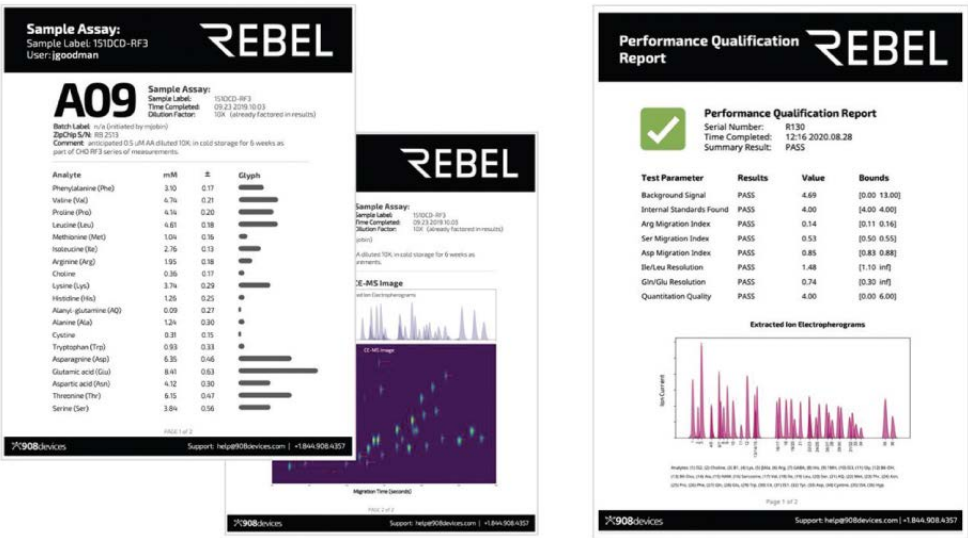
Rebel is currently configured to report concentrations of 32 critical extracellular metabolites in cell culture media, such as amino acids, vitamins, and biogenic amines, which are known to substantially affect the growth profile and properties of the resulting biological entities and their expressed materials. Incorporating our microfluidic sample handling and CE technology, as well as our microscale Mass Spec technology, Rebel’s internal autosampler is capable of queueing approximately 96 such samples for unattended analysis and delivering reported concentrations for each sample.



A fit-for-purpose at-line system, the Rebel is designed to be located within the same laboratory as a bioreactor, enabling more frequent monitoring of key cell media parameters. To run this analysis, the Rebel requires as little as one microliter of cell culture media with little sample preparation. This allows customers to run more tests while preserving precious cell culture media, which is extremely valuable for small batches as used in cell therapy and personalized medicine.

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The Rebel, using its onboard algorithms, eliminates the need for manual calibration and delivers processed and actionable results in real-time. As runs are completed, users can access the report either as a PDF print out or a laboratory information system compatible file exported to the network. The Rebel software is compliant for operation in GxP environments.



Consumables and Services

- Rebel's operation requires a consumable kit that includes:
- one microfluidic preparation and separation chip;
 - diluent electrolyte for samples, including internal standards;
 - background electrolyte for separation; and
 - performance qualification and calibration standards.

Currently, customers of Rebel are consuming on average one kit per month. With continuous operation, the Rebel is capable of consuming approximately one 200-sample kit a day.

We also offer an annual certification kit and service plan. The certification kit is shipped to the customer, who loads the provided samples, and executes a certification protocol. The system is remotely qualified and certified based on the data acquired meeting factory specifications.

Annual and extended warranty and service plans are available for the Rebel.

ZipChip

Our ZipChip solution is a plug-and-play, high-resolution separation platform that optimizes Mass Spec sample analysis. Our ZipChip platform consists of a ZipChip Interface, which is installed into a conventional Mass Spec instrument, and consumable microfluidic chips, or ZipChips. We designed this technology to be compatible with third party Mass Spec instruments. Powered by our integrated microfluidic technology, the ZipChip platform allows researchers to consolidate a host of time-consuming biotherapeutic, metabolomic, and proteomic applications typically run on multiple instruments

or configurations onto a single platform. With ZipChip, researchers can switch applications in minutes, instead of hours typical with an alternative such as liquid chromatography.



Leveraging our data analytics capabilities, we have also incorporated an automated software solution called DARWIN to expedite the analysis of the ZipChip and Mass Spec data for proteins and biotherapeutics. DARWIN eliminates most of the manual choices, selections, and decisions encumbering typical analysis software and directly and rapidly reports identified species, modifications and relative abundances.

Since launch of the ZipChip platform, we have sold more than 150 ZipChip Interfaces and have established 17 multi-unit accounts in leading, global pharmaceutical organizations and academic institutions. Our ZipChip platform is compatible with market-leading conventional Mass Spec instruments currently installed in laboratories, and we intend to continue to expand the ZipChip platform to become compatible with any conventional Mass Spec instrument.

As an open-access discovery platform that can interface with more than 10,000 conventional Mass Spec instruments, ZipChip provides us the ability to leverage the growing list of newly established applications and publications from customers who have incorporated the device into their projects. By incorporating select assays investigated on the ZipChip by customers into our MX908 and Rebel devices, we can create an evolving pipeline of new customer-driven, point-of-need Mass Spec applications as the scope of analytes our devices can detect and analyze will continue to expand. We have already incorporated a number of the customer-driven assays in our MX908 and Rebel devices, and we are investigating several more for our future product pipeline.

ZipChip Consumables

We offer a variety of kits for the ZipChip Interface that include microfluidic ZipChips and different reagents optimized for a wide scope of applications. These kits include intact antibody, metabolomics, peptide and others. We also expect to grow our revenue from warranty and annual certification related to the ZipChip platform as the product sales expand.

Market Opportunities

We have developed ultracompact, high-fidelity Mass Spec devices to interrogate the unknown and invisible and provide actionable results in critical-to-life point-of-need applications. Our first products are purpose-built handheld and desktop Mass Spec devices that currently address a range of applications and markets. We estimate our TAM for our devices to be \$4.8 billion in 2020 growing to an estimated \$22 billion over the next five years. The TAM for our handhelds is estimated to be \$1.5 billion in 2020 with expansion to over \$3 billion with software application extensions into GxP facilities for raw material inspection, counterfeit and adulteration inspection, contamination and cleaning validation, and other quality assurance and quality control assays. Our desktop devices supporting bioprocess development represent a total addressable market of \$260 million in 2020 expanding significantly to approximately \$12 billion with execution of our roadmap and the rapid growth of cell therapy. We see additional future opportunity to address \$3.0 billion in 2020 across the laboratory chromatography market space growing to more than \$6.9 billion with further market growth and roadmap expansion into complex

proteomics by 2025. Our estimates of our TAM are based on potential customer research and development spending, addressable aspects of potential customers’ end product development process, and potential platform usage. We also utilize estimated penetration and placement rates for our platform with potential customers in our target markets and historical patterns for consumables usage.



Our TAM for all device placements in 2020 and expanding in 2025 with product roadmap and market growth.

Our Initial Market—Field Forensics

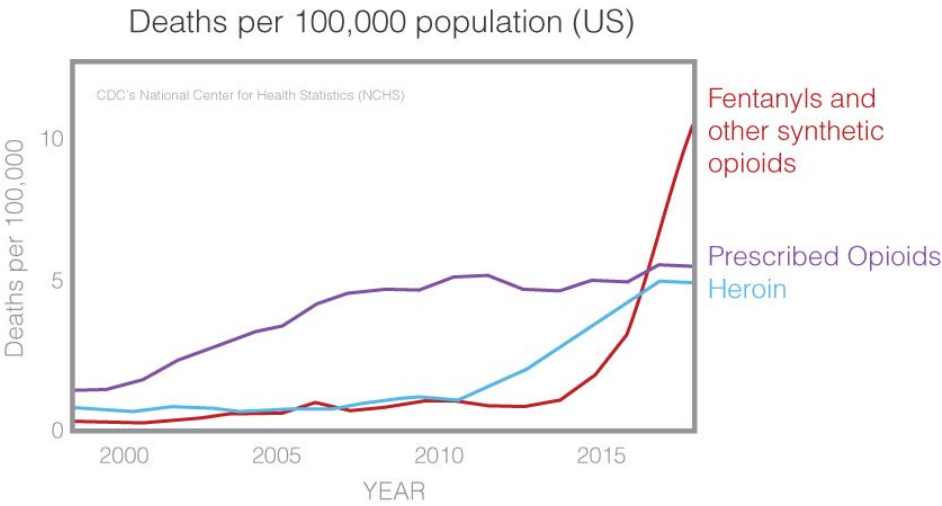
Forensic labs have historically used conventional Mass Spec instruments to chemically analyze a diverse array of submitted samples. Testing for controlled substances is one of the major drivers for the use of Mass Spec in the field forensics setting. According to the latest available data from the Bureau of Justice, U.S. criminal forensic laboratories handled approximately 4 million requests, roughly 1.2 million of which were controlled substances-related. We believe that this increase in requests will be even more acute for the point-of-need setting.

In the field forensics setting, high accuracy and fidelity can be just as important at the point-of-need as it is in the laboratory. Simple and inexpensive colorimetric tests are being abandoned in many jurisdictions due to their extremely narrow and poor performance capabilities, in favor of handheld technologies with broad lab-like capabilities. This is creating an expanded market of individual users that is a multiple of the centralized laboratory Mass Spec instrument market.

The need for such field technologies is acute for controlled substances and identification of other priority chemicals and hazards at trace levels. The toxicity of fentanyl and its analogs is 100 to 10,000 times the potency of morphine, creating an opioid crisis of unprecedented scale and breadth. Drug overdose deaths saw a significant increase during the first few months of 2020. Preliminary data from the U.S. Centers for Disease Control and Prevention, or CDC, shows that overdose deaths have increased by about 10%, with the CDC estimating the country could see more than 75,500 drug-related deaths this year. The CDC estimates that the total economic burden of opioid abuse in the United States is \$78 billion a year. More than \$35 billion in counter drug initiatives is being budgeted for fiscal year 2021 by the United States alone.

The potency and diversity of these emerging classes pose a major challenge for point-of-need measurements, as depicted in the graph below. Near invisible quantities of opioids can be fatal, and street drugs are often heavily obscured with filler materials, making trace detection with high-fidelity

technologies an imperative for success. The diversity of the problem also drives the need for agility with devices that can be rapidly updated in the field with new machine learning updates. There are thousands of variants of these highly potent opioids, and other emerging classes such as cathinones and cannabinoids that will further exacerbate the problem.



In addition to controlled substances, point-of-need Mass Spec instruments can address a wide variety of other use cases, including:

- first responders and local, state, and federal law enforcement;
- U.S. and international defense and homeland security;
- forensic laboratories' case management and triage;
- package inspection for postal services, couriers, customs agencies, and corporate mail rooms;
- facility safety for hotels, local, state and federal government facilities, and private enterprises;
- and
- quality assurance and control.

We estimate that the TAM for our handhelds is \$1.5 billion per year in 2020 for trace detection of drugs, explosives, priority chemicals, and other hazards on surfaces and in the air. Our TAM expands to over \$3 billion with use cases in GxP facilities for raw material inspection, counterfeit and adulteration inspection, contamination and cleaning validation, and other quality assurance and quality control assays. These use cases would be accessed through release of additional software apps or mission modes for our base hardware.

Life Sciences

Mass Spec addresses a significant number of applications along the life sciences research and biopharma value chain. It is integral in research and discovery, drug development, product validation and quality control. Biologic therapeutic modalities and all cell-based products more broadly, use bioreactors to manufacture product in two stages—process development and clinical and GXP manufacturing.

Within a cell, thousands of intertwined processes govern the cells ability to produce various proteins, its ability to perform a specific function, and its energy and waste expenditure. But efficient intracellular operations are also highly reliant on the *extracellular* environment—the cell culture media. In bioreactors, the timely influx of raw materials, environmental controls, and management of waste can be not only essential to efficiency, but literally to the life or death of the cells. The worldwide cell culture media market itself is estimated to be a \$2 billion business in 2020. Regardless of how carefully the starting cell culture media has been designed and selected, bioprocessing is by definition a dynamic and inhomogeneous process. Cellular biology is complicated and unpredictable.

Due to issues with both the existing point-of-need solutions and alternative laboratory-based workflows, development scientists currently lack an ideal solution to accurately analyze the extracellular environment during or after the growth cycle without having to compromise between timing or completeness.

Democratization of Mass Spec will allow for significant efficiencies and new applications for the technology within life sciences. With real-time access to comprehensive media profiles, bioprocess development scientists can:

- accelerate their product development cycles with feedback in minutes rather than weeks;
- improve process yield and lower costs throughout their value chain;
- enable a broad range of complex therapeutic modalities in biopharmaceuticals; and
- increase the probability of successfully developing cell-based products.

We believe these efficiencies will lead to substantial growth opportunities in biologic-based therapeutics where a better understanding of the extracellular environment is a crucial element of bioprocessing.

For antibody therapeutics, a key requirement is that monoclonal production cell lines not only produce high titers of antibody but with acceptable Critical Quality Attributes, or CQAs. The extracellular media properties can greatly impact both the titer and the CQAs of the produced antibody. Likewise, for cell and gene therapeutics, management of the complex mammalian cell culture system and measurement and control of the extracellular environment is crucial. Historically, bioprocessing has been focused on large-scale batched production of monoclonal antibodies, or mAbs, using genetically stable clones, whose production has largely been optimized over many years of refinement. Today, newer advanced modalities, like cell and gene therapies, are fueling growth in the market while introducing variability of input materials (e.g., patient or donor cells, transient transfected cell lines), higher cost of goods sold, and the necessity for small-batched production?—?driven by smaller patient populations and the need to scale out. This change is driving manufacturers toward increased monitoring and optimization at a level of intensity beyond what is seen historically.

End market sales of biologics across mAbs, cell, and gene therapies are estimated at \$150 billion in 2020, growing to approximately \$250 billion by 2025 at a 11% compounded annual growth rate according to third party reports and analyst sources. While mAbs are forecasted to continue to dominate end-product sales in 2025, it is estimated that the pipeline of cell and gene therapies will be nearly 6,000 assets, representing more than 50% of the total biologics pipeline. A massive expansion of global bioprocessing capacity is underway to accommodate the needed small batched production. We estimate Rebel's TAM to be \$260 million in 2020, representing more than 1,700 device placements and 1.6 million media tests to support process development, and is expected to expand to approximately \$12 billion TAM by 2025 with the execution of our roadmap and the rapid growth of cell therapy.

Our product development roadmap for the Rebel platform includes the extension of current capabilities and move to an online and, ultimately, a real-time "bioreactor brain". In process development today, smaller scale bioreactors are outfitted with a variety of disconnected multi-party simple sensors and controllers. With the increasing trend toward highly parallelized systems with many small-scale bioreactors running simultaneously, manual sampling becomes a significant bottleneck. The roadmap expansion of Rebel's analyte panel to address core culture kinetics (e.g., glucose, lactate, ammonium, pH, dissolved oxygen) and attributes like cell count, and viable cell density means that this future online Rebel system could have a uniquely comprehensive assessment of the present state and trajectory of the extracellular environment. Historical data profiles across parallel bioreactors and designed experiments form an excellent basis for machine learning and multivariable predictive control to optimize experimental variables to maximize yield, minimize risk of loss, and improve kinetics?—?the "bioreactor brain". An outsize portion of this opportunity is driven by testing in autologous cell therapies and is commensurate with the total expected cell batches produced.

Future Market Opportunities

The fastest and most convenient way to explore new applications incorporating our platform technology is through interfacing with a conventional general-purpose laboratory Mass Spec instrument. Our laboratory interface connects our proprietary microfluidic chips, called ZipChips, to conventional

Mass Spec Instruments, in a simple and customer friendly manner to form a discovery platform. Our research customers incorporate our ZipChip Interface into their projects due to its preparation convenience and separation speed. These customers prove-out new assays spanning a range of markets from diagnostics to consumer health and beauty, to agrochemical, oil and gas, and defense. They measure such things as novel therapeutics, metabolites, and quality and process attributes, and explore complex proteomics. We estimate our ZipChip platform is able to address \$3.0 billion in 2020 across the research chromatography market space growing to more than \$6.9 billion with further market growth roadmap expansion into complex proteomics by 2025. The resulting pipeline and market multiplier for subsequent point-of-need products has not been considered and may be significant.

Customers

We sell our products worldwide through an experienced direct sales force as well as through domestic and international channel distribution partners. Representative organizations using our products in each of our primary markets are as follows:

Pharma/Biotech:

? • Amgen Inc.	??• Merck & Co. Inc.	?
? • Biogen Inc.	??• New England BioLabs Inc.	?
? • Bristol-Myers Squibb Co.	??• Nucleus Biologics, LLC	?
? • Dana-Farber Cancer Institute	??• Teva Pharmaceutical Industries	?
? • Lonza Group AG	??• Transcenta Holding Limited	?

Government:

? • Federal Emergency Management Agency Center for Domestic Preparedness	??• United States Department of Homeland Security	?
? • The National Institute for BioProcessing Research and Training	??• United States Marine Corps	?
• The National Institute for Innovation in Manufacturing Biopharmaceuticals	• U.S. Centers for Disease Control and Prevention	
• United States Army	• U.S. Food and Drug Administration	

Academia:

? • Boston University	??• North Carolina State University	?
? • Duke University	??• University of Kentucky	?
? • Johns Hopkins University	??• University of North Carolina-Chapel Hill	?

Manufacturing and Supply

Our manufacturing strategy has two components: to outsource subassemblies or assemblies to domestic contract manufacturers where it is cost and capital favorable, and to use our internal manufacturing facilities for the balance of our production needs. Our in-house manufacturing facilities are located at our headquarters in Boston, Massachusetts. These facilities are ISO 9001:2015 certified and include approximately 5,100 square feet of configurable production assembly floor, 1,800 square feet of advanced machining space, and 2,000 square feet of configurable cleanroom. Inventory is held in our Boston facilities in a 700 square foot controlled-access cage.

Devices

The MX908 and Rebel are manufactured, tested and shipped from our Boston facility. Several custom components of the MX908 and Rebel are fabricated by third party suppliers, including printed circuit boards and cables, and metal and plastic mechanical components. The assembly of technology-sensitive components such as our proprietary vacuum pumps and ion trap/ionization module is completed in-house.

Currently, our Boston manufacturing facility is capable of supporting the production of approximately 2,000 MX908 and Rebel units combined per year. When our annual sales exceed 2,000 MX908 and Rebel units, we expect that we would need to either expand our in-house production operations, or transfer some or all aspects of MX908 and/or Rebel assembly to contract manufacturers, to accommodate larger run-rates. We believe there are numerous domestic and international contract manufacturers that could be qualified to produce the MX908 and/or Rebel when third-party demand for our products outpace our current manufacturing capacity. The autosampler subassembly of the Rebel is supplied by a single supplier, Spark Holland B.V.

Volume manufacturing of the ZipChip Interface is outsourced to Columbia Tech, an ISO 9001 wholly-owned subsidiary of Coghlin Companies, Inc. Our Boston facility can and has manufactured ZipChip Interfaces on demand. Typically, upon the launch of a ZipChip Interface that is compatible with a particular conventional Mass Spec instrument, we manufacture and test initial devices at our facility, before transferring production to our contract manufacturer. We maintain resources to handle all warranty and service of our installed base and, if required, these resources are capable of manufacturing ZipChip Interfaces. The final testing and shipment of ZipChip Interfaces are completed from our Boston facility.

We are continuously evaluating and updating our supply chain to ensure our ability to respond to customer demand for our products. For example, we have relationships with a number of machine shops and electronics suppliers that can provide components for our devices, including components currently provided by a single source. We plan to continue the diversification of our supply chain as we scale. We use our annual demand planning to assess initial device needs for each year, and we update and reassess those estimates as needed, including with respect to the levels of inventory that we believe will be required to support anticipated customer demand.

Consumables

The MX908 incorporates a number of non-proprietary consumables that are commercial-off-the-shelf available and sourced from a number of reputable suppliers. Sampling swabs that are used for the analysis of liquid and solid materials in the MX908 are currently single-sourced from DSA Detection. While we believe that alternatives are available, it would take time to identify and validate replacement swab samples, which could compromise our ability to supply these to our MX908 customers on a timely basis.

Consumable kits for the Rebel and ZipChip Interface include electrolytes, standards, and microfluidic chips. All assay kits and standards are assembled in our Boston cleanroom facilities. Component reagents and standards are widely available from multiple suppliers. Our microfluidic chips are produced and assembled in our Boston cleanroom facilities. The substrate is supplied by Micronit Microtechnologies B.V. While we believe that alternative suppliers would be available, it would take time to identify and qualify alternate suppliers and transfer design requirements to them, which could negatively affect our ability to supply these chips to our Rebel and ZipChip customers on a timely basis.

Sales and Marketing

We distribute our devices and consumables via direct field sales and support organizations located in North America and through a combination of our own sales force and more than 25 third party distributors in domestic and international markets which include Australia, Canada, China, Czech Republic, Germany, Japan, Singapore, Turkey, and the United Kingdom. In North America, we use distribution partners to provide our products to end customers where a contract vehicle is required. Since the commercial launch of our first handheld, the installed base of our devices has grown to more than 1,200 devices across 32 countries.

Our domestic sales force and international partners inform our current and potential customers of current product offerings, new target applications, and advances in our technologies and products. As our primary point of contact in the marketplace, our sales force focuses on delivering a consistent marketing message and high level of customer service, while also attempting to help us better understand the evolving market and customer needs.

As of September 30, 2020, we had 29 people employed in sales, sales support and marketing, including five technical field application scientists. This staff is located in the United States and we

have two consultants working internationally to support our sales and applications efforts. We intend to significantly expand our sales, support, and marketing efforts in regions with a concentrated life sciences presence, including large pharmaceutical and biopharma companies. For example, we plan to establish a direct sales footprint in Europe, and to develop a distribution and support network in China. Additionally, we believe that there is significant opportunity in other Asia-Pacific countries such as India and South Korea as well as other areas such as Australia and South America. We plan to expand into these regions via initial penetration with distributors and then subsequent support with direct sales and support personnel.

Our business model is focused on driving the adoption of our products and maximizing use across our customers' value chains. This is enabled through customer trials and partnerships that allows us to further understand the critical applications for our technology and inform our future developments and market expansion.

Our MX908 devices often are sold to governmental institutions and other customers that require participation in a tender process that involves preparation of extensive documentation and a lengthy review process. As a result of these factors, and the budget cycles of our customers, our sales cycle can often be six to twelve months, or longer. Our Rebel devices are relatively new to the life science marketplace and require a capital investment by our customers. The sales process typically involves numerous interactions and demonstrations with multiple people within an organization. Some potential customers conduct in-depth evaluations of the system, including running experiments at our Boston headquarters and comparing results from alternative systems and technologies.

Service and Support

We offer warranty and extended warranty service plans, as well as on-site training, in order to improve customer adoption of our products. Support under warranty and extended service contracts include the following:

- *Technical support.* Customers can call a hot-line number 24 hours per day, 365 days per year for support on issues ranging from questions on proper usage of the device, to assistance in interpretation of chemical spectra to ensure the device is working as intended. We refer to this support as our Reachback program.
- *Software updates and library updates.* We periodically release updates to the embedded software in our products. These updates will ensure the ongoing functionality of our products and repair defects in the software. We also release updates and additions to our library of spectral images enabling identification of additional chemicals.
- *Warranty.* Our MX908 and ZipChip Interface devices are covered under a return-to-factory warranty model for repairs. Depending on availability, loaner units are made available to minimize downtime with our customers.

We provide training at the customer's location with the initial purchase of our devices. Each training event is between four to six hours and covers device functionality and hands-on training with the device. At the conclusion of the training, certificates are issued for all attendees. Additional training days are available on a per diem basis. For our desktop devices, we offer an advanced training and applications training to assist customers in implementing their required applications with our device.

Research and Development

Investment in research and development is at the core of our business strategy. Our research and development team is responsible for designing, developing and enhancing our products, as well as performing product testing and quality assurance activities. Members of our research and development team specialize in many functional areas including algorithms, machine learning, electrical and mechanical engineering as well as software development.

As of September 30, 2020, we had 39 full-time employees dedicated to research and development. Of these, approximately 40% have advanced degrees in engineering or the sciences. We have made substantial investments in product and technology development since our inception. Research and development expense totaled \$9.0 million in the year ended December 31, 2019 and \$6.0 million in the nine months ended September 30, 2020. We expect our research and development expense to

increase significantly for the foreseeable future as we enhance our existing products, develop new products for our current markets and introduce new products in new markets.

We consider the holistic nature of our internal product development teams critical to our products' success. Accordingly, our research and development team possesses functional expertise in critical areas such as:

- chemistry, biochemistry, physics of Mass Spec and separations and sample processing;
- embedded, desktop and mobile software engineering;
- machine learning, high-speed digital signal processing, multivariate statistical learning, algorithms and decision theory;
- user experience design and user interface design;
- mechanical engineering and industrial design;
- analog, digital and mixed signal electronics engineering;
- ultra-efficient pumping and pneumatics engineering; and
- microfluidic design, and volume fabrication at the micro- and meso-scale.

The majority of our research and development operations are conducted in our Boston facility. We also conduct additional research and development operations out of a second facility in Chapel Hill (approximately 2,000 square feet), North Carolina to support assay development for Rebel and ZipChip.

Competition

We have a range of competitors extending from small, privately held companies with single-point solutions to large, publicly-held corporations, including those with a portfolio of Mass Spec products, such as Agilent, Bruker, Danaher, Inficon, FLIR, PerkinElmer, Shimadzu, Thermo Fisher Scientific, and Waters Corp. Many of these companies have greater resources and market presence than we do.

We expect the markets for our products to remain highly competitive and dynamic and to reflect rapid technological evolution and continually evolving customer requirements. Our ability to compete successfully will depend on a number of factors including our ability to:

- offer differentiated point-of-need Mass Spec devices;
- translate market requirements into an engineering roadmap of new software and hardware features to remain competitive;
- demonstrate the value of employing our products at the point-of-need through accelerated workflows; and
- provide pro-active support and service that delights our customers.

Intellectual Property

Protection of our intellectual property is fundamental to the long-term success of our business. We believe that our continued success depends in large part on our proprietary technology, the skills of our employees and the ability of our employees to continue to innovate and incorporate advances into our products. We regard our products and the internally developed software embedded in our products as proprietary.

We rely primarily on a combination of trade secret, patent, copyright and trademark laws, as well as contractual provisions with employees and third parties, to establish and protect our intellectual property rights. Our patent strategy is to seek broad protection on fundamental enabling technologies, and layer on additional patents on specific implementations or methods of operation critical to our present and anticipated products, and to prevent competitive operation. While our expertise in signal processing and machine learning is critical to our success, we typically keep these inventions as trade secrets to avoid public disclosure. Some high value consumables have been engineered with clandestine product integrity features to inhibit duplication or counterfeiting efforts of our intellectual property. We provide our products to customers pursuant to terms and conditions that impose restrictions on use and disclosure. We also seek to avoid disclosure of our intellectual property using contractual obligations, by requiring employees, consultants and contractors with access to our proprietary information to execute nondisclosure, non-competition and assignment of intellectual property agreements. In addition, we generally control access to our proprietary and confidential information through the use of internal and external controls.

Our foundational technology in the area of miniature Mass Spec originated as an effort at Oak Ridge National Laboratories led by our Scientific Founder J. Michael Ramsey, now a Professor of Chemistry at the University of North Carolina.

As of September 30, 2020, our owned patent assets included approximately 14 U.S. patents, two pending U.S. patent applications, 11 foreign patents and six pending foreign patent applications in various foreign jurisdictions, including Australia, Canada, China, the European Union, Hong Kong, Israel, Japan, South Korea, Singapore and Taiwan. The subject matter covered by our owned patent assets includes core aspects of compact Mass Spec technology, a design for a handheld Mass Spec device, a design for a modular Mass Spec chamber, patents for multiple ionization modes and adaptive pressure operation within survey period, the determination of preferred ionization mode, adaptive resolution control, adaptive operation to reduce power consumption, and the detection of positive and negative ions. As of September 30, 2020, our in-licensed patent assets included 26 U.S. patents, five foreign patents, five pending U.S. patent application, and six pending foreign patent application. The subject matter covered by our in-licensed patent assets includes a microfabricated ionization source and a microfabricated ionizer chip, microscale Mass Spec systems, devices and related methods, a miniature charged particle trap with an elongated trapping region for Mass Spec, high pressure Mass Spec signal enhancement by means of convective transport, electrospray ionization interface to high pressure Mass Spec, a method of sample injection for chemical separations in microfluidic devices, integrated sample processing for electrospray ionization devices, and microchips with integrated multiple electrospray ionization emitters and related methods, systems and devices. Excluding any patent term extension, the currently issued 908 Devices-owned patents are expected to expire between 2032 to 2038. The currently issued in-licensed patents are expected to expire from 2020 to 2037. We do not expect any of the in-licensed patents that are set to expire in 2020 to have a material effect on our business as those patents relate to a prior design for the ion trap and we have since in-licensed new patents covering the current design.

We also seek to protect our brand through procurement of trademark rights. As of September 30, 2020, we owned seven registered trademarks in the United States, nine registered foreign trademarks, and two U.S. pending trademark applications. Our registered trademarks and pending trademark applications include trademarks for 908 Devices, Rebel, MX908, and our logo. In order to supplement protection of our brand, we have also registered several internet domain names.

Licenses

UT-Battelle

In June 2012, we entered into two license agreements, which were subsequently amended in August 2013 with UT-Battelle, LLC, or UTB, which manages and operates the Oak Ridge National Laboratory under its prime contract with the U.S. Department of Energy, pursuant to which UTB granted us an exclusive, sublicensable, worldwide license under certain patent rights owned by UTB related to Mass Spec technology to develop, manufacture, use and commercialize products, services and methods that are covered by such patent rights, or the Licensed Products, in the defined fields of use within forensics, life sciences, industrial process monitoring and food and environmental testing and safety. The patents are related to the design and operation of microscale ion traps and ion sources with flexible operating pressures, and were the first patents that enabled us to reduce the size of our Mass Spec platform. We refer to these two licenses as the UTB Agreements.

We paid UTB an upfront payment of \$5,000 in connection with executing the UTB Agreements and made a payment of \$15,000 in January 2013. In addition, we issued an aggregate of 73,750 shares of our common stock to UTB, which had an aggregate fair value at the time of issuance of approximately \$25,200. Additionally, we must pay UTB a low-single digit percentage royalty on our net sales of Licensed Products that are covered by a valid claim of the licensed patents, subject to an annual minimum royalty payment owed to UTB of \$70,000. We are also obligated to pay UTB a percentage of certain royalty income received from any sublicensees ranging from the lower- to mid-double-digit percentages. To date, we have not issued any sublicenses under the UTB Agreements. There are no future milestone payments to be made by the Company under the UTB Agreements.

We are obligated to use commercially reasonable efforts to develop, manufacture and commercialize the Licensed Products.

The UTB Agreements will continue until the expiration of the last to expire patent or last to be abandoned patent application that is licensed to us, unless terminated earlier in accordance with the terms of the UTB Agreements, which we currently expect will be in 2026. We may terminate the UTB Agreements by providing advance written notice of 60 days as specified in the UTB Agreements. UTB may terminate the UTB Agreements if we violate or fail to perform any terms of the UTB Agreements and we fail to cure such violation or failure within 90 days of notice thereof from UTB. Additionally, if we challenge the validity or enforceability of any of the licensed patents, the UTB Agreements will automatically terminate.

University of North Carolina, Chapel Hill

In June 2012, we entered into a license agreement, which was subsequently amended in April 2013 and August 2014, and then amended and restated in May 2015, which we refer to in this prospectus as the UNC Agreements, with the University of North Carolina, Chapel Hill, or UNC, pursuant to which UNC granted us an exclusive, sublicensable, worldwide license to develop, manufacture, use, and commercialize products, services and methods, covered by certain patent rights owned by UNC, including patents related to a microfabricated ionization source and a microfabricated ionizer chip.

We issued an aggregate of 110,626 shares of our common stock to UNC, which had an aggregate fair value at the time of issuance of approximately \$37,800. Additionally, we must pay UNC a low-single digit percentage royalty on our net sales of any products that are covered by a valid claim of the licensed patents, subject to an annual minimum royalty payment of \$30,000. We are also obligated to pay UNC a low double-digit percentage of certain royalty income received from our sublicensees. To date, we have not issued any sublicenses under the UNC Agreements.

We are obligated to use commercially reasonable efforts to develop, manufacture and commercialize the Licensed Products and achieve defined milestones within the UNC Agreements. There are no future milestone payments to be made by the Company under the UNC Agreements.

We are responsible for all reasonable, documented patent expenses incurred during the life of the UNC Agreements and associated costs associated with the preparation, filing, prosecuting, issuance and maintenance of all patent applications and patents included within the patent rights covered by the UNC Agreements. In addition, we have the option to exclusively license UNC rights in improvements to the license patents and related portfolio, by paying \$10,000 per improvement.

The UNC Agreement will continue until the expiration of the last to expire patent or last to be abandoned patent application that is licensed to us, unless terminated earlier in accordance with the terms of the UNC Agreements. There are current patent applications pending under the UNC Agreements so we expect the UNC Agreements will continue through at least 2037. We may terminate the UNC Agreements by providing advance written notice of 60 days as specified therein. UNC may terminate the UNC Agreements if we violate or fail to perform any terms of the UNC Agreements and we fail to cure such violation or failure within 90 days of notice thereof from UNC.

Regulations

Chemical detection, identification, and authentication technologies are of value to military, governmental, and law enforcement organizations worldwide. As a result, our products and technologies are subject to export control laws and regulations, which are imposed to ensure that sensitive technologies are withheld from unfriendly governments, terrorists or criminal organizations.

Our current products are dual-use items with both military and civilian applications. These products are subject to the U.S. Export Administration Regulations, or EAR. The EAR imposes various documentation, recordkeeping and transaction screening requirements and may impose licensing requirements for certain countries, customers, or end-use applications of our products. Applicable U.S. export regulations will continue to apply to our products and technologies even after they are exported to non-U.S. customers or to any non-U.S. subsidiaries or affiliates.

Articles, services and technologies that have certain military applications or that are designed, developed, modified or adapted specifically for military applications may be subject to the International Traffic in Arms Regulations, or ITAR. When ITAR requirements apply, they apply in place of EAR. ITAR imposes registration requirements and broader, more stringent export licensing requirements than EAR. We must determine whether ITAR or EAR governs each of our products, services, and technologies. We may assume the risk of making these determinations on our own, or we may decide to request formal governmental jurisdictional rulings.

Although our current products and services are not subject to ITAR licensing requirements, such licensing requirements could apply to our future products and services.

Under generally applicable U.S. trade regulations administered by the Office of Foreign Assets Control, or OFAC, of the U.S. Department of the Treasury, we are generally prohibited from engaging in transactions involving sanctioned countries, as well as certain persons and entities that have been designated for targeted sanctions by OFAC. EAR and ITAR also impose export restrictions targeted at identified persons and entities, and we are required to comply with these restrictions as well.

Violations of the ITAR, EAR, and OFAC requirements can result in significant fines, penalties, denial of export privileges, and even terms of imprisonment for the individuals involved.

In addition, the U.S. Food and Drug Administration, or FDA, regulates, among other things, the research, development, testing, manufacturing, clearance, approval, labeling, storage, recordkeeping, advertising, promotion, marketing, distribution, post-market monitoring and reporting, and import and export of medical devices. Our products are currently marketed as research use only, or RUO. Products such as ours that are marketed for RUO are not intended for use in a clinical investigation or for clinical diagnostic use outside an investigation and must be labeled "For Research Use Only. Not for use in diagnostic procedures." Products that are intended for RUO and are properly labeled as RUO are exempt from compliance with the FDA's requirements applicable to medical devices more generally, including the requirements for clearance or approval and compliance with manufacturing requirements known as the Quality System Regulation.

A product labeled RUO but intended to be used diagnostically may be viewed by the FDA as adulterated and misbranded under the Federal Food, Drug, and Cosmetics Act and subject to FDA enforcement activities. RUO products cannot make any claims related to safety, effectiveness or diagnostic utility and they cannot be intended for human clinical diagnostic use. The FDA will also evaluate the totality of the circumstances to determine if the product is intended for diagnostic purposes. If the FDA were to determine, based on the totality of circumstances, that our products labeled and marketed for RUO are intended for diagnostic purposes, they would be considered medical devices that will require clearance or approval prior to commercialization.

Although we currently market our products as RUO, we may in the future make the decision to market them for clinical or diagnostic purposes, or may develop other different products intended for clinical or diagnostic purposes, which would result in the application of a more onerous set of regulatory requirements.

Human Capital Resources

As of September 30, 2020, we had 96 employees, of which 29 work in sales, sales support and marketing, 39 work in engineering and research and development, 21 work in manufacturing and operations and seven work in general and administrative. As of September 30, 2020, all of our employees were located in the United States. None of our employees is represented by a labor union or is subject to a collective bargaining agreement. We consider our relationship with our employees to be good. Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards and cash-based performance bonus awards. The health and safety of our employees, customers and communities are of primary concern. During

the COVID-19 pandemic, we have taken significant steps to protect our workforce including but not limited to, working remotely, and implementing social distancing protocols consistent with guidelines issued by federal, state, and local law.

Facilities

Our corporate headquarters are located in Boston, Massachusetts, where we lease and occupy approximately 37,500 square feet of space. The lease for this facility expires on October 7, 2025. We also operate an additional office in Chapel Hill, North Carolina that is approximately 2,000 square feet and supports assay development for Rebel and ZipChip. The lease for this facility expires on November 30, 2022. We also operate an additional office in Campbell, California that is approximately 1,500 square feet and supports our west coast employees. The lease for this facility expires on February 28, 2021. We believe that our facilities meet our current and future anticipated needs through 2024.

Legal Proceedings

From time to time, we may become involved in litigation or other legal proceedings. We are not currently a party to any material litigation or legal. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

MANAGEMENT

The following table sets forth certain information concerning our executive officers and key employees as of the date of this prospectus who, subject to rights pursuant to any employment agreements, serve at the pleasure of our board of directors:

<u>Name</u>	<u>Age</u>	<u>Position</u>	
Kevin J. Knopp, Ph.D.	48	President, Chief Executive Officer and Director	?
Joseph H. Griffith IV	45	Chief Financial Officer	?
Christopher Brown, Ph.D.	46	Chief Technology Officer	?
Maura Fitzpatrick	50	Vice President, Product Management & Marketing	?
Kevin McCallion, Ph.D.	55	Vice President, Production and New Product Introduction	?
Trent Basarsky, Ph.D.	53	Vice President, Commercial	?
John Kenneweg.	48	Vice President, Government	?
Michael S. Turner	53	Vice President, General Counsel	?

The following table sets forth certain information concerning our non-employees who serve on our board of directors as of the date of this prospectus:

<u>Name</u>	<u>Age</u>	<u>Position</u>	
Nicolas Barthelemy	54	Director	?
Keith L. Crandell	60	Director	?
E. Kevin Hrusovsky	59	Chairman	?
Sharon Kedar.	46	Director	?
J. Michael Ramsey, Ph.D.	68	Director	?
Mark Spoto.	51	Director	?

The following is a biographical summary of the experience of our executive officers and key employees.

Executive officers and key employees

Kevin J. Knopp, Ph.D. has been our President and Chief Executive Officer, and a member of our board of directors since February 2012. Prior to that, Dr. Knopp served as Vice-President and Site Leader of the Portable Optical Analysis division of Thermo Fisher Scientific Inc. following the acquisition of Ahura Scientific, Inc., a company he co-founded in 2002 that commercialized handheld optical spectrometers for a range of applications in the pharma and security markets. Dr. Knopp earned a B.S. in Electrical Engineering from Boston University, and his M.S. and Ph.D. degrees from the University of Colorado at Boulder. Our board of directors has concluded that Dr. Knopp is qualified to serve as a director because of his operational and historical expertise gained from serving as our President and Chief Executive Officer, and his extensive professional and educational experience in the analytical tools and instrumentation industry.

Joseph H. Griffith IV has been our Chief Financial Officer since March 2014. From November 2011 to March 2014, Mr. Griffith served as Chief Financial Officer of the Life Sciences and Technology business unit of PerkinElmer, Inc., a publicly traded company that produces analytical instruments, genetic testing and diagnostic tools, medical imaging components, software, instruments and consumables for multiple end markets. Previously, Mr. Griffith served as Chief Accounting Officer and Vice President of Finance from April 2008 to November 2011 and as Corporate Controller from July 2003 to April 2008, of Caliper Life Sciences, Inc., a publicly traded life sciences company that developed and sold lab automation equipment, that was acquired by PerkinElmer, Inc. Prior to that, he served as Corporate Controller of Zymark Corporation, a company that provided laboratory automation, robotics, and liquid handling solutions, from April 2002 to July 2003, when it was acquired by Caliper Life Sciences, Inc. From August 1997 to February 2002, Mr. Griffith served as an Audit Senior at Arthur

Andersen, a national accounting firm. He is a licensed Certified Public Accountant and holds a B.S. in Accounting from Villanova University.

Christopher Brown, Ph.D. is a co-founder and has been our Chief Technology Officer & Vice President of Research & Development since February 2012. Prior to founding 908 Devices, Dr. Brown was a platform architect at Apple Inc. leading investigations in future-gen health-technologies. Prior to Apple, from April 2010 to October 2010, he was a Senior Director at Thermo Fisher Scientific, Inc. and from 2005 until 2010 he was Senior Director of Product Development and Engineering at Ahura Scientific, Inc. Prior to Ahura Scientific he held roles of increasing responsibility at InLight Solutions, Inc. Dr. Brown holds a B.Sc. in Mathematics/Chemistry from Brandon University, and Ph.D. in Chemistry from Dalhousie University where he specialized in statistical and machine learning methods for chemical data.

Maura Fitzpatrick has been our Vice President of Product Management and Marketing since September 2020. From November 2019 until September 2020, Ms. Fitzpatrick served as Vice President of Product Management at Waters Corporation, a company in the life sciences market specializing in liquid chromatography, mass spectrometry, and informatics and from January 2018 to November 2019 Ms. Fitzpatrick served as Senior Director of Product Marketing. From September 2015 to December 2017, Ms. Fitzpatrick served as the Vice President of Product Management and Marketing at Cambridge Technology Inc., a company that provides laser beam steering solutions. From January 2009 to September 2015, she held various Director and Senior Director roles in Marketing and Product Management at Thermo Fisher Scientific, Inc. Ms. Fitzpatrick earned a B.S. in Chemistry from Merrimack College and an A.S. in Marketing from Johnson and Wales University.

Kevin McCallion, Ph.D. has been our Vice President of Production and New Product Introduction since August 2020 and was our Director, Component Engineering from May 2013 to August 2020. Prior to joining us, Dr. McCallion served as Vice President of Engineering for TeraDiode, Inc., a developer of compact, high efficiency laser sources. Previously, Dr. McCallion was Director of Engineering at Finisar Corp, a manufacturer of optical communications subsystems and components. Prior to that, he was a co-founder and Vice President of Product Development at Azna LLC, implementing novel, high-speed diode lasers for long haul transmission. Earlier in his career, he also held senior technical management positions at Nortel Networks Corporation and CoreTek, Inc. He received a B.Eng. (1st Hons), M.Sc. and Ph.D. in Electrical Engineering and Optoelectronics from the University of Strathclyde in the United Kingdom. Dr. McCallion is an inventor on more than 30 U.S. patents and is author on numerous technical publications.

Trent Basarsky, Ph.D. is our Vice President of Commercial Business, and since January 2017, he has also been our Vice President and General Manager of Life Sciences. Prior to joining us, Dr. Basarsky was Chief Business Officer at Zephyrus Biosciences, a company focused on single-cell Westerns, which was acquired by Bio-Techne Corporation. From 2009 to 2014, Dr. Basarsky was Vice President of Corporate Development at ProteinSimple, Inc., also acquired by Bio-Techne Corporation, with responsibilities including acquisitions, marketing, and intellectual property. From July 2008 to October 2009, Dr. Basarsky served as Director of Corporate Development and Marketing at Codexis Inc., a cleantech company focused on next generation biofuels and pharmaceutical manufacturing. Dr. Basarsky was an independent sports technology entrepreneur from September 2007 to June 2008. From July 2004 to July 2007, Dr. Basarsky was Director of Corporate and Business Development of Molecular Devices, LLC which was acquired by MDS, Inc. From 1998 to 2004, he held positions in marketing, product management, business development and intellectual property at Axon Instruments, a life science instrumentation company acquired by Molecular Devices. Dr. Basarsky received a B.Sc. in Zoology from the University of Alberta, a Ph.D. in Neuroscience from Iowa State University, and he has passed the USPTO patent bar exam.

John Kenneweg is our Vice President of Government Business and, since April 2013, he has also been our Vice President and General Manager of Field Forensics. Prior to joining us, Mr. Kenneweg served as the Director of Federal Government Programs at Thermo Fisher Scientific's Portable Analytical Instrument Division from 2010 to 2013, a publicly traded company that produces a range of solutions to include life science technology, analytical instruments, diagnostics and lab equipment and services. Prior to that, Mr. Kenneweg managed government sales for Ahura Scientific, Inc. from 2005

until it was acquired by Thermo Fisher Scientific in 2010. Prior to that, he served as Business Development Manager from 2002 to 2005, Sales Manager from 1999 to 2002 and Product Manager from 1997 to 1999, at Draeger Safety, Inc, the U.S. subsidiary of Drägerwerk AG, a company that sells and manufactures gas detection and respiratory protection equipment for safety and medical purposes. He earned a B.A. from West Virginia University and served honorably in the United States Marine Corps.

Michael S. Turner has been our Vice President, General Counsel since November 2020. Previously, Mr. Turner served as Co-Chief Executive Officer, General Counsel and Executive Director from June 2019 to March 2020, and as Executive Vice President, General Counsel and Company Secretary from May 2014 to June 2019, of Allied Minds plc, a publicly traded venture firm focused on early stage company development within the technology and life science sectors. Prior to that, he served as Partner at DLA Piper LLP from January 2010 to May 2014, and at Goodwin Procter LLP from September 1998 to December 2009, counseling public and private companies, investment banks, and private equity and venture capital firms, with an emphasis on capital markets, mergers and acquisitions and corporate governance for growth companies in the technology and life science sectors. Michael received his B.A. from Colgate University and his J.D. from Cornell Law School and is admitted to the bar in Massachusetts and New York.

Non-employee directors

The following is a biographical summary of the experience of our non-employee directors.

Nicolas Barthelemy has served as a member of our board of directors since February 2018. Mr. Barthelemy brings over 25 years of industry experience to the director role. Mr. Barthelemy previously served as the President and Chief Executive Officer of Biotheranostics, Inc., a molecular diagnostics company, from September 2014 to February 2017. Prior to joining Biotheranostics, Inc., he held a variety of senior executive roles at Life Technologies Corporation, including President, Global Commercial Operations and President of the Cell Systems Division, until its acquisition by Thermo Fisher Scientific, Inc. Prior to joining Invitrogen Corporation (which later became Life Technologies), Mr. Barthelemy held a variety of operational and commercial roles with Biogen, Inc., including Vice President of Manufacturing. Before that, he held various technical positions at Merck & Co., Inc.'s manufacturing division. Mr. Barthelemy serves on the boards of directors of several public companies, including Repligen Corporation, Fluidigm Corporation and Twist Bioscience Corporation. Mr. Barthelemy has an engineering degree from Ecole Supérieure de Physique et Chimie Industrielles (ESPCI), France, as well as an M.S. in chemical engineering from the University of California, Berkeley. Our board of directors has concluded that Mr. Barthelemy possesses specific attributes that qualify him to serve as a member of our board of directors, including his financial and investment expertise and his extensive knowledge and experience in manufacturing, distributing and commercializing life science instruments, reagents and services as well as his knowledge of the bioprocessing space.

Keith L. Crandell has served as a member of our board of directors since June 2012. Since July 1994, Mr. Crandell has served as a managing director of ARCH Venture Partners, a venture capital firm focused on early-stage technology companies. He serves on the board of directors of Quanterix Corporation, a publicly-traded company focusing on digital biomarker detection for infectious disease screening and therapeutics development and Twist Bioscience a publicly-traded company focused on silicon-based DNA writing platform with genomic tools to classify viral samples; genome engineering tools to build vaccines. He is also a director of several private companies and serves on the Entrepreneurship Advisory Board at the Polsky Center for Entrepreneurship, the University of Chicago Booth School of Business, the University of Chicago Pritzker School of Molecular Engineering Advisory Council, on the investment advisory board for the Partners Innovation Fund, a venture capital fund affiliated with Harvard Medical School Hospitals and on the Chicago History Museum Board of Trustees. Mr. Crandell has a B.S. degree in chemistry and mathematics from St. Lawrence University, an M.S. in chemistry from the University of Texas at Arlington, and an M.B.A. from the University of Chicago. Our board of directors has concluded that Mr. Crandell possesses specific attributes that qualify him to serve as a member of our board of directors, including his financial expertise and his substantial experience as an investor in emerging companies.

E. Kevin Hrusovsky has served as a member of our board of directors since September 2013 and Chairman of our board of directors since September 2020. Since June 2014, Mr. Hrusovsky has served as President and, since January 2015, as Chief Executive Officer of Quanterix Corporation, a publicly traded company. Prior to joining Quanterix, Mr. Hrusovsky served as Senior Vice President of PerkinElmer, Inc., a publicly traded company that produces analytical instruments, genetic testing and diagnostic tools, medical imaging components, software, instruments and consumables for multiple end markets from February 2012 to May 2013 and served as President of the Life Sciences and Technology business unit of PerkinElmer, Inc. from November 2011 to May 2013. From May 2013 through September 2013, he served as a consultant to PerkinElmer. Previously, Mr. Hrusovsky served as Chief Executive Officer and President of Caliper Life Sciences, Inc., a life sciences company that developed and sold lab automation equipment, from July 2003 to November 2011 when it was acquired by PerkinElmer, Inc. Prior to that, he served as Chief Executive Officer and President of Zymark, a company that provided laboratory automation, robotics, and liquid handling solutions, and Director of International Business, Agricultural Chemical Division, and President of the Pharmaceutical Division for FMC Corporation, a publicly traded chemical manufacturing company. He also held several management positions at E.I. DuPont de Nemours, a publicly traded chemical manufacturing company. Mr. Hrusovsky serves on the board of directors of BioreclamationIVT, LLC. Mr. Hrusovsky has a B.S. in mechanical engineering from Ohio State University and an M.B.A. from Ohio University. Mr. Hrusovsky is also the founder of Powering Precision Health, a non-profit global think tank composed of the industry's top medical, research and financial experts. Our board of directors has concluded that Mr. Hrusovsky possesses specific attributes that qualify him to serve as a member of our board of directors, including his financial expertise, operational expertise and his substantial experience as a President and Chief Executive Officer.

Sharon Kedar has served as a member of our board of directors since April 2019. Ms. Kedar is the Co-Founder, Partner of Northpond Ventures, a science, medical and technology focused venture capital firm, where she has been a partner since its formation. Prior to founding Northpond, Ms. Kedar spent fifteen years at Sands Capital Management where she served as Chief Financial Officer and was active in all key functions of the company. Ms. Kedar serves on the boards of directors of several private companies, including Codex DNA, Inc., Emulate, Inc., Hawthorne Effect, Inc., and IsoPlexis Corporation, Inc. Ms. Kedar is a CFA charter holder, has an M.B.A. from Harvard Business School and a B.A. in Economics from Rice University. Our board of directors has concluded that Ms. Kedar possesses specific attributes that qualify her to serve as a member of our board of directors, including her financial expertise and her substantial experience as an investor in emerging companies.

J. Michael Ramsey, Ph.D. has served as a member of our board of directors since February 2012 and is the company's scientific founder. Dr. Ramsey is the Goldby Distinguished Professor of Chemistry with faculty positions in the departments of Biomedical Engineering and Applied Physical Sciences at the University of North Carolina, Chapel Hill and the director of the University of North Carolina Center for Biomedical Microtechnologies. Prior to UNC, he was a Group Leader and Corporate Research Fellow at Oak Ridge National Laboratory where he directed the Chemical Microtechnology and Laser Spectroscopy Group within the Division of Chemistry. Dr. Ramsey is the sole scientific founder of Caliper Technologies, later renamed Caliper Life Sciences, Inc. and acquired by PerkinElmer in 2011. He also serves on the board of directors of Genturi Inc., a privately held company, where he is the scientific founder. Dr. Ramsey received a Ph.D. in Chemistry from Indiana University and a B.S. in Chemistry from Bowling Green State University. Our board of directors has concluded that Dr. Ramsey possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience in developing life sciences companies and his expertise in micro- and nanofluidics, microscale biochemical separations, miniaturization of mass spectrometry, digital assays, and laser-based chemical detection.

Mark Spoto has served as a member of our board of directors since June 2012. Mr. Spoto is a Co-Founder and General Partner at Razor's Edge Ventures, a multi-stage investment firm that invests in technology companies solving significant challenges in national security and high-growth commercial markets where he has been a partner since 2011. Prior to Razor's Edge, Mr. Spoto was a partner at the national technology law firm of Cooley LLP. Mr. Spoto serves on the boards of directors of several private companies, including HawkEye 360, BlackSky and Ursa Space. Mr. Spoto holds a B.S. in

Aerospace Engineering from Boston University and a J.D. from Georgetown University Law Center. Our board of directors has concluded that Mr. Spoto possesses specific attributes that qualify him to serve as a member of our board of directors, including his financial and investment expertise and his significant legal, managerial and corporate governance expertise.

Our Board of Directors

As of October 31, 2020, our board of directors consisted of seven members, each of whom is a member pursuant to the board composition provisions of our certificate of incorporation and agreements with our stockholders. These board composition provisions will terminate upon the completion of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our nominating and corporate governance committee and our board of directors may therefore consider a broad range of factors relating to the qualifications and background of nominees. Our nominating and corporate governance committee's and our board of directors' priority in selecting board members is the identification of persons who will further the interests of our stockholders through their established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape, and professional and personal experiences and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal. Our sixth amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Director Independence

Our board of directors has determined that all members of our board of directors, except Dr. Knopp, are independent directors, including for purposes of the rules of the Nasdaq Global Market and the Securities and Exchange Commission, or SEC. In making such independence determination, our board of directors considered the relationships that each non-employee director has with us and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director. In considering the independence of the directors listed above, our board of directors considered the association of our directors with the holders of more than 5% of our common stock. Upon the completion of this offering, we expect that the composition and functioning of our board of directors and each of our committees will comply with all applicable requirements of the Nasdaq Global Market and the rules and regulations of the SEC. There are no family relationships among any of our directors or executive officers.

Staggered Board

In accordance with the terms of our sixth amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering, our board of directors will be divided into three staggered classes of directors and each director will be assigned to one of the three classes. At each annual meeting of the stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2021 for Class I directors, 2022 for Class II directors and 2023 for Class III directors.

- Our Class I directors will be Sharon Kedar and Michael Ramsey;
- Our Class II directors will be Nicolas Barthelemy, Kevin Knopp and Mark Spoto; and
- Our Class III directors will be Keith Crandell and Kevin Hrusovsky.

Our sixth amended and restated certificate of incorporation and amended and restated by-laws that will become effective upon the completion of this offering will provide that the number of directors shall be fixed from time to time by a resolution of the majority of our board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change in control.

Board Leadership Structure and Board's Role in Risk Oversight

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our financial condition, development and commercialization activities, operations, strategic direction and intellectual property as more fully discussed in the section entitled "Risk Factors" appearing elsewhere in this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of our board of directors in overseeing the management of our risks is conducted primarily through committees of our board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. The audit committee of our board of directors is primarily responsible for overseeing our risk management processes on behalf of our board of directors. Going forward, we expect that the audit committee will receive reports from management on at least a quarterly basis regarding our assessment of risks. In addition, the audit committee reports regularly to our board of directors, which also considers our risk profile. The audit committee and our board of directors focus on the most significant risks we face and our general risk management strategies. While our board of directors oversees our risk management, management is responsible for day-to-day risk management processes. Our board of directors expects management to consider risk and risk management in each business decision, to proactively develop and monitor risk management strategies and processes for day-to-day activities and to effectively implement risk management strategies. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables our board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Committees of our Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which will operate pursuant to a charter adopted by our board of directors and will be effective upon the effectiveness of the registration statement of which this prospectus is a part. Upon the effectiveness of the registration statement of which this prospectus is a part, the composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act of 2002, Nasdaq and SEC rules and regulations.

Audit Committee

Effective upon completion of this offering Keith L. Crandell, Sharon Kedar and Mark Spoto will serve on the audit committee, which will be chaired by Mark Spoto. Our board of directors has determined that each member is "independent" for audit committee purposes as that term is defined in the rules of the SEC and the applicable Nasdaq rules, and each has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has designated Mark Spoto as an "audit committee financial expert," as defined under the applicable rules of the SEC. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;

- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending based upon the audit committee's review and discussions with management and our independent registered public accounting firm whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the audit committee report required by SEC rules to be included in our annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

Compensation Committee

Effective upon completion of this offering Nicholas Barthelemy, Keith L. Crandell and Mark Spoto will serve on the compensation committee, which will be chaired by Nicholas Barthelemy. Our board of directors has determined that each member of the compensation committee is "independent" as defined in the applicable Nasdaq rules. The compensation committee's responsibilities include:

- annually reviewing and approving the corporate goals and objectives relevant to the compensation of our Chief Executive Officer;
- evaluating the performance of our Chief Executive Officer in light of such corporate goals and objectives and based on such evaluation: (i) approving the cash compensation of our Chief Executive Officer and (ii) approving grants and awards to our Chief Executive Officer under equity-based plans;
- reviewing and approving the cash compensation of our other executive officers;
- reviewing and establishing our overall management compensation, philosophy and policy;
- overseeing and administering our compensation and similar plans;
- evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable Nasdaq rules;
- reviewing and approving our policies and procedures for the grant of equity-based awards;
- reviewing and recommending to our board of directors the compensation of our directors;
- preparing the compensation committee report required by SEC rules, if and when required, to be included in our annual proxy statement; and
- reviewing and approving the retention, termination or compensation of any consulting firm or outside advisor to assist in the evaluation of compensation matters.

Nominating and Corporate Governance Committee

Effective upon completion of this offering Keith L. Crandell, Kevin Hrusovsky and Mark Spoto will serve on the nominating and corporate governance committee, which will be chaired by Mark Spoto. Our board of directors has determined that each member of the nominating and corporate governance committee is "independent" as defined in the applicable Nasdaq rules. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to our board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- reviewing the composition of our board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;
- identifying individuals qualified to become members of our board of directors;
- recommending to our board of directors the persons to be nominated for election as directors and to each of our board's committees;

- developing and recommending to our board of directors a code of business conduct and ethics and a set of corporate governance guidelines; and
- overseeing the evaluation of our board of directors and management.

Our board of directors may from time to time establish other committees.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of our board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Corporate Governance

We have adopted a written code of business conduct and ethics, which will become effective upon the effectiveness of the registration statement of which this prospectus is a part, that applies 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 the effectiveness of the registration statement of which this prospectus is a part, a current copy of the code will be posted on the investor relations section of our website, which is located at <http://www.908devices.com>. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

EXECUTIVE COMPENSATION

The following is a discussion of compensation arrangements of our named executive officers, or NEOs. This discussion contains forward looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt may differ materially from currently planned programs as summarized in this discussion.

To date, the compensation of our NEOs has consisted of a combination of base salary, cash incentive compensation and long-term incentive compensation in the form of stock options. Compensation of our executives is structured around the achievement of individual performance and near-term corporate targets as well as long-term business objectives. We seek to ensure that the total compensation paid to our executive officers is reasonable and competitive. As we transition from a private company to a publicly traded company, we intend to evaluate our compensation values and philosophy and compensation plans and arrangements as circumstances require.

The compensation provided to our NEOs for the year ended December 31, 2019 is detailed in the 2019 Summary Compensation Table and the accompanying footnotes and narrative that follow.

Our NEOs for the year ended December 31, 2019, which consist of our Chief Executive Officer and our two most highly-compensation executive officers other than our Chief Executive Officer, are as follows:

- Kevin J. Knopp, Ph.D., our President and Chief Executive Officer;
- John Kenneweg, our Vice President, Government; and
- Christopher Brown, Ph.D., our Chief Technology Officer.

2019 Summary Compensation Table

The following table shows the total compensation awarded to, earned by, or paid to our NEOs for services rendered to us in all capacities during the year ended December 31, 2019.

Name and principal position	??	Year	??	Salary (\$)	??	Option Awards \$(1)	??	Non-Equity Incentive Plan Compensation \$(2)	??	All Other Compensation \$(3)	??	Total (\$)	?
Kevin J. Knopp, Ph.D.	???	2019	???	287,481	???	92,219	???	64,622	???	238	???	444,560	??
President and Chief Executive Officer	???	???	???	???	???	???	??	?	???	??	?	???	???
John Kenneweg	???	2019	???	209,879	???	51,233	???	112,000	???	—	???	373,112	??
Vice President, Government	???	???	???	???	???	???	??	?	???	??	?	???	???
Christopher Brown, Ph.D.	???	2019	???	256,190	???	51,233	???	59,325	???	1,988	???	368,736	??
Chief Technology Officer	???	???	???	???	???	???	??	?	???	??	?	???	???

- (1) These amounts represent the aggregate grant date fair value for option awards granted during our year ended December 31, 2019, computed in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718. A discussion of the assumptions used in determining grant date fair values may be found in Notes 3 and 9 to our financial statements for the year ended December 31, 2019, included elsewhere in this prospectus. These amounts do not correspond to the actual value that may be recognized by the NEOs upon exercise of the applicable award or sale of the underlying shares of common stock.
- (2) For Drs. Knopp and Brown, the amounts represent cash bonuses earned under our annual performance-based bonus plan for the 12-month period from January 1, 2019 to December 31, 2019 and paid in 2020. For more information on these bonuses, see the description of the annual performance bonuses under "2019 Bonuses" below. For Mr. Kenneweg, the amount reported represents commissions earned with respect to the year ended December 31, 2019. For more

information on these commission payments, see the descriptions of the commissions under "2019 Commissions" below.

- (3) These amounts represent premiums paid by us during 2019 with respect to individual term life insurance policies where we pay the death proceeds to the beneficiary on the death of the insured.

Narrative Disclosure to Summary Compensation Table

2019 Salaries

Our NEOs each receive a base salary to compensate them for services rendered to our company. The base salary payable to each NEO is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities.

The board of directors increased the base salary of each of Dr. Knopp, Mr. Kenneweg and Dr. Brown effective as of February 1, 2019 from \$275,000, \$185,000 and \$245,068, respectively, to \$288,750, \$210,900 and \$257,321, respectively.

Our board of directors and compensation committee may adjust base salaries from time to time in their discretion.

2019 Bonuses

For the year ended December 31, 2019, each of Dr. Knopp and Dr. Brown was eligible to earn an annual bonus based on the achievement of certain corporate and individual performance milestones. The target annual bonus for each of Dr. Knopp and Dr. Brown for the year ended December 31, 2019 was equal to 30% of the executive's respective annual base salary.

For the year ended December 31, 2019, 70% of the target bonus was tied to the achievement of corporate milestones, of which 80% related to market level revenue targets and 20% related to cash management, and 30% of the target bonus was tied to achievement of individual performance milestones. Following review and determinations of corporate and individual performance for 2019, the compensation committee determined that: (i) Dr. Knopp's annual bonus was earned at 74.6% of his target bonus and (ii) Dr. Brown's annual bonus was earned at 76.9% of his target bonus. The annual bonus earned by each NEO with respect to the year ended December 31, 2019 is reported under the "Non-Equity Incentive Plan Compensation" column in the "2019 Summary Compensation Table" above.

2019 Commissions

For the year ended December 31, 2019, Mr. Kenneweg was eligible to earn commissions based on achievement of certain performance metrics. For 2019, the total target commission was established as \$240,000, comprised of: \$31,500 related to the corporate milestones noted above, \$50,000 in individual performance milestones and \$158,500 in compensation related to revenue. The commissions targets were proposed by our Chief Executive Officer and approved by our compensation committee.

Based upon performance in 2019, Mr. Kenneweg earned \$112,000, or 46.7% of the 2019 target commissions for 2019. The commissions earned represented \$10,000 in individual performance milestones and \$110,000 in compensation related to revenue.

Equity-Based Compensation

Although we do not have a formal policy with respect to the grant of equity incentive awards to our executive officers, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. In addition, we believe that equity grants promote executive retention because they incentivize our executive officers to remain in our employment during the vesting period. Accordingly, our board of directors has periodically reviewed the equity incentive compensation of our NEOs and granted equity incentive awards to them from time to time. In January 2019, we granted each of Dr. Knopp, Mr. Kenneweg and Dr. Brown an option to purchase 110,626, 61,459 and 61,459 shares of our common stock, respectively, each with an exercise price per share equal to the fair market value of our common stock on the date of grant. Each of the awards vests and becomes exercisable as to 1/48th of the shares on each monthly anniversary of January 21, 2019, subject to the applicable holder's continued service to our company through the applicable vesting date.

Other Elements of Compensation

Retirement Savings and Health and Welfare Benefits

We currently maintain a 401(k) retirement savings plan for our employees, including our NEOs, who satisfy certain eligibility requirements. Our NEOs are eligible to participate in the 401(k) plan on the same terms as other full-time employees. We believe that providing a vehicle for tax-deferred retirement savings through our 401(k) plan adds to the overall desirability of our executive compensation package and further incentivizes our employees, including our NEOs, in accordance with our compensation policies.

All of our full-time employees, including our NEOs, are eligible to participate in our health and welfare plans, including medical, dental and vision benefits, medical and dependent care flexible spending accounts, short-term and long-term disability insurance, and life and AD&D insurance.

Perquisites and other personal benefits

We may provide limited perquisites to our NEOs when our compensation committee determines that such perquisites are necessary or advisable to fairly compensate or incentivize our employees. In 2019, we did not provide our NEOs with any perquisites that were not provided to all employees generally other than term life insurance premiums for Dr. Knopp and Dr. Brown and the amounts of such life insurance premiums for the year ended December 31, 2019 are reported under the "All Other Compensation" column in the "2019 Summary Compensation Table" above.

Outstanding Equity Awards at 2019 Year End

The following table sets forth information regarding outstanding equity awards held by our NEOs as of December 31, 2019.

Name	Option Awards(1)					
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Vesting Commencement Date	Option Exercise Price (\$)	Option Expiration Date	
Kevin J. Knopp, Ph.D.	92,188(2)	30,730(2)	1/1/2017	\$1.75	1/1/2027	
?	25,351(3)	85,275(3)	1/21/2019	\$1.58	1/21/2029	
John Kenneweg	153,033	—	12/12/2013	\$0.35	12/12/2023	
?	12,291	—	1/16/2015	\$0.93	1/16/2025	
?	20,742(4)	6,914(4)	12/2/2016	\$0.96	12/2/2026	
?	14,084(3)	47,375(3)	1/21/2019	\$1.58	1/21/2029	
Christopher Brown, Ph.D.	92,188(2)	30,730(2)	1/1/2017	\$1.75	1/1/2027	
?	14,084(3)	47,375(3)	1/21/2019	\$1.58	1/21/2029	

- (1) Each of the outstanding equity awards in the table above was granted pursuant to our 2012 Stock Option and Grant Plan, as amended, or the 2012 Plan.
- (2) Represents an option to purchase shares of our common stock granted on June 22, 2017. The shares underlying this option vest, as follows: 1/48th of the shares vest on each monthly anniversary of January 1, 2017, subject to the applicable holder's continued service to our company through the applicable vesting date.
- (3) Represents an option to purchase shares of our common stock granted on January 21, 2019. The shares underlying this option vest, as follows: 1/48th of the shares on each monthly anniversary of January 21, 2019, subject to the applicable holder's continued service to our company through the applicable vesting date.
- (4) Represents an option to purchase shares of our common stock granted on December 5, 2016. The shares underlying this option vest, subject to continued service, as follows: 25% of the shares vested on December 2, 2017, with the remainder vesting over the next three years in equal

monthly installments on the last day of each succeeding calendar month thereafter, subject to Mr. Kenneweg's continued service to our company through the applicable vesting date.

Executive Compensation Arrangements

We initially entered into an offer letter with each of the NEOs in connection with his employment with us, which sets forth the terms and conditions of his employment, including base salary, target annual bonus opportunity, initial equity awards and standard employee benefit plan participation. Effective upon the closing of this offering, we intend to enter into employment agreements with each of the NEOs that will replace the offer letters and provide for specified payments and benefits in connection with a termination of employment in certain circumstances. Our goal in providing these severance and change in control payments and benefits is to offer sufficient cash continuity protection such that the named executive officers will focus their full time and attention on the requirements of the business rather than the potential implications of a qualifying employment termination or change in control for their respective positions. We prefer to have certainty regarding the potential severance amounts payable to the NEOs, rather than negotiating severance at the time that an NEO's employment terminates. We have also determined that accelerated vesting provisions with respect to outstanding equity awards in connection with a qualifying termination of employment in certain circumstances are appropriate because they encourage our NEOs to stay focused on the business in those circumstances, rather than focusing on the potential implications of the termination of employment for them personally. The employment agreements with our NEOs will require the named executive officers to execute a separation agreement containing a general release of claims in favor of us to receive any severance payments and benefits. The material terms of the employment agreements we intend to enter into with our NEOs are summarized below.

Kevin J. Knopp, Ph.D.

Under the employment agreement we intend to enter into with Dr. Knopp, or the Knopp Employment Agreement, Dr. Knopp will continue to serve as our President and Chief Executive Officer on an at-will basis. Dr. Knopp's base salary upon the closing of this offering will be \$400,000, which is subject to periodic review, and he will be eligible to earn an annual bonus with a target amount equal to 100% of his base salary. Dr. Knopp will also continue to be eligible to participate in the employee benefit plans available to our employees, subject to the terms of those plans.

Pursuant to the Knopp Employment Agreement, in the event that Dr. Knopp's employment is terminated by us without "cause" or Dr. Knopp resigns for "good reason" (as each term is defined in the Knopp Employment Agreement), subject to the execution and effectiveness of a separation agreement, including a general release of claims in our favor, (i) he will be entitled to receive base salary continuation for 12 months following termination, (ii) subject to Dr. Knopp's copayment of premium amounts at the applicable active employees' rate and proper election to continue COBRA health coverage, we will cover the monthly employer contribution that we would have paid to provide health insurance to Dr. Knopp had he remained employed with us until the earliest of: (A) 12 months following termination, (B) Dr. Knopp's eligibility for group medical plan benefits under any other employer's group medical plan or (C) the end of Dr. Knopp's COBRA health continuation period, (iii) he will be entitled to receive a prorated portion of the annual bonus earned for the year in which the date of termination occurs; and (iv) if the date of termination occurs after the last day of the year to which a bonus applies but before we pay such bonus, and Dr. Knopp has otherwise earned such bonus under the Employment Agreement, we shall pay him such bonus in a lump sum when we determine and pay bonuses to senior executives for the applicable year (the "Prior Year Bonus").

In lieu of the payments and benefits described in the preceding paragraph, in the event that Dr. Knopp's employment is terminated by us without cause or Dr. Knopp resigns for good reason, in either case within 12 months following a "change in control" (as defined in the Knopp Employment Agreement), subject to the execution and effectiveness of a separation agreement, including a general release of claims in our favor, (i) he will be entitled to receive a lump sum in cash equal to one times the sum of (A) Dr. Knopp's then-current annual base salary (or Dr. Knopp's annual base salary in effect immediately prior to the change in control, if higher) plus (B) Dr. Knopp's average annual cash bonuses and commission payments earned for the three full calendar years immediately preceding the date of termination, (ii) subject to Dr. Knopp's copayment of premium amounts at the applicable active

employees' rate and proper election to continue COBRA health coverage, we will cover the monthly employer contribution that we would have paid to provide health insurance to Dr. Knopp had he remained employed with us until the earliest of? (A) 12 months following termination, (B) Dr. Knopp's eligibility for group medical plan benefits under any other employer's group medical plan or (C) the end of Dr. Knopp's COBRA health continuation period, (iii) he will be entitled to receive a prorated portion of the annual bonus earned for the year in which the date of termination occurs; (iv) he will be entitled to receive the Prior Year Bonus and (v) he will be entitled to accelerated vesting of 100% of all stock options and other stock-based awards held by him that are subject solely to time-based vesting.

John Kenneweg

Under the employment agreement we intend to enter into with Mr. Kenneweg, or the Kenneweg Employment Agreement, Mr. Kenneweg will continue to serve as our Vice President, Government on an at-will basis. Mr. Kenneweg's base salary upon the closing of this offering will be \$250,000, which is subject to periodic review, and he will be eligible to earn an annual bonus with a target amount equal to 15% of his base salary and annual commissions with a target amount equal to \$200,000. Mr. Kenneweg will also continue to be eligible to participate in the employee benefit plans available to our employees, subject to the terms of those plans.

Pursuant to the Kenneweg Employment Agreement, in the event that Mr. Kenneweg's employment is terminated by us without "cause" or Mr. Kenneweg resigns for "good reason" (as each term is defined in the Kenneweg Employment Agreement), subject to the execution and effectiveness of a separation agreement, including a general release of claims in our favor, (i) he will be entitled to receive base salary continuation for six months following termination, (ii) subject to Mr. Kenneweg's copayment of premium amounts at the applicable active employees' rate and proper election to continue COBRA health coverage, we will cover the monthly employer contribution that we would have paid to provide health insurance to Mr. Kenneweg had he remained employed with us until the earliest of? (A) six months following termination, (B) Mr. Kenneweg's eligibility for group medical plan benefits under any other employer's group medical plan or (C) the end of Mr. Kenneweg's COBRA health continuation period, (iii) he will be entitled to receive a prorated portion of the annual bonus earned for the year in which the date of termination occurs and (iv) if the date of termination occurs after the last day of the year to which a bonus applies but before we pay such bonus, and Mr. Kenneweg, has otherwise earned such bonus under the Employment Agreement, we shall pay him such bonus in a lump sum when we determine and pay bonuses to senior executives for the applicable year (the "Prior Year Bonus").

In lieu of the payments and benefits described in the preceding paragraph, in the event that Mr. Kenneweg's employment is terminated by us without cause or Mr. Kenneweg resigns for good reason, in either case within 12 months following a "change in control" (as defined in the Kenneweg Employment Agreement), subject to the execution and effectiveness of a separation agreement, including a general release of claims in our favor, (i) he will be entitled to receive a lump sum in cash equal to one times the sum of? (A) Mr. Kenneweg's then-current annual base salary (or Mr. Kenneweg's annual base salary in effect immediately prior to the change in control, if higher) plus (B) Mr. Kenneweg's average annual cash bonuses and commission payments earned for the three full calendar years immediately preceding the date of termination, (ii) subject to Mr. Kenneweg's copayment of premium amounts at the applicable active employees' rate and proper election to continue COBRA health coverage, we will cover the monthly employer contribution that we would have paid to provide health insurance to Mr. Kenneweg had he remained employed with us until the earliest of? (A) 12 months following termination, (B) Mr. Kenneweg's eligibility for group medical plan benefits under any other employer's group medical plan or (C) the end of Mr. Kenneweg's COBRA health continuation period, (iii) he will be entitled to receive a prorated portion of the annual bonus earned for the year in which the date of termination occurs (iv) he will be entitled to receive the Prior Year Bonus and (v) he will be entitled to accelerated vesting of 100% of all stock options and other stock-based awards held by him that are subject solely to time-based vesting.

Christopher Brown, Ph.D.

Under the employment agreement we intend to enter into with Dr. Brown, or the Brown Employment Agreement, Dr. Brown will continue to serve as our Chief Technology Officer on an at-will basis. Dr. Brown's base salary upon the closing of this offering will be \$300,000, which is subject to periodic review and adjustment, and he will be eligible to earn an annual bonus with a target amount equal to 50%

of his base salary. Dr. Brown will also continue to be eligible to participate in the employee benefit plans available to our employees, subject to the terms of those plans.

Pursuant to the Brown Employment Agreement, in the event that his employment is terminated by us without "cause" or Dr. Brown resigns for "good reason" (as each term is defined in the Brown Employment Agreement), subject to the execution and effectiveness of a separation agreement, including a general release of claims in our favor, (i) he will be entitled to receive base salary continuation for nine months following termination, (ii) subject to Dr. Brown's copayment of premium amounts at the applicable active employees' rate and proper election to continue COBRA health coverage, we will cover the monthly employer contribution that we would have paid to provide health insurance to Dr. Brown had he remained employed with us until the earliest of? (A) nine months following termination, (B) Dr. Brown's eligibility for group medical plan benefits under any other employer's group medical plan or (C) the end of Dr. Brown's COBRA health continuation period, (iii) he will be entitled to receive a prorated portion of the annual bonus earned for the year in which the date of termination occurs; and (iv) if the date of termination occurs after the last day of the year to which a bonus applies but before we pay such bonus, and Mr. Brown has otherwise earned such bonus under the Employment Agreement, we shall pay him such bonus in a lump sum when we determine and pay bonuses to senior executives for the applicable year (the "Prior Year Bonus").

In lieu of the payments and benefits described in the preceding paragraph, in the event that Dr. Brown's employment is terminated by us without cause or Dr. Brown resigns for good reason, in either case within 12 months following a "change in control" (as defined in the Brown Employment Agreement), subject to the execution and effectiveness of a separation agreement, including a general release of claims in our favor, (i) he will be entitled to receive a lump sum in cash equal to one times the sum of? (A) Dr. Brown's then-current annual base salary (or Dr. Brown's annual base salary in effect immediately prior to the change in control, if higher) plus (B) Dr. Brown's average annual cash bonuses and commission payments earned for the three full calendar years immediately preceding the date of termination, (ii) subject to Dr. Brown's copayment of premium amounts at the applicable active employees' rate and proper election to continue COBRA health coverage, we will cover the monthly employer contribution that we would have paid to provide health insurance to Dr. Brown had he remained employed with us until the earliest of? (A) 12 months following termination, (B) Dr. Brown's eligibility for group medical plan benefits under any other employer's group medical plan or (C) the end of Dr. Brown's COBRA health continuation period, (iii) he will be entitled to receive a prorated portion of the annual bonus earned for the year in which the date of termination occurs (iv) he will be entitled to receive the Prior Year Bonus and (v) he will be entitled to accelerated vesting of 100% of all stock options and other stock-based awards held by him that are subject solely to time-based vesting.

Parachute Payments Under Section 280G of the Code

The payments and benefits provided to the NEOs in connection with a change in control may not be eligible for a federal income tax deduction for the company pursuant to Section 280G of the U.S. Internal Revenue Code of 1986, as amended, or the Code, and may subject the NEOs to an excise tax under Section 4999 of the Code. Under the employment agreements with the NEOs, if the payments or benefits payable to an NEOs in connection with a change in control would be subject to the excise tax on golden parachutes imposed under Section 4999 of the Code, then those payments or benefits will be reduced if such reduction would result in a higher net after-tax benefit to the such NEO.

Restrictive Covenants Agreements

Each of our NEOs is signing an agreement containing confidential information, invention assignment, nonsolicitation and noncompetition protections.

Employee Benefit and Equity Compensation Plans

2012 Stock Option and Grant Plan

Our 2012 Plan was adopted by our board of directors and approved by our stockholders on June 12, 2012, and was most recently amended in September 2020. Under the 2012 Plan, we have reserved for issuance an aggregate of 3,761,109 shares of our common stock. The number of shares of common stock reserved for issuance is subject to adjustment in the event of any merger, consolidation,

sale of all or substantially all of our assets, reorganization, recapitalization, reclassification, stock split, stock dividend, reverse stock split or other similar transaction.

The shares of common stock underlying awards that are forfeited, canceled, reacquired by us prior to vesting, satisfied without the issuance of stock or otherwise terminated (other than by exercise) and shares of common stock that are withheld upon exercise of an option or settlement of an award to cover the exercise price or tax withholding are currently added back to the shares of common stock available for issuance under the 2012 Plan. Following this offering, such shares will be added to the shares of common stock available for issuance under the 2020 Plan.

Our board of directors has acted as administrator of the 2012 Plan. The administrator has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, and to determine the specific terms and conditions of each award, subject to the provisions of the 2012 Plan. Persons eligible to participate in the 2012 Plan are those full or part-time employees, officers and directors of, and consultants to, our company as selected from time to time by the administrator in its discretion.

The 2012 Plan permits the granting of (1) options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code, and (2) options that do not so qualify. The per share exercise price of each option is determined by our board of directors but may not be less than 100% of the fair market value of the common stock on the date of grant. The term of each option is fixed by our board of directors but may not exceed 10 years from the date of grant. Our board of directors determines at what time or times each option may be exercised. In addition, the 2012 Plan permits the granting of restricted shares of common stock and unrestricted shares of common stock. Our board of directors may award restricted shares of common stock to participants subject to such conditions and restrictions as it may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with us through a specified vesting period.

The 2012 Plan provides that upon the occurrence of a "sale event," as defined in the 2012 Plan, all outstanding stock options will terminate at the effective time of such sale event, unless the parties to the sale event agree that such awards will be assumed or continued by the successor entity. In the event of a termination of the 2012 Plan and all options issued thereunder in connection with a sale event, optionees will be provided an opportunity to exercise options that are then exercisable or will become exercisable as of the effective time of the sale event within a specified period of time prior to the consummation of the sale event. In addition, we have the right to provide for cash payment to holders of options, in exchange for the cancellation thereof, in an amount per share equal to the difference between the value of the consideration payable per share of common stock in the sale event and the per share exercise price of such options. In the event of, and subject to the consummation of, a sale event, restricted stock (other than shares of restricted stock that become vested as a result of the sale event) will be forfeited immediately prior to the effective time of a sale event unless such awards are assumed or continued by the successor entity. In the event that shares of restricted stock are forfeited in connection with a sale event, such shares of restricted stock shall be repurchased at a price per share equal to the lower of the original per share purchase price of such shares or the current fair market value of such shares determined immediately prior to the sale event. We have the right to provide for cash payment to holders of restricted stock in exchange for the cancellation thereof, in an amount per share equal to the value of the consideration payable per share of common stock in the sale event.

Additionally, the 2012 Plan provides for certain drag along rights pursuant to which grantees may be obligated, on the request of the company or the accepting requisite holder, to sell, transfer and deliver, or cause to be sold, transferred and delivered, to a buyer, their shares in the event the Company or the accepting requisite holder determines to enter into a sale event with a buyer.

The board of directors may amend or discontinue the 2012 Plan at any time, subject to stockholder approval where such approval is required by applicable law. The administrator of the 2012 Plan may also amend or cancel any outstanding award, provided that no amendment to an award may adversely affect a participant's rights without his or her consent. The administrator of the 2012 Plan is specifically authorized to exercise its discretion to reduce the exercise price of outstanding stock options or effect the repricing of such awards through cancellation and re-grants.

The 2012 Plan will automatically terminate upon the earlier of 10 years from the date on which the 2012 Plan was initially adopted by our board of directors or 10 years from the date the 2012 Plan was initially approved by our stockholders. As of October 31, 2020, options to purchase 3,264,022 shares of common stock were outstanding under the 2012 Plan. Our board of directors has determined not to make any further awards under the 2012 Plan following the closing of this offering.

2020 Stock Option and Incentive Plan

Our 2020 Plan was adopted by our board of directors on November 23, 2020, approved by our stockholders on December 11, 2020 and became effective upon the date immediately preceding the date on which the registration statement of which this prospectus is part is declared effective by the SEC. The 2020 Plan will replace the 2012 Plan as our board of directors has determined not to make additional awards under the 2012 Plan following the closing of our initial public offering. However, the 2012 Plan will continue to govern outstanding equity awards granted thereunder. The 2020 Plan allows us to make equity-based and cash-based incentive awards to our officers, employees, directors and consultants.

Authorized Shares. We have initially reserved 1,843,771 shares of our common stock for the issuance of awards under the 2020 Plan, or the Initial Limit. The 2020 Plan provides that the number of shares reserved and available for issuance under the 2020 Plan will automatically increase on January 1, 2022 and each January 1 thereafter, by 4% of the outstanding number of shares of our common stock on the immediately preceding December 31 or such lesser number of shares as determined by our compensation committee, or the Annual Increase. These limits are subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. The shares we issue under the 2020 Plan will be authorized but unissued shares or shares that we reacquire. The shares of common stock underlying any awards under the 2020 Plan and the 2012 Plan that are forfeited, cancelled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by us prior to vesting, satisfied without the issuance of stock, expire or are otherwise terminated (other than by exercise) will be added back to the shares of common stock available for issuance under the 2020 Plan.

Incentive Stock Option Limit. The maximum number of shares of common stock that may be issued in the form of incentive stock options shall not exceed the Initial Limit, cumulatively increased on January 1, 2022 and on each January 1 thereafter by the lesser of the Annual Increase for such year or 2,000,000 shares of common stock.

Plan Administration. The 2020 Plan will be administered by our compensation committee. Our compensation committee has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted and the number of shares subject to such awards, to make any combination of awards to participants, to accelerate at any time the exercisability or vesting of any award and to determine the specific terms and conditions of each award, subject to the provisions of the 2020 Plan.

Eligibility. Persons eligible to participate in the 2020 Plan will be those full or part-time officers, employees, non-employee directors and consultants as selected from time to time by our compensation committee in its discretion.

Stock Options. The 2020 Plan permits the granting of both options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code, and options that do not so qualify. The option exercise price of each option will be determined by our compensation committee but may not be less than 100% of the fair market value of our common stock on the date of grant unless the option is granted (i) pursuant to a transaction described in, and in a manner consistent with Section 424(a) of the Code or (ii) to individuals who are not subject to U.S. income tax. The term of each option will be fixed by our compensation committee and may not exceed 10 years from the date of grant. Our compensation committee will determine at what time or times each option may be exercised.

Stock Appreciation Rights. Our compensation committee may award stock appreciation rights under the 2020 Plan subject to such conditions and restrictions as it may determine. Stock appreciation rights entitle the recipient to shares of common stock, or cash, equal to the value of the appreciation

in our stock price over the exercise price. The exercise price of each stock appreciation right may not be less than 100% of the fair market value of our common stock on the date of grant. The term of each stock appreciation right will be fixed by our compensation committee and may not exceed 10 years from the date of grant. Our compensation committee will determine at what time or times each stock appreciation right may be exercised.

Restricted Stock Awards, Restricted Stock Units, and Unrestricted Stock Awards. Our compensation committee may award restricted shares of common stock and restricted stock units to participants subject to such conditions and restrictions as it may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment with us through a specified vesting period. Our compensation committee may also grant shares of common stock that are free from any restrictions under the 2020 Plan. Unrestricted stock may be granted to participants in recognition of past services or for other valid consideration and may be issued in lieu of cash compensation due to such participant.

Dividend Equivalent Rights. Our compensation committee may grant dividend equivalent rights to participants that entitle the recipient to receive credits for dividends that would be paid if the recipient had held a specified number of shares of common stock.

Cash-Based Awards. Our compensation committee may grant cash bonuses under the 2020 Plan to participants, subject to the achievement of certain performance goals.

Sale Event. The 2020 Plan provides that upon the effectiveness of a “sale event,” as defined in the 2020 Plan, an acquirer or successor entity may assume, continue or substitute for the outstanding awards under the 2020 Plan. To the extent that awards granted under the 2020 Plan are not assumed or continued or substituted for by the successor entity, upon the effective time of the sale event, such awards shall terminate. In such case, except as may be otherwise provided in the relevant award certificate, all awards with time-based vesting, conditions or restrictions shall become fully vested and exercisable or nonforfeitable as of the effective time of the sale event and all awards with conditions and restrictions relating to the attainment of performance goals may become vested and nonforfeitable in connection with a sale event in the administrator’s discretion or to the extent specified in the relevant award certificate. In the event of such termination, individuals holding options and stock appreciation rights will be permitted to exercise such options and stock appreciation rights (to the extent exercisable) within a specified period of time prior to the sale event. In addition, in connection with the termination of the 2020 Plan upon a sale event, we may make or provide for a payment, in cash or in kind, to participants holding vested and exercisable options and stock appreciation rights equal to the difference between the per share consideration payable to stockholders in the sale event and the exercise price of the options or stock appreciation rights and we may make or provide for a payment, in cash or in kind, to participants holding other vested awards.

Amendment and Termination. Our board of directors may amend or discontinue the 2020 Plan and our compensation committee may amend or cancel outstanding awards for purposes of satisfying changes in law or any other lawful purpose, but no such action may adversely affect rights under an award without the holder’s consent. Certain amendments to the 2020 Plan require the approval of our stockholders. The administrator of the 2020 Plan is specifically authorized to exercise its discretion to reduce the exercise price of outstanding stock options and stock appreciation rights or effect the repricing of such awards through cancellation and re-grants without stockholder consent. No awards may be granted under the 2020 Plan after the date that is 10 years from the effective date of the 2020 Plan. No awards under the 2020 Plan have been made prior to the date of this prospectus.

2020 Employee Stock Purchase Plan

Our 2020 Employee Stock Purchase Plan, or the ESPP, was adopted by our board of directors on November 23, 2020, approved by our stockholders on December 11, 2020 and became effective on the date immediately preceding the date on which the registration statement of which this prospectus forms a part is declared effective by the SEC. The ESPP is intended to qualify as an “employee stock purchase plan” within the meaning of Section 423 of the Code. The ESPP initially reserves and authorizes the issuance of up to a total of 288,857 shares of our common stock to participating employees. The ESPP provides that the number of shares reserved and available for issuance will automatically increase

on January 1, 2022 and each January 1 thereafter through January 1, 2030, by the least of? (i) 307,295 shares of our common stock, (ii) 1% of the outstanding number of shares of common stock on the immediately preceding December 31, or (iii) such lesser number of shares of common stock as determined by the administrator of the ESPP. The number of shares reserved under the ESPP is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

All employees are eligible to participate in the ESPP. However, any employee who owns 5% or more of the total combined voting power or value of all classes of our stock will not be eligible to purchase shares of common stock under the ESPP.

We may make one or more offerings each year to our employees to purchase shares under the ESPP. Offerings will usually begin on each May 1 and November 1 and will continue for six-month periods, referred to as offering periods. Each eligible employee may elect to participate in any offering by submitting an enrollment form at least 15 business days before the applicable offering date.

Each employee who is a participant in the ESPP may purchase shares of our common stock by authorizing payroll deductions of up to 15% of his or her eligible compensation during an offering period. Unless the participating employee has previously withdrawn from the offering, his or her accumulated payroll deductions will be used to purchase shares of our common stock on the last business day of the offering period at a price equal to 85% of the fair market value of the shares of our common stock on the first business day or the last business day of the offering period, whichever is lower, provided that no more \$25,000 worth of common stock (or such other lesser maximum number of shares as may be established by the administrator) may be purchased by any one employee during any offering period. Under applicable tax rules, an employee may purchase no more than \$25,000 worth of shares of our common stock, valued at the start of the purchase period, under the ESPP in any calendar year.

The accumulated payroll deductions of any employee who is not a participant on the last day of an offering period will be refunded. An employee's rights under the ESPP terminate upon voluntary withdrawal from the plan or when the employee ceases employment with us for any reason.

The ESPP may be terminated or amended by our board of directors at any time. An amendment that increases the number of shares of our common stock authorized under the ESPP and certain other amendments require the approval of our stockholders.

Senior Executive Cash Incentive Bonus Plan

On November 23, 2020 our board of directors adopted the Senior Executive Cash Incentive Bonus Plan, or the Bonus Plan. The Bonus Plan provides for annual cash bonus payments based upon the attainment of our company and individual performance targets established by our compensation committee. The payment targets will be related to financial and operational measures or objectives with respect to our company, or the Corporate Performance Goals, as well as individual performance objectives.

Our compensation committee may select Corporate Performance Goals from among the following: cash flow (including, but not limited to, operating cash flow and free cash flow), revenue, corporate revenue, earnings before interest, taxes, depreciation and amortization, net income (loss) (either before or after interest, taxes, depreciation and/or amortization), changes in the market price of our common stock, economic value-added, acquisitions or strategic transactions, including collaborations, joint ventures or promotion arrangements, operating income (loss), return on capital assets, equity, or investment, stockholder returns, return on sales, gross or net profit levels, productivity, expense efficiency, margins, operating efficiency, customer satisfaction, working capital, earnings (loss) per share of our common stock, bookings, new bookings or renewals, sales or market shares, number of customers, number of new customers or customer references, operating income, and/or net annual recurring revenue, any of which may be measured in absolute terms, as compared to any incremental increase, in terms of growth, as compared to results of a peer group, against the market as a whole, compared to applicable market indices and/or measured on a pre-tax or post-tax basis.

Our compensation committee may select executive officers to participate in the Bonus Plan. Each executive officer who is selected to participate in the Bonus Plan will have a target bonus opportunity

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set for each performance period. The bonus formulas will be adopted in each performance period by the compensation committee and communicated to each executive. The Corporate Performance Goals will be measured at the end of each performance period after our financial reports have been published or such other appropriate time as the compensation committee determines. If the Corporate Performance Goals and individual performance objectives are met, payments will be made as soon as practicable following the end of each performance period, but no later than 74 days after the end of the year in which such performance period ends. Subject to the rights contained in any agreement between the executive officer and us, an executive officer must be employed by us on the bonus payment date to be eligible to receive a bonus payment. The Bonus Plan also permits the compensation committee to approve additional bonuses to executive officers in its sole discretion.

NON-EMPLOYEE DIRECTOR COMPENSATION

The following table presents the total compensation for each person who served as a non-employee member of our board of directors for such service during the year ended December 31, 2019. Other than as set forth in the table and described more fully below, we did not pay any compensation, make any equity awards or non-equity awards to, or pay any other compensation to any of the non-employee members of our board of directors in 2019. We reimburse non-employee members of our board of directors for reasonable travel and out-of-pocket expenses incurred in attending meetings of our board of directors and committees of our board of directors.

?	??	Fees Earned or Paid in Cash (\$)		??	Option Awards (\$)(1)		??	All Other Compensation (\$)		??	Total (\$)	?
J. Michael Ramsey, Ph.D.(2)	??	??	60,000	???	??	—	???	??	—	???	??60,000	??
E. Kevin Hrusovsky	??	??	—	???	??	—	???	??	—	???	??	—??
Nicolas Barthelemy	??	??	—	???	??	—	???	??	—	???	??	—??
Keith Crandell	??	??	—	???	??	—	???	??	—	???	??	—??
Mark Spoto	??	??	—	???	??	—	???	??	—	???	??	—??
Sharon Kedar(3)	??	??	—	???	??	—	???	??	—	???	??	—??

- (1) There were no options or other equity awards granted to directors in 2019. Except as noted below in footnote (3), none of our directors held options to purchase our common stock or any other stock awards as of December 31, 2019.
- (2) Dr. Ramsey is party to an independent contractor agreement with us, pursuant to which Dr. Ramsey receives \$5,000 per month as compensation for services provided to us, including one full day a week of consulting services, serving on our board of directors and serving as the chair of our scientific advisory board.
- (3) Ms. Kedar, who is a partner at Northpond Ventures, LP, a significant shareholder, has agreed to waive her director compensation with respect to her service as a non-employee director.

The outstanding options held by our directors as of December 31, 2019 are set forth below.

?	??	Aggregate Number of Shares Subject to Stock Options		??
J. Michael Ramsey, Ph.D.	??	??	46,094(1)	??
E. Kevin Hrusovsky	??	??	125,183(2)	??
Nicolas Barthelemy	??	??	49,167(3)	??

- (1) The shares underlying this option vest monthly over four years and will become fully vested in January 2021.
- (2) Represents an option to purchase 76,016 shares that is fully vested and an option to purchase 49,167 shares that vests monthly over three years and will become fully vested in April 2021.
- (3) The shares underlying this option vest monthly over three years and will become fully vested in March 2021.

Non-Employee Director Compensation Policy

Our board of directors intends to adopt a non-employee director compensation policy, to be effective upon effectiveness of the registration statement of which this prospectus forms a part, that is designed to enable us to attract and retain, on a long-term basis, highly qualified non-employee directors. Under the policy, each director who is not an employee will be paid cash compensation from and after the completion of this offering, as set forth below:

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?	??	Member Annual Fee	??	Chairman Annual Fee	??
Board of Directors	???	\$37,500	???	\$25,000	??
Audit Committee	???	9,000	???	18,000	??
Compensation Committee	???	6,000	???	12,000	??
Nominating and Corporate Governance Committee	???	5,000	???	10,000	??

* The annual fee for service as Chairman of the board of directors is in addition to the annual fee for service on the board of directors.

In addition, the non-employee director compensation policy will provide that, upon initial election to our board of directors (or, in the case of each non-employee director other than our Chairman as of the effectiveness of the registration statement of which this prospectus forms a part, upon such effectiveness), each non-employee director will be granted an option to purchase a number of shares equal to 0.055% of the number of shares of our common stock outstanding on the grant date, or the Initial Grant. The Initial Grant will vest in equal monthly installments over 36 months from the grant date, subject to continued service through the applicable vesting date. Furthermore, on the date of each annual meeting of stockholders following the completion of this offering, each non-employee director who continues as a non-employee director following such meeting will be granted an option to purchase a number of shares equal to 0.037% of the number of shares of our common stock outstanding on such grant date, or the Annual Grant. The Annual Grant will vest in 12 equal monthly installments from the grant date, subject to continued service through the applicable vesting date. Such awards are subject to full accelerated vesting upon a sale of the company.

We will reimburse all reasonable out-of-pocket expenses incurred by non-employee directors in attending meetings of our board of directors and committees thereof.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than the compensation agreements and other arrangements described under “Executive compensation” and “Director compensation” in this prospectus and the transactions described below, 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 below were comparable to terms we could have obtained in arm’s-length dealings with unrelated third parties.

Equity Financings

Series E Preferred Stock Financing

On April 12, 2019, we sold an aggregate of 2,169,563 shares of our Series E preferred stock at a purchase price of? \$6.29 per share, and on April 29, 2019, we sold an aggregate of 612,631 shares of our Series E preferred stock, for an aggregate purchase price of approximately \$17.5 million, pursuant to our Series E preferred stock financing. The following table summarizes purchases of our Series E preferred stock by our directors, holders of more than 5% of our capital stock and their affiliated entities. None of our executive officers purchased shares of Series E preferred stock.

<u>Stockholder</u>	<u>??</u>	<u>Shares of Series E Preferred Stock</u>	<u>??</u>	<u>Total Purchase Price</u>	<u>?</u>
Northpond Ventures, LP(1)	??	2,158,826	???	\$10,000,005	??
The Barthelemy 2001 Trust(2)	??	31,796	???	199,996	??
ARCH Venture Fund VII, L.P.(3)	??	293,818	???	1,848,115	??
SAEV Guernsey Holdings Limited(4)	??	74,448	???	468,277	??
Yodabyte Investments, LLC(5)	??	96,979	???	609,998	??

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- (1) Sharon Kedar, a member of our board of directors, is a partner at Northpond Ventures. Ms. Kedar has agreed to waive her director compensation with respect to her service as a non-employee director.
 - (2) Nicolas Barthelemy, a member of our board of directors, is a beneficiary of the Barthelemy 2001 Trust.
 - (3) Keith Crandell, a member of our board of directors, is a partner at ARCH Venture Fund.
 - (4) Cory Steffek, a former member of our board of directors, was a Managing Director of SAEV Guernsey Holdings Limited.
 - (5) Mark Spoto, a member of our board of directors, is a Managing Member of Razor’s Edge Fund, LP (“Razor’s Edge”), which is an affiliate of Yodabyte Investments, LLC, in which Mr. Spoto is also a Managing Director.

Series D Preferred Stock Financing

On March 2, 2017, we sold an aggregate of 3,549,176 shares of our Series D preferred stock at a purchase price of? \$5.6351 per share, for an aggregate purchase price of approximately \$20 million, pursuant to our Series D preferred stock financing. We had a second closing on September 7, 2018, where we sold an aggregate of 709,835 additional shares of our Series D preferred stock at a purchase price of? \$5.6351 per share, for an aggregate purchase price of approximately \$4 million. The following

table summarizes purchases of our Series D preferred stock by our directors, holders of more than 5% of our capital stock and their affiliated entities. None of our executive officers purchased shares of Series D preferred stock.

Stockholder	??	Shares of Series E Preferred Stock	??	Total Purchase Price	?
ARCH Venture Fund VII, L.P.(1)	??	??727,869	???	??4,101,614	??
SAEV Guernsey Holdings Limited(2)	??	??727,869	???	??4,101,614	??
RE Sidecar 4, LLC(3)	??	??150,840	???	??849,998	??
Yodabyte Investments, LLC (3)	??	??177,459	???	??999,999	??

- (1) Keith Crandell, a member of our board of directors, is a partner at ARCH Venture Fund.
- (2) Cory Steffek, a former member of our board of directors, was a Managing Director of SAEV Guernsey Holdings Limited.
- (3) Mark Spoto, a member of our board of directors, is a Managing Member of Razor's Edge Fund LP ("Razor's Edge"), which is an affiliate of RE Sidecar 4, LLC ("RE Sidecar"), and which Mr. Spoto is also a Managing Director. Razor's Edge, RE Sidecar and Yodabyte are referred to collectively as the "Razor's Edge Funds."

Stockholders Agreement

We are party to a fourth amended and restated stockholders agreement, that provides, among other things, that certain holders of our capital stock, including ARCH Venture Fund VII, L.P., Razor's Edge Funds, SAEV Guernsey Holdings Limited and UTEC 2 L.P., which each hold more than 5% of our outstanding capital stock, Kevin Knopp, our Chief Executive Officer, director and co-founder, Christopher Brown, our Chief Technology Officer, director and co-founder, and J. Michael Ramsey, our director and co-founder, have agreed as to the manner in which they will vote their shares of our capital stock on certain matters, including with respect to the election of directors. Upon completion of this offering, the voting provisions of the stockholders 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.

Right of First Refusal

Pursuant to our equity compensation plans and certain agreements with our stockholders, including the fourth amended and restated stockholders agreement with certain holders of our capital stock, including ARCH Venture Fund VII, L.P., Razor's Edge Funds, SAEV Guernsey Holdings Limited and UTEC 2 L.P., which each hold more than 5% of our outstanding capital stock, Kevin Knopp, our Chief Executive Officer, director and co-founder, Christopher Brown, our Chief Technology Officer, director and co-founder, and J. Michael Ramsey, our director and co-founder, we or our assignees have a right to purchase shares of our capital stock that certain stockholders propose to sell to other parties. This right will terminate upon completion of this offering. Since January 1, 2017, we and our assignees have waived our right of first refusal in connection with the sale of certain shares of our capital stock, including sales by certain of our executive officers. See the section titled "Principal Stockholders" for additional information regarding beneficial ownership of our capital stock.

Registration Rights

We are party to a fourth amended and restated registration rights agreement, that provides, among other things, that certain holders of our capital stock, including ARCH Venture Fund VII, L.P., Razor's Edge Funds, SAEV Guernsey Holdings Limited and UTEC 2 L.P., which each hold more than 5% of our outstanding capital stock, Kevin Knopp, our Chief Executive Officer, director and co-founder, and Kevin Hrusovsky, one of our directors, have the right to demand that we file a registration statement or request that their shares of our capital stock be included on a registration statement that we are otherwise filing.

Following the expiration of the lock-up period described below in “Shares Eligible For Future Sale—? Lock-up Agreements,” pursuant to our registration rights agreement, the holders of 17,222,141 shares of common stock, which includes 2,530,212 shares of common stock outstanding as of October 31, 2020 and 14,691,929 shares of common stock issuable upon conversion of our outstanding preferred stock as of October 31, 2020, are entitled to registration rights with respect to the shares of common stock held by them. These shares include all of the shares held following this offering by our principal stockholders and their affiliates, except that such numbers of shares do not reflect the shares of common stock, if any, purchased by any holders of registration rights in this offering. See “Description of Capital Stock—Registration Rights” for a more detailed description of these registration rights.

Commercial Services Agreement

In 2015, we entered into a commercial services agreement with SAEV Guernsey, one of our preferred stock investors, under which the investor became eligible for payment upon the achievement of certain sales and marketing milestones by December 31, 2016. As described in Note 8 of the Financial Statements, the investor achieved milestones totaling \$1.5 million, which will become payable only upon a Deemed Liquidation (as defined in our charter) prior to a qualified public offering. As a result, the investor's rights to payment will terminate upon the completion of this offering.

Amended and Restated Exclusive License Agreement with The University of North Carolina at Chapel Hill

We entered into an Amended and Restated Exclusive License Agreement with The University of North Carolina at Chapel Hill, or UNC, on May 20, 2015, as amended, pursuant to which UNC licensed its rights to certain inventions developed by J. Michael Ramsey PhD, who holds faculty positions at the UNC and who is the Company's scientific founder and a member of our board of directors since February 2012. See the section titled “Intellectual Property” for additional information regarding Dr. Ramsey's intellectual property. Under the terms of a separate agreement between Dr. Ramsey and UNC, Dr. Ramsey receives a portion of the royalties paid to UNC. Dr. Ramsey received approximately \$54,100 and \$57,400 from UNC in 2019 and 2018, respectively.

Indemnification Agreements with Officers and Directors and Directors' and Officers' Liability Insurance

We have entered into indemnification agreements with each of our directors, which such agreements will be amended and restated in connection with this offering. We will also enter into indemnification agreements with each of our executive officers in connection with this offering. The indemnification agreements, our restated certificate of incorporation and our restated by-laws to be in effect upon completion of this offering will require us to indemnify our directors to the fullest extent not prohibited by Delaware law. Subject to certain limitations, our restated by-laws also require us to advance expenses incurred by our directors and officers.

In addition, pursuant to the terms of our fourth amended and restated stockholders agreement we have also agreed to indemnify each Investor (as defined in the stockholders agreement), as well as their respective affiliates, direct and indirect partners (including partners of partners and stockholders and members of partners), members, stockholders, directors, officers, employees, and agents and each person who controls any of them from any losses (including reasonable fees and expenses) based upon, arising out of, or by reason of any third party or governmental claims relating to the indemnified party's status as a security holder, creditor, director, agent, representative or controlling person of the Company to the extent, and solely to the extent, that such losses are based upon, arise out of or are otherwise reasonably related to any action taken or omitted to be taken or alleged to have been taken or omitted to have been taken as security holder, director, agent, representative or controlling person of the Company or otherwise, alleging so called control person liability or securities law liability, except for losses arising from or based on (i) an untrue statement or omission or an alleged untrue statement or omission in a registration statement or prospectus made in reliance upon information furnished to the Company by or on behalf of such indemnified party, or (ii) conduct by an indemnified party which constitutes fraud or willful misconduct.

Our stock option plan also provides that our directors will not be liability for any act, omission, interpretation, construction or determination made in good faith in connection with the plan, and the members of our board of directors and any committee administering the plan will be entitled to indemnification and reimbursement by us in respect of any claim, loss, damage or expense (including reasonable attorneys' fees) arising or resulting therefrom to the fullest extent permitted by law and/or under our governing documents, including our certificate of incorporation or bylaws, or any directors' and officers' liability insurance coverage which may be in effect from time to time and/or any indemnification agreement between such individual and the Company.

We also maintain a general liability insurance policy which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers. Under our Fourth Amended and Restated Stockholders Agreement dated April 12, 2019, we also agreed to use our reasonable best efforts prior to this offering to increase our directors' and officers' liability insurance to at least \$10 million per occurrence, including coverage of claims under the Securities Act and the Exchange Act.

Directed Share Program

At our request, the underwriters have reserved up to 325,000 shares of our common stock offered by this prospectus for sale, at the initial public offering price per share, to our directors, officers, employees, business associates and other persons with whom we have a relationship. We do not currently know the extent to which these related persons will participate in the directed share program. The sales will be made by Empire Asset Management Co. as the directed share program administrator.

Related Person Transaction Policy

Our board of directors has adopted a written related person transaction policy providing that transactions with our directors, officers and holders of five percent or more of our voting securities and their affiliates, each a related person, must be approved by our audit committee. This policy became effective on the date our registration statement for this offering became effective. Pursuant to this policy, the audit committee has the primary responsibility for reviewing and approving or disapproving "related person 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. For purposes of this policy, 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 their immediate family members.

As appropriate for the circumstances, the audit committee will review and consider:

- the related person's interest in the related person transaction;
- the approximate dollar amount involved in the related person transaction;
- the approximate dollar amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the related-party transaction; and
- any other information regarding the related-party transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information known to us regarding beneficial ownership of our capital stock as of October 31, 2020, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- each person or group of affiliated persons known by us to be the beneficial owner of more than 5% of our capital stock;
- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

The following table does not reflect any shares of our common stock that may be purchased pursuant to our directed share program described under “Certain Relationships and Related Party Transactions—Directed Share Program” or any potential purchases of shares of our common stock made as part of this offering. If any shares of our common stock are purchased by our officers, directors, 5% stockholders or their affiliated entities, the number and percentage of our shares of common stock beneficially owned by them after this offering will differ from those set forth in the following table.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Under those rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power, and includes securities that the individual or entity has the right to acquire, such as through the exercise of stock options, within 60 days of October 31, 2020. Except as noted by footnote, and subject to community property laws where applicable, we believe, based on the information provided to us, that the persons and entities named in the table below have sole voting and investment power with respect to all common stock shown as beneficially owned by them.

The percentage of beneficial ownership prior to this offering in the table below is based on shares of common stock deemed to be outstanding as of October 31, 2020, assuming the conversion of all outstanding shares of our redeemable convertible preferred stock upon the completion of this offering into an aggregate of 14,691,929 shares of common stock upon the completion of this offering, and the percentage of beneficial ownership at this offering in the table below is based on shares of common stock assumed to be outstanding after the completion of the offering.

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Name and Address of Beneficial Owner	??	Number of Shares Beneficially Owned Prior to Offering	??	Percentage of Shares Beneficially Owned		??	After Offering	??	??
				Before Offering	??				
5% Stockholders:	??	??	?	???	??	?	???	??	??
ARCH Venture Fund VII, L.P.(1)	??	??	5,425,045	???	??	27.5%	???	??	20.7%
Razor's Edge Funds(2)	??	??	1,943,641	???	??	9.9%	???	??	7.4%
SAEV Guernsey Holdings Limited(3)	??	??	1,256,047	???	??	6.4%	???	??	4.8%
UTEC 2 L.P.(4)	??	??	1,201,622	???	??	6.1%	???	??	4.6%
Named Executive Officers and Directors:	??	??	?	???	??	?	???	??	??
Christopher Brown(5)	??	??	1,257,943	???	??	6.3%	???	??	4.8%
E. Kevin Hrusovsky(6)	??	??	457,077	???	??	2.3%	???	??	1.7%
John Kenneweg(7)	??	??	224,735	???	??	1.1%	???	??	*
J. Michael Ramsey(8)	??	??	1,597,737	???	??	8.1%	???	??	6.1%
Keith Crandell(9)	??	??	5,425,045	???	??	27.5%	???	??	20.7%
Kevin Knopp(10)	??	??	1,534,108	???	??	7.7%	???	??	5.8%
Mark Spoto(11)	??	??	1,943,641	???	??	9.9%	???	??	7.4%
Nicolas Barthelemy(12)	??	??	73,215	???	??	*	???	??	*
Sharon Kedar(13)	??	??	977,091	???	??	5.0%	???	??	3.7%
Executive officers and directors as a group (12 persons)(14)	??	??	14,035,868	???	??	63.4%	???	??	49.0%

* Indicates beneficial ownership of less than 1%.

(1) Consists of 5,425,045 shares of common stock issuable upon the conversion of 4,763,149 shares of Series A preferred stock, 1,596,906 shares of Series B preferred stock, 1,090,120 shares of Series C preferred stock, 1,083,098 shares of Series D preferred stock and 293,818 shares of Series E preferred stock held by ARCH Venture Fund VII, L.P. ("ARCH Fund VII"). The managing directors of ARCH Fund VII are Keith L. Crandell, Clinton Bybee and Robert Nelsen, and they may be deemed to beneficially own the shares held by ARCH Fund VII. Messrs. Crandell, Bybee and Nelsen disclaim beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The address of ARCH Fund VII is 8755 West Higgins Road, Suite 1025, Chicago, Illinois 60631.

(2) Consists of: (i) 1,436,119 shares of common stock issuable upon the conversion of 1,750,000 shares of Series A preferred stock and 586,710 shares of Series B preferred stock held by Razor's Edge; (ii) 338,856 shares of common stock issuable upon the conversion of 400,514 shares of Series C preferred stock and 150,840 shares of Series D preferred stock held by RE Sidecar; and (iii) 168,666 shares of common stock issuable upon the conversion of 177,459 shares of Series D preferred stock and 96,979 shares of Series E preferred stock held by Yodabyte. The managing members of the Razor's Edge Funds are Mark Spoto, Peggy Styer, Steven Pann, Richard Moxley and Jack Kerrigan, and they may be deemed to beneficially own the shares held by the Razor's Edge Funds. Messrs. Spoto, Pann, Moxley and Kerrigan and Ms. Styer disclaim beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The address of the Razor's Edge Funds is 1875 Explorer Street, Suite 560, Reston, VA 20190.

(3) Consists of 1,256,047 shares of common stock issuable upon the conversion of 1,159,420 shares of Series C preferred stock, 809,847 shares of Series D preferred stock and 74,448 shares of Series E preferred stock held by SAEV Guernsey Holdings Limited ("SAEV Guernsey"). The directors of SAEV Guernsey are Mahdi F. Aladel, Bruce D. Niven, and Salman K. Juma, and they may be deemed to beneficially own the shares held by SAEV Guernsey. Messrs. Aladel, Niven, and Juma disclaim beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The registered address of SAEV Guernsey is PO Box 255, Trafalgar Court, Les Bangués, St. Peter Port, Guernsey GY1 3QL.

(4) Consists of 1,201,622 shares of common stock issuable upon the conversion of 1,250,000 shares of Series A preferred stock, 419,078 shares of Series B preferred stock and 286,082 shares of common stock issuable upon the conversion of shares of Series C preferred stock held by UTEC 2,

L.P. ("UTECH L.P."). The general partner of UTECH L.P. is The University of Tokyo Edge Capital Partners Co., Ltd. whose managing director is Tomotaka Goji, and he may be deemed to beneficially own the shares held by UTECH L.P. Mr. Tomotaka Goji disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The address of UTECH L.P. is Hongo 7-3-1, Bunkyo-ku, Tokyo 113-8485, Japan.

- (5) Consists of the following: (i) 1,099,516 shares of common stock, (ii) 154,031 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 and (iii) 4,396 shares of common stock issuable upon the conversion of 7,153 shares of Series D preferred stock held by Dr. Brown.
- (6) Consists of the following: (i) 57,771 shares of common stock, (ii) 127,402 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 and (iii) 135,405 shares of common stock issuable upon the conversion of 165,000 shares of Series A preferred stock and 55,318 shares of Series B preferred stock held by Mr. Hrusovsky. Also includes 136,499 shares of common stock issuable upon the conversion of 222,098 shares of Series B preferred stock held by the E. Kevin Hrusovsky 2012 Irrevocable Trust, of which Kevin, his wife and two children are trustees and have joint voting and investment power over the shares held by the E. Kevin Hrusovsky 2012 Irrevocable Trust.
- (7) Consists of the 224,735 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 held by Mr. Kenneweg.
- (8) Consists of the following: (i) 1,552,604 shares of common stock, which is inclusive of shares jointly owned with his spouse, and (ii) 45,133 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 held by Dr. Ramsey.
- (9) Consists of securities held by ARCH Fund VII as set forth in footnote 1. Mr. Crandell disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein, if any.
- (10) Consists of the following: (i) 1,264,444 shares of common stock, (ii) 181,047 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 and (iii) 88,617 shares of common stock issuable upon the conversion of 102,629 shares of Series A preferred stock, 34,408 shares of Series B preferred stock and 7,153 shares of Series D preferred stock held by Dr. Knopp.
- (11) Consists of securities held by the Razor's Edge Funds as set forth in footnote 2. Mr. Spoto disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein, if any.
- (12) Consists of 53,674 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 held by Mr. Barthelemy. Also includes 19,541 shares of common stock issuable upon the conversion of 31,796 shares of Series E preferred stock held by The Barthelemy 2001 Trust, of which Nicolas and Lisa Barthelemy are trustees and have joint voting and investment power over the shares held by The Barthelemy 2001 Trust.
- (13) Consists of 977,091 shares of common stock issuable upon the conversion of 1,589,826 shares of Series E preferred stock held by Northpond Ventures, LP where Ms. Kedar is a partner. Ms. Kedar disclaims beneficial ownership of such shares except to the extent of her pecuniary interest therein, if any. The address of Northpond Ventures, LP is 7500 Old Georgetown Rd, Suite 850, Bethesda, MD 20814.
- (14) See footnotes 5 through 13. Also includes the following: (i) 91,580 shares of common stock, 120,613 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 and 17,814 shares of common stock issuable upon the conversion of 28,986 shares of Series C preferred stock held by Mr. Griffith; (ii) 312,709 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 held by Dr. Basarsky; and (iii) 2,560 shares of common stock issuable upon the exercise of stock options exercisable within 60 days of October 31, 2020 held by Mr. Turner.

DESCRIPTION OF CAPITAL STOCK

The following descriptions are summaries of the material terms of our sixth amended and restated certificate of incorporation, which will be effective upon the completion of this offering and amended and restated by-laws, which will be effective upon the effectiveness of the registration statement of which this prospectus is a part. The descriptions of the common stock and redeemable convertible preferred stock give effect to changes to our capital structure that will occur immediately prior to the completion of this offering.

General

Upon completion of this offering, our authorized capital stock will consist of 100,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, par value \$0.001 per share, all of which shares of preferred stock will be undesignated.

As of October 31, 2020, 5,008,833 shares of our common stock and 23,905,267 shares of redeemable convertible preferred stock were outstanding and held by 71 stockholders of record. This amount does not take into account the conversion of all outstanding shares of our redeemable convertible preferred stock into common stock upon the completion of this offering.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding redeemable convertible preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding redeemable convertible preferred stock. The shares to be issued by us in this offering will be, when issued and paid for, validly issued, fully paid and non-assessable.

Preferred Stock

Upon the completion of this offering, all outstanding shares of our redeemable convertible preferred stock will be converted into shares of our common stock. Upon the consummation of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. Immediately after consummation of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Stock Options

As of October 31, 2020, options to purchase 3,264,022 shares of our common stock were outstanding under our 2012 Stock Option and Incentive Plan, or 2012 Plan, of which 1,803,588 were exercisable as of that date.

Registration Rights

Upon the completion of this offering, the holders of 17,222,141 shares of our common stock, including those issuable upon the conversion of redeemable convertible preferred stock, which shares we refer to as "registrable securities," will be entitled to rights with respect to the registration of these

registrable securities under the Securities Act. These rights are provided under the terms of an investors' rights agreement between us and holders of our redeemable convertible preferred stock. The fourth amended and restated registration rights agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses of underwritten registrations under this agreement will be borne by us and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Demand Registration Rights

Beginning 180 days after the effective date of this registration statement, the holders of registrable securities are entitled to demand registration rights under certain conditions. Under the terms of the fourth amended and restated registration rights agreement, we will be required, upon the written request of holders of a majority of these registrable securities to file a registration statement and use best efforts to effect the registration of all or a portion of these registrable securities for public resale. We are required to effect only two registrations pursuant to this provision of the investors' rights agreement.

Short-form Registration Rights

Pursuant to the fourth amended and restated registration rights agreement, if we are eligible to file a registration statement on Form S-3, upon the written request of holders of these registrable securities that would result in an aggregate offering price of at least \$500,000, we will be required to effect a registration of such registrable securities. We are required to effect only two registrations in any twelve month period pursuant to this provision of the investors' rights agreement. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Piggyback Registration Rights

Pursuant to the investors' rights agreement, if we register any of our securities either for our own account or for the account of other security holders, subject to certain exceptions, the holders of these shares are entitled to include their shares in the registration. Subject to certain exceptions contained in the investors' rights agreement, we and the underwriters may limit the number of shares included in the underwritten offering to the number of shares which we and the underwriters determine in our sole discretion will not jeopardize the success of the offering.

Indemnification

Our fourth amended and restated registration rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expiration of Registration Rights

The demand registration rights and short form registration rights granted to any holder of registrable securities under the investors' rights agreement will terminate upon the earliest to occur of: (i) a deemed liquidation event (as defined in our certificate of incorporation), (ii) the fifth anniversary of the completion of this offering or (iii) such time after this offering when the holders' shares may be sold without restriction pursuant to Rule 144 within a three month period.

Anti-Takeover Effects of our Sixth Amended and Restated Certificate of Incorporation and Amended and Restated By-Laws and Delaware Law

Our sixth amended and restated certificate of incorporation and amended and restated by-laws include a number of provisions that may have the effect of delaying, deferring or preventing another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies

Our sixth amended and restated certificate of incorporation provides for the division of our board of directors into three classes serving staggered three-year terms, with one class being elected each year. Our sixth amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of two-thirds or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board,

may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No Written Consent of Stockholders

Our sixth amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our amended and restated by-laws or removal of directors by our stockholders without holding a meeting of stockholders.

Meetings of Stockholders

Our sixth amended and restated certificate of incorporation and amended and restated by-laws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our amended and restated by-laws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements

Our amended and restated by-laws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our by-laws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to our Sixth Amended and Restated certificate of incorporation and Amended and Restated By-Laws

Any amendment of our sixth amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our sixth amended and restated certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition, limitation of liability and the amendment of our by-laws and certificate of incorporation must be approved by not less than two-thirds of the outstanding shares entitled to vote on the amendment, and not less than two-thirds of the outstanding shares of each class entitled to vote thereon as a class. Our amended and restated by-laws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the amended and restated by-laws, and may also be amended by the affirmative vote of at least two-thirds of the outstanding shares entitled to vote on the amendment, or, if our board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated Preferred Stock

Our sixth amended and restated certificate of incorporation provides for 5,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our

sixth amended and restated certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Choice of Forum

Our amended and restated by-laws that will become effective upon the closing of this offering will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders; (3) any action asserting a claim against us arising pursuant to any provision of the General Corporation Law of the State of Delaware or our certificate of incorporation or by-laws; (4) any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or by-laws; or (5) any action asserting a claim governed by the internal affairs doctrine; provided, however, that the this provision shall not apply to any causes of action arising under the Securities Act or Exchange Act.

In addition, our amended and restated by-laws that will become effective upon the closing of this offering will contain a provision by virtue of which, unless we consent in writing to the selection of an alternative forum, the United States District Court for the District of Massachusetts will be the exclusive forum for any private action asserting violations by us or any of our directors or officers of the Securities Act, or the rules and regulations promulgated thereunder, and of all suits in equity and actions at law brought to enforce any liability or duty created by those statutes or the rules and regulations under such statutes. If any action the subject matter of which is within the scope of the preceding sentence is filed in a court other than the United States District Court for the District of Massachusetts, the plaintiff or plaintiffs shall be deemed by this provision of our amended and restated by-laws (i) to have consented to removal of the action by us to the United States District Court for the District of Massachusetts, in the case of an action filed in a state court, and (ii) to have consented to transfer of the action to the United States District Court for the District of Massachusetts.

Our amended and restated by-laws will also provide that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision. It is possible that a court of law could rule that the choice of forum provisions contained in our amended and restated by-laws are inapplicable or unenforceable if they are challenged in a proceeding or otherwise. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation and by-laws has been challenged in legal proceedings.

These forum provisions may impose additional costs on stockholders, may limit our stockholders' ability to bring a claim in a forum they find favorable, and the designated courts may reach different judgments or results than other courts. In addition, there is uncertainty as to whether the federal forum provision for Securities Act claims will be enforced, which may impose additional costs on us and our stockholders.

Section 203 of the Delaware General Corporation Law

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming 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 for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Nasdaq Global Market Listing

Our common stock has been approved for listing on the Nasdaq Global Market under the trading symbol "MASS."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be Computershare Trust Company, N.A. The transfer agent and registrar's address is PO Box 505000, Louisville, KY 40202, and its telephone number is 800-736-3001.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our shares. Future sales of our 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 will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our 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 our ability to raise equity capital in the future.

Based on the number of shares outstanding as of October 31, 2020, upon the completion of this offering, 26,200,762 shares of our common stock will be outstanding. Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below. All remaining shares of common stock held by existing stockholders immediately prior to the completion of this offering will be "restricted securities" as such term is defined in Rule 144. These restricted securities were issued and sold by us, or will be issued and sold by us, in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act, including the exemptions provided by Rule 144 or Rule 701, summarized below.

Rule 144

In general, a person who has beneficially owned restricted stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we are subject to the Securities Exchange Act of 1934, as amended, or the Exchange Act, periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares then outstanding, which will equal approximately 262,008 shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares, based on the number of shares outstanding as of October 31, 2020; or
- the average weekly trading volume of our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales by affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Any person who is not an affiliate of ours at the time of, or at any time during the three months preceding, a sale and has held restricted securities for at least one year will be entitled to sell an unlimited number of restricted securities without regard to the length of time we have been subject to Exchange Act periodic reporting or whether we are current in our Exchange Act reporting.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares.

However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under "Underwriting" included elsewhere in this prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Lock-up Agreements

We, our directors and executive officers and holders of substantially all of our common stock have signed a lock-up agreement that prevent us and them from selling any of our common stock or any securities convertible into or exercisable or exchangeable for common stock for a period of not less than 180 days from the date of this prospectus without the prior written consent of the Cowen and Company, LLC and SVB Leerink LLC, subject to certain exceptions. See the section entitled "Underwriting" appearing elsewhere in this prospectus for more information.

Registration Rights

Upon completion of this offering, certain holders of our securities will be entitled to various rights with respect to registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See the section entitled "Description of Capital Stock—Registration Rights" appearing elsewhere in this prospectus for more information.

Equity Incentive Plans

We intend to file one or more registration statements on Form S-8 under the Securities Act to register our shares issued or reserved for issuance under our equity incentive plans. The first such registration statement is expected to be filed soon after the date of this prospectus and will automatically become effective upon filing with the SEC. Accordingly, shares registered under such registration statement will be available for sale in the open market, unless such shares are subject to vesting restrictions with us or the lock-up restrictions described above. As of October 31, 2020, we estimate that such registration statement on Form S-8 will cover approximately 5,617,158 shares.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

- a non-resident alien individual;
- a foreign corporation or any other foreign organization taxable as a corporation for U.S. federal income tax purposes; or
- a foreign estate or trust, the income of which is not subject to U.S. federal income tax on a net income basis.

This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons that hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its tax advisor regarding the tax consequences of acquiring, holding and disposing of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and, all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any such change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein. We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code, which is generally property held for investment.

This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any aspects of any U.S. federal tax other than the income tax, U.S. state, local or non-U.S. taxes, include the alternative minimum tax, or the Medicare tax on net investment income. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt or governmental organizations;
- financial institutions;
- brokers or dealers in securities;
- regulated investment companies;
- pension plans;
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- "qualified foreign pension funds," or entities wholly owned by a "qualified foreign pension fund";
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and partners and investors therein);
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- persons who have elected to mark securities to market;
- persons who have a functional currency other than the U.S. dollar;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;

- persons for whom our stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code;
- certain U.S. expatriates; and
- persons subject to special tax accounting rules as a result of any item of gross income with respect to the common stock being taken into account in an applicable financial statement under Section 451(b) of the Code.

This discussion is for general information only and is not tax advice. Accordingly, all prospective non-U.S. holders of our common stock should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock.

Distributions on our Common Stock

Distributions, if any, on our common stock 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. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder’s investment, up to such holder’s tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in “Gain on Sale or Other Taxable Disposition of Our Common Stock.” Any such distributions will also be subject to the discussions below under the sections titled “Backup Withholding and Information Reporting” and “Withholding and Information Reporting Requirements—FATCA.”

Subject to the discussion in the following two paragraphs in this section, dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence. If we or another withholding agent apply over-withholding or if a non-U.S. holder does not timely provide us with the required certification, the non-U.S. holder may be entitled to a refund or credit of any excess tax withheld by timely filing an appropriate claim with the IRS.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional “branch profits tax” at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder’s country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) to the applicable withholding agent and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS.

Gain on Sale or Other Taxable Disposition of our Common Stock

Subject to the discussions below under “Backup Withholding and Information Reporting” and “Withholding and Information Reporting Requirements—FATCA,” a non-U.S. holder generally will not be subject to any U.S. federal income tax on any gain realized upon such holder’s sale or other taxable disposition of shares of our common stock unless:

- the gain is effectively connected with the non-U.S. holder’s conduct of a U.S. trade or business and, if an applicable income tax treaty so provides, is attributable to a permanent

establishment or a fixed-base maintained by such non-U.S. holder in the United States, in which case the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in “Distributions on Our Common Stock” also may apply;

- the non-U.S. holder is a nonresident alien individual who is present in the United States for a period or periods aggregate 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence) on the net gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- we are, or have been, at any time during the five-year period preceding such sale or other taxable disposition (or the non-U.S. holder’s holding period, if shorter) a “U.S. real property holding corporation,” unless our common stock is regularly traded on an established securities market and the non-U.S. holder holds no more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above in “Distributions on Our Common Stock,” generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them. Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder’s U.S. federal income tax liability, if any, provided that an appropriate claim is filed with the IRS in a timely manner.

Withholding and Information Reporting Requirements—FATCA

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a U.S. federal withholding tax at a rate of 30% on payments of dividends on our common stock paid to a foreign entity unless (i) if

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the foreign entity is a “foreign financial institution,” such foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a “foreign financial institution,” such foreign entity identifies certain of its U.S. investors, if any, or (iii) the foreign entity is otherwise exempt under FATCA. Under applicable U.S. Treasury regulations, withholding under FATCA currently applies to payments of dividends on our common stock. Currently proposed U.S. Treasury Regulations provide that FATCA withholding does not apply to gross proceeds from the disposition of property of a type that can produce U.S. source dividends or interest; however, prior versions of the rules would have made such gross proceeds subject to FATCA withholding. Taxpayers (including withholding agents) can generally rely on the proposed Treasury Regulations until final Treasury Regulations are issued. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of this withholding tax. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their tax advisors regarding the possible implications of this legislation on their investment in our common stock and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of the 30% withholding tax under FATCA.

UNDERWRITING

We and the underwriters for the offering named below have entered into an underwriting agreement with respect to the common stock being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of shares of our common stock set forth opposite its name below. Cowen and Company, LLC and SVB Leerink LLC are the representatives of the underwriters.

Underwriter	Number of Shares
Cowen and Company, LLC	22,437,500
SVB Leerink LLC	22,112,500
William Blair & Company, L.L.C.	1,040,000
Stifel, Nicolaus & Company, Incorporated	910,000
Total	26,500,000

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased, other than those shares covered by the option to purchase additional shares described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act of 1933, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Option to Purchase Additional Shares. We have granted to the underwriters an option to purchase up to 975,000 additional shares of common stock at the public offering price, less the underwriting discounts and commissions. This option is exercisable for a period of 30 days. To the extent that the underwriters exercise this option, the underwriters will purchase additional shares from us in approximately the same proportion as shown in the table above.

Discounts and Commissions. The following table shows the public offering price, underwriting discounts and commissions and proceeds, before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

We estimate that the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately \$2,700,000 and are payable by us. We have agreed to reimburse the underwriters for up to \$35,000 for their FINRA counsel fee. In accordance with FINRA Rule 5110, this reimbursed fee is deemed underwriting compensation for this offering.

	Total			
	Per Share	Without Option	With Option	
Public offering price	220.00	130,000,000	149,500,000	
Underwriting discounts and commissions	1.40	9,100,000	10,465,000	
Proceeds, before expenses, to Company	18.60	120,900,000	139,035,000	

The underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus. The underwriters may offer the shares of common stock

to securities dealers at the public offering price less a concession not in excess of? \$0.84 per share. If all of the shares are not sold at the public offering price, the underwriters may change the offering price and other selling terms.

Discretionary Accounts. The underwriters do not intend to confirm sales of the shares to any accounts over which they have discretionary authority.

Market Information. Prior to this offering, there has been no public market for shares of our common stock. The initial public offering price was determined by negotiations between us and the representatives of the underwriters. In addition to prevailing market conditions, the factors considered in these negotiations included:

- the history of, and prospects for, our company and the industry in which we compete;
- our past and present financial information;
- an assessment of our management; its past and present operations, and the prospects for, and timing of, our future revenue;
- the present state of our development;
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

We have applied to have our common stock listed on the Nasdaq Global Market under the symbol "MASS".

Stabilization. In connection with this offering, the underwriters may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions, penalty bids and purchases to cover positions created by short sales.

- Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.
- Overallotment transactions involve sales by the underwriters of shares of common stock in excess of the number of shares the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in the option to purchase additional shares. The underwriters may close out any short position by exercising their option to purchase additional shares and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the option to purchase additional shares. If the underwriters sell more shares than could be covered by exercise of the option to purchase additional shares and, therefore, have a naked short position, the position can be closed out only by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering.
- Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by that syndicate member is purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on the Nasdaq Global Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Lock-Up Agreements. Pursuant to certain “lock-up” agreements, we and our executive officers, directors and substantially all of our other stockholders, have agreed, subject to certain exceptions, not to and will not cause or direct any of its affiliates to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into, or announce the intention to enter into any swap, hedge or similar agreement or arrangement (including, without limitation, 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) that transfers, is designed to transfer or reasonably could be expected to transfer (whether by the stockholder or someone other than the stockholder) that transfers, in whole or in part, directly or indirectly the economic consequence of ownership of, directly or indirectly, or make any demand or request or exercise any right with respect to the registration of, or file with the SEC a registration statement under the Securities Act relating to, any common stock or securities convertible into or exchangeable or exercisable for any common stock without the prior written consent of Cowen and Company, LLC and SVB Leerink LLC, for a period of 180 days after the date of the pricing of the offering.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The exceptions permit us, among other things and subject to restrictions, to: (a) issue common stock or options pursuant to employee benefit plans, (b) issue common stock upon exercise of outstanding options or warrants (c) issue securities in connection with acquisitions or similar transactions, or (d) file registration statements on Form S-8. The exceptions permit parties to the “lock-up” agreements, among other things and subject to restrictions, to: (a) convert outstanding convertible preferred stock into common stock in connection with the consummation of the offering, (b) if the party is a natural person, (i) make certain gifts or transfers to a trust for the benefit of such party’s family members, (ii) make transfers by will or intestate succession, and (iii) make transfers pursuant to a court or regulatory agency order or qualified domestic order or in connection with a divorce settlement, (c) if the party is a corporation, partnership, limited liability company or other business entity, make transfers to any stockholders, partners, members of, or owners of similar equity interests in, the party, or to an affiliate of the party, if such transfer is not for value, (d) if the party is a corporation, partnership, limited liability company or other business entity, make transfers (i) in connection with the sale or transfer of all of the party’s capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the party’s assets, in any such case not undertaken for the purpose of avoiding the restrictions imposed by the “lock-up” agreement or (ii) to such party’s affiliates, (e) make transfers pursuant to a tender offer, merger, consolidation or other similar transaction made to all holders of our securities involving a change of control, provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed, any common stock or securities convertible into or exercisable or exchangeable for common stock held shall remain subject to the restrictions on transfer set for in the lock-up agreement, (f) participate in any transactions relating to common stock or other securities convertible into or exercisable or exchangeable for common stock acquired in this offering or in open market transactions after completion of the offering, provided that no such transaction is required to be, or is, publicly announced (whether Form 4, Form 5 or otherwise) during the lock-up period, (h) enter into any trading plan providing for the sale of common stock, which meets the requirements of Rule 10b5-1(c) under the Securities Exchange Act of 1934, provided that such plan does not provide for, or permit, the sale of any common stock during the lock-up period and no public announcement or filing is voluntarily made or required regarding such plan during the lock-up period, and (i) make transfers to us to satisfy tax withholding obligations pursuant to our equity incentive plans or arrangements disclosed in the prospectus.

Cowen and Company, LLC and SVB Leerink LLC, in their sole discretion, may release our common stock and other securities subject to the lock-up agreements described above in whole or in part at any time. When determining whether or not to release our common stock and other securities from lock-up agreements, Cowen and Company, LLC and SVB Leerink LLC will consider, among other factors, the holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time of the request. In the event of such a release or waiver for one of our directors or officers, Cowen and Company, LLC and SVB Leerink LLC shall provide us with notice of the impending release or waiver at least three business days before the effective date of such release or waiver and we will announce the impending release or waiver by issuing a press release at least two business days before the effective date of the release or waiver.

Directed Share Program. At our request, the underwriters have reserved up to 325,000 shares of our common stock for sale, at the initial public offering price, through a directed share program to our directors, officers, employees, business associates and other persons with whom we have a relationship. The sales will be made by Empire Asset Management Co. as the directed share program administrator. There can be no assurance that any of the reserved shares will be so purchased. The number of shares available for sale to the general public in the offering will be reduced to the extent the reserved shares are purchased in the directed share program. Any reserved shares of common stock not purchased through the directed share program will be offered to the general public on the same basis as the other common stock offered hereby.

Selling Restrictions

Canada. The common stock 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 common stock 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. The securities will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to article 652a or 1156 of the Swiss Federal Code of Obligations.

European Economic Area and the United Kingdom. In relation to each Member State of the European Economic Area and the United Kingdom (each, a "Member State"), no shares have been offered or will be offered pursuant to the offering to the public in that Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Member 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 the Company 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 the Company 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 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 Member 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 Member 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.

References to the Prospectus Regulation includes, in relation to the United Kingdom, the Prospectus Regulation as it forms part of the United Kingdom domestic law by virtue of the European Union (Withdrawal) Act of 2018.

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, or 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 and/or (iii) to whom it may otherwise be lawfully communicated (all such persons together being referred to as “relevant persons”) 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.

Hong Kong. The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (the “SFO”) of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong) (the “CO”), or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the SFO and any rules made thereunder.

Singapore. 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 (the "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, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or
- 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 (however 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:

- (i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

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).

Israel. In the State of Israel this prospectus shall not be regarded as an offer to the public to purchase shares of common stock under the Israeli Securities Law, 5728—1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728-1968, including, inter alia, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions (the "Addressed Investors"); or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728—1968, subject to certain conditions (the "Qualified Investors"). The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. We have not and will not take any action that would require us to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728—1968. We have not and will not distribute

this prospectus or make, distribute or direct an offer to subscribe for our common stock to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

Qualified Investors may have to submit written evidence that they meet the definitions set out in of the First Addendum to the Israeli Securities Law, 5728—1968. In particular, we may request, as a condition to be offered common stock, that Qualified Investors will each represent, warrant and certify to us and/or to anyone acting on our behalf: (i) that it is an investor falling within one of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968; (ii) which of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968 regarding Qualified Investors is applicable to it; (iii) that it will abide by all provisions set forth in the Israeli Securities Law, 5728—1968 and the regulations promulgated thereunder in connection with the offer to be issued common stock; (iv) that the shares of common stock that it will be issued are, subject to exemptions available under the Israeli Securities Law, 5728—1968: (a) for its own account; (b) for investment purposes only; and (c) not issued with a view to resale within the State of Israel, other than in accordance with the provisions of the Israeli Securities Law, 5728—1968; and (v) that it is willing to provide further evidence of its Qualified Investor status. Addressed Investors may have to submit written evidence in respect of their identity and may have to sign and submit a declaration containing, inter alia, the Addressed Investor's name, address and passport number or Israeli identification number.

We have not authorized and do not authorize the making of any offer of securities through any financial intermediary on our behalf, other than offers made by the underwriters and their respective affiliates, with a view to the final placement of the securities as contemplated in this document. Accordingly, no purchaser of the shares, other than the underwriters, is authorized to make any further offer of shares on our behalf or on behalf of the underwriters.

Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, or the ASIC, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001, or Corporations Act, and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the securities may only be made to persons, or the Exempt Investors, who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the securities without disclosure to investors under Chapter 6D of the Corporations Act.

The securities applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring securities must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Electronic Offer, Sale and Distribution of Shares. A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives 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 underwriters and selling group members that will make internet

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distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

Other Relationships. Certain of the underwriters and their affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates for which they have received, and may in the future receive, customary fees.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Cooley LLP is representing the underwriters in this offering.

EXPERTS

The financial statements as of December 31, 2019 and 2018 and for the years then ended included in this Prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock we are offering by this prospectus. This prospectus does not contain all of the information included in the registration statement. For further information pertaining to us and our common stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the 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.

Upon the completion of the offering, we will be subject to the informational requirements of the Exchange Act and will file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, at the SEC's website at www.sec.gov. We also maintain a website at <http://www.908devices.com>. Upon completion of the offering, you may access, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendment to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of 908 Devices Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of 908 Devices Inc. (the “Company”) as of December 31, 2019 and 2018, and the related statements of operations and comprehensive loss, of redeemable convertible preferred stock and stockholders’ deficit and of cash flows for the years then ended, including the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Substantial Doubt about the Company’s Ability to Continue as a Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has incurred losses since inception and has an accumulated deficit that raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

October 2, 2020, except for the effects of the reverse stock split discussed in Note 16 to the financial statements, as to which the date is December 14, 2020.

We have served as the Company’s auditor since 2013.

908 Devices Inc.
Balance Sheets
(In thousands, except share and per share amounts)

	December 31,			September 30,		Pro Forma September 30,	
	2018	2019	2020	2020	2020	2020	
	(unaudited)		(unaudited)		(unaudited)		
Assets							
Current assets:							
Cash and cash equivalents	\$ 7,072	\$ 17,913	\$ 19,712		\$ 19,712		
Accounts receivable, net	4,132	5,005	9,312		9,312		
Unbilled receivables	2,204	74	127		127		
Inventory	3,523	5,237	4,835		4,835		
Prepaid expenses and other current assets	272	351	430		430		
Total current assets	17,203	28,580	34,416		34,416		
Operating lease, right-of-use assets	8,180	7,245	6,467		6,467		
Property and equipment, net	1,834	1,326	934		934		
Deferred offerings costs	—	—	868		868		
Other long-term assets	531	511	719		719		
Total assets	\$ 27,748	\$ 37,662	\$ 43,404		\$ 43,404		
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)							
Current liabilities:							
Accounts payable	\$ 645	\$ 577	\$ 612		\$ 612		
Accrued expenses	2,853	2,909	4,882		4,882		
Deferred revenue	951	1,490	2,227		2,227		
Operating lease liabilities	310	1,078	1,124		1,124		
Current portion of long-term debt	—	—	3,500		3,500		
Total current liabilities	4,759	6,054	12,345		12,345		
Long-term debt, net of discount and current portion	9,650	14,769	11,317		11,317		
Operating lease liabilities, net of current portion	7,973	6,941	6,101		6,101		
Deferred revenue, net of current portion	362	571	7,029		7,029		
Commercial services agreement liability—related party	750	750	375		375		
Preferred stock warrant liability	1,341	728	754		—		
Total liabilities	24,835	29,813	37,921		37,167		
Commitments and contingencies (Note 12)							
Redeemable convertible preferred stock (Series A, B, C, D and E), \$0.001 par value; 21,338,912 shares authorized at December 31, 2018 and 24,156,877 shares authorized at December 31, 2019 and September 30, 2020 (unaudited); 20,749,831 shares issued and outstanding at December 31, 2018 and 23,905,267 shares issued and outstanding at December 31, 2019 and September 30, 2020 (unaudited); liquidation preference of \$71,285 at December 31, 2019 and September 30, 2020 (unaudited); no shares issued or outstanding, pro forma at September 30, 2020 (unaudited)	53,089	71,017	71,091		—		
Stockholders' equity (deficit):							
Common stock, \$0.001 par value; 32,803,254 shares and 36,976,630 shares authorized at December 31, 2018 and 2019, respectively, and 36,976,630 shares authorized at September 30, 2020 (unaudited); 4,990,272 shares and 4,990,702 shares issued and outstanding at December 31, 2018 and 2019, respectively, and 5,001,312 shares issued and outstanding at September 30, 2020 (unaudited); 19,693,241 shares issued and outstanding, pro forma at September 30, 2020 (unaudited)	5	5	5		20		
Additional paid-in capital	2,095	2,476	2,629		74,459		
Accumulated deficit	(52,276)	(65,649)	(68,242)		(68,242)		
Total stockholders' equity (deficit)	(50,176)	(63,168)	(65,608)		6,237		
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	\$ 27,748	\$ 37,662	\$ 43,404		\$ 43,404		

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

908 Devices Inc.					
Statements of Operations and Comprehensive Loss					
(In thousands, except share and per share amounts)					
	Year Ended December 31,		Nine Months Ended September 30,		
	2018	2019	2019	2020	
			(unaudited)		
Revenue:					
Product and service revenue	\$ 13,738	\$ 15,344	\$ 8,292	\$ 18,844	
License and contract revenue	8,316	2,628	1,332	2,333	
Total revenue	22,054	17,972	9,624	21,177	
Cost of revenue:					
Product and service cost of revenue	9,002	9,098	5,397	8,121	
License and contract cost of revenue	659	731	418	712	
Total cost of revenue	9,661	9,829	5,815	8,833	
Gross profit	12,393	8,143	3,809	12,344	
Operating expenses:					
Research and development	9,528	8,993	7,020	5,953	
Selling, general and administrative	9,304	11,294	8,624	8,320	
Total operating expenses	18,832	20,287	15,644	14,273	
Loss from operations	(6,439)	(12,144)	(11,835)	(1,929)	
Other income (expense):					
Interest expense	(1,147)	(1,530)	(1,276)	(732)	
Other income (expense), net	50	301	227	68	
Total other expense, net	(1,097)	(1,229)	(1,049)	(664)	
Net loss and comprehensive loss	(7,536)	(13,373)	(12,884)	(2,593)	
Accretion of redeemable convertible preferred stock to redemption value	(76)	(109)	(79)	(74)	
Net loss attributable to common stockholders	\$ (7,612)	\$ (13,482)	\$ (12,963)	\$ (2,667)	
Net loss per share attributable to common stockholders, basic and diluted	\$ (1.55)	\$ (2.70)	\$ (2.60)	\$ (0.53)	
Weighted average common shares outstanding, basic and diluted	4,907,075	4,990,416	4,990,314	4,995,878	
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)		\$ (0.71)	\$	\$ (0.13)	
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)		18,983,092		19,687,807	

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

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908 Devices Inc.

Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit
(In thousands, except share amounts)

	Redeemable Convertible Preferred Stock			Common Stock			Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount		Shares	Amount				
Balances at December 31, 2017	20,039,996	\$49,091		4,862,349	\$ 5		\$1,883	\$(45,117)	\$(43,229)
Adjustment due to adoption of ASC 606								377	377
Issuance of Series D redeemable convertible preferred stock, net of issuance costs of \$78	709,835	3,922							
Accretion of redeemable convertible preferred stock to redemption value		76					(76)		(76)
Issuance of common stock upon exercise of stock options				127,923			71		71
Stock-based compensation expense							217		217
Net loss								(7,536)	(7,536)
Balances at December 31, 2018	20,749,831	\$53,089		4,990,272	5		\$2,095	\$(52,276)	\$(50,176)
Issuance of Series E redeemable convertible preferred stock, net of issuance costs of \$185	2,782,194	17,315							
Preferred stock warrant exercises	373,242	504					222		222
Accretion of redeemable convertible preferred stock to redemption value		109					(109)		(109)
Issuance of common stock upon exercise of stock options				430			1		1
Stock-based compensation expense							267		267
Net loss								(13,373)	(13,373)
Balances at December 31, 2019	23,905,267	\$71,017		4,990,702	5		\$2,476	\$(65,649)	\$(63,168)
Issuance of common stock upon exercise of stock options				10,610			9		9
Accretion of redeemable convertible preferred stock to redemption value		74					(74)		(74)
Stock-based compensation expense							218		218
Net loss								(2,593)	(2,593)
Balances at September 30, 2020 (unaudited)	23,905,267	\$71,091		5,001,312	5		\$2,629	\$(68,242)	\$(65,608)

	Redeemable Convertible Preferred Stock			Common Stock			Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount		Shares	Amount				
Balances at December 31, 2018	20,749,831	\$53,089		4,990,272	5		\$2,095	\$(52,276)	\$(50,176)
Issuance of Series E redeemable convertible preferred stock, net of issuance costs of \$185	2,782,194	17,315							
Issuance of common stock upon exercise of stock options				430			1		1
Accretion of redeemable convertible preferred stock to redemption value		79					(79)		(79)
Stock-based compensation expense							200		200
Net loss								(12,884)	(12,884)
Balances at September 30, 2019 (unaudited)	23,532,025	\$70,483		4,990,702	5		\$2,217	\$(65,160)	\$(62,938)

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

908 Devices Inc.
Statements of Cash Flows
(In thousands)

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
			(unaudited)	
Cash flows from operating activities:				
Net loss	\$(7,536)	\$(13,373)	\$(12,884)	\$(2,593)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:				
Depreciation and amortization expense	896	900	688	610
Stock-based compensation expense	217	267	200	218
Change in fair value of preferred stock warrant liability	91	(59)	(59)	26
Change in fair value of commercial services agreement liability—related party	—	—	—	(375)
Noncash interest and loss on extinguishment of debt	208	370	355	48
Provision for inventory obsolescence	97	149	83	67
Loss on disposal of property and equipment	256	—	—	—
Changes in operating assets and liabilities:				
Accounts receivable, net	2,531	(873)	(1,941)	(4,307)
Unbilled receivables	(2,130)	2,130	2,139	(53)
Inventory	(989)	(1,863)	(2,732)	126
Prepaid expenses and other current assets	128	(79)	(85)	(79)
Other long-term assets	(13)	20	20	(208)
Accounts payable and accrued expenses	(1,013)	(12)	387	1,140
Deferred revenue	(1,722)	748	1,899	7,195
Right-of-use operating assets	1,214	981	734	778
Operating lease liabilities	(1,133)	(310)	(57)	(794)
Net cash provided by (used in) operating activities	(8,898)	(11,004)	(11,253)	1,799
Cash flows from investing activities:				
Purchases of property and equipment	(727)	(392)	(278)	(9)
Lease deposit	(440)	—	—	—
Net cash used in investing activities	(1,167)	(392)	(278)	(9)
Cash flows from financing activities:				
Proceeds from issuance of redeemable convertible preferred stock, net of issuance costs	3,922	17,315	17,315	—
Proceeds from issuance of common stock upon option exercise	71	1	1	9
Proceeds from exercise of preferred stock warrants	—	4	—	—
Proceeds from issuance of notes payable	—	15,000	15,000	—
Payments of debt issuance costs	—	(83)	(83)	—
Repayment of notes payable	—	(10,000)	(10,000)	—
Proceeds from Paycheck Protection Program loan	—	—	—	2,202
Repayment of Paycheck Protection Program loan	—	—	—	(2,202)
Net cash provided by financing activities	3,993	22,237	22,233	9
Net increase (decrease) in cash and cash equivalents	(6,072)	10,841	10,702	1,799
Cash and cash equivalents at beginning of period	213,144	7,072	7,072	217,913
Cash and cash equivalents at end of period	7,072	17,913	17,774	219,712
Supplemental disclosure of noncash investing and financing information:				
Deferred offering costs included in accounts payable and accrued expenses	—	—	—	868
Transfers of inventory to property and equipment	—	—	—	209
Accretion of redeemable convertible preferred stock to redemption value	76	109	79	74
Issuance of preferred stock warrants in connection with notes payable	—	168	168	—
Issuance of preferred stock warrants in connection with lease agreement	317	—	—	—
Exercise of preferred stock warrants	—	722	—	—
Supplemental disclosure of cash flow information:				
Cash paid for interest	889	1,155	720	685

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

908 Devices Inc.
Notes to Financial Statements

1. Nature of the Business and Basis of Presentation

908 Devices Inc. (the "Company") was incorporated in the State of Delaware on February 10, 2012. The Company is a commercial-stage technology company providing a suite of purpose-built handheld and desktop mass spectrometry devices for the point-of-need to interrogate unknown and invisible materials in a broad array of markets including life sciences research, bioprocessing, industrial biotech, forensics and adjacent markets.

The Company is subject to risks and uncertainties common to technology companies in the device industry and of similar size, including, but not limited to, development by competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations, uncertainty of market acceptance of products, and the need to obtain additional financing to fund operations. Potential risks and uncertainties also include, without limitation, uncertainties regarding the duration and magnitude of the impact of the COVID-19 pandemic on the Company's business and the economy generally. Products currently under development will require additional research and development efforts prior to commercialization and will require additional capital and adequate personnel and infrastructure. The Company's research and development may not be successfully completed, adequate protection for the Company's technology may not be obtained, the Company may not obtain necessary government regulatory approval, and approved products may not prove commercially viable. The Company operates in an environment of rapid change in technology and competition.

In March 2020, the World Health Organization declared the global novel coronavirus disease 2019 ("COVID-19") outbreak a pandemic. The impact of this pandemic has been and will likely continue to be extensive in many aspects of society, which has resulted in and will likely continue to result in significant disruptions to the global economy, as well as businesses and capital markets around the world. The Company cannot at this time predict the specific extent, duration, or full impact that the COVID-19 pandemic will have on its future financial condition and operations. The impact of the COVID-19 coronavirus outbreak on the Company's financial performance will depend on future developments, including the duration and spread of the pandemic and related governmental advisories and restrictions. These developments and the impact of COVID-19 on the financial markets and the overall economy are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company's results may be materially adversely affected.

Future impacts to the Company's business as a result of COVID-19 could include disruptions to the Company's manufacturing operations and supply chain caused by facility closures, reductions in operating hours, staggered shifts and other social distancing efforts; labor shortages; decreased productivity and unavailability of materials or components; limitations on its employees' and customers' ability to travel, and delays in shipments to and from affected countries and within the United States. While the Company maintains an inventory of finished products and raw materials used in its products, a prolonged pandemic could lead to shortages in the raw materials necessary to manufacture its products. To address actual and expected reductions in revenue and cash flows, the Company reduced its discretionary spending and reduced payroll costs, including through temporary employee furloughs and salary reductions. Starting in July 2020, furloughed employees and pay rates were reinstated.

Basis of Presentation

The Company's financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB").

Going Concern

In accordance with ASU No. 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (Subtopic 205-40)*, the Company has evaluated whether there are

908 Devices Inc.**Notes to Financial Statements?(Continued)****1. Nature of the Business and Basis of Presentation?(Continued)**

conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued.

Since its inception, the Company has funded its operations primarily with proceeds from sales of redeemable convertible preferred stock and borrowings under loan agreements. The Company has incurred recurring losses since inception, including net losses of \$7.5 million and \$13.4 million for the years ended December 31, 2018 and 2019, respectively, and \$2.6 million for the nine months ended September 30, 2020 (unaudited). In addition, as of December 31, 2019 and September 30, 2020 (unaudited), the Company had an accumulated deficit of \$65.6 million and \$68.2 million, respectively. The Company expects to continue to generate operating losses for the foreseeable future. The future viability of the Company is dependent on its ability to raise additional capital to finance its operations. Based on its losses from operations incurred since inception, expectation of continuing operating losses for the foreseeable future, and need to raise additional capital to finance its future operations, as of October 2, 2020, the issuance date of the financial statements for the year ended December 31, 2019, the Company has concluded that there is substantial doubt about its ability to continue as a going concern within one year after the date that these financial statements are issued. In addition, as of November 6, 2020, the issuance date of the interim financial statements for the nine months ended September 30, 2020 (unaudited), the Company has concluded that there is substantial doubt about its ability to continue as a going concern within one year after the date that these interim financial statements are issued.

The Company is seeking to complete an initial public offering ("IPO") of its common stock. Upon the closing of a qualified public offering on specified terms, the Company's outstanding redeemable convertible preferred stock will automatically convert into shares of common stock (see Note 8). In the event the Company does not complete an IPO, the Company expects to seek additional funding through private equity financings, debt financings, or other capital sources, including collaborations with other companies, government funding arrangements or other strategic transactions. The Company may not be able to obtain financing on acceptable terms, or at all, and the terms of any financing may adversely affect the holdings or the rights of the Company's stockholders.

If the Company is unable to obtain funding, the Company will be required to delay, reduce or eliminate some or all of its research and development programs, product expansion or commercialization efforts, or the Company may be unable to continue operations. Although management continues to pursue these financing plans, there is no assurance that the Company will be successful in obtaining sufficient funding on terms acceptable to the Company to fund continuing operations, if at all.

The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty. Accordingly, the financial statements have been prepared on a basis that assumes the Company will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

2. Summary of Significant Accounting Policies***Use of Estimates***

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting periods. Significant estimates and assumptions reflected in these financial statements include, but are not limited to, revenue recognition, the valuation of inventory, the valuation of common stock and stock-based awards, the valuation of the commercial services agreement liability and the valuation of the preferred stock warrant liability. The Company bases its estimates on historical experience, known trends and other market-specific or other relevant factors that

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

it believes to be reasonable under the circumstances. Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and financial markets. The Company is not aware of any specific event or circumstance that would require an update to its estimates or judgments or a revision of the carrying value of its assets or liabilities as of October 2, 2020, the date of issuance of these financial statements. These estimates may change, as new events occur and additional information is obtained. On an ongoing basis, management evaluates its estimates as there are changes in circumstances, facts and experience. Changes in estimates are recorded in the period in which they become known. Actual results may differ from those estimates or assumptions.

Unaudited Interim Financial Information

The accompanying balance sheet as of September 30, 2020 and the statements of operations and comprehensive loss, of cash flows and of redeemable convertible preferred stock and stockholders' deficit for the nine months ended September 30, 2019 and 2020 are unaudited. The unaudited interim financial statements have been prepared on the same basis as the audited annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of September 30, 2020 and the results of its operations and its cash flows for the nine months ended September 30, 2019 and 2020. The financial data and other information disclosed in these notes related to the nine months ended September 30, 2019 and 2020 are also unaudited. The results for the nine months ended September 30, 2020 are not necessarily indicative of results to be expected for the year ending December 31, 2020, any other interim periods, or any future year or period.

Unaudited Pro Forma Information

The accompanying unaudited pro forma balance sheet as of September 30, 2020 has been prepared to give effect, upon the closing of a qualified IPO, to the conversion of all outstanding shares of redeemable convertible preferred stock of the Company into an aggregate of 14,691,929 shares of common stock and the conversion of all outstanding warrants to purchase shares of redeemable convertible preferred stock of the Company into warrants to purchase an aggregate of 154,634 shares of common stock as if the IPO had occurred on September 30, 2020.

In the accompanying statements of operations and comprehensive loss, the unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2019 and the nine months ended September 30, 2020 have been prepared to give effect, upon the closing of a qualified IPO, to the conversion of all outstanding shares of redeemable convertible preferred stock into shares of common stock and the conversion of all outstanding warrants to purchase shares of redeemable convertible preferred stock into warrants to purchase shares of common stock as if the proposed IPO had occurred on the later of January 1, 2019 or the issuance date of the convertible preferred stock or preferred stock warrants.

Risk of Concentrations of Credit, Significant Customers and Significant Suppliers

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. The Company maintains its cash and cash equivalents with two financial institutions that management believes to be of high credit quality. The Company has not experienced any other-than-temporary losses with respect to its cash and cash equivalents and does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

Significant customers are those that accounted for 10% or more of the Company's total revenue or accounts receivable. During the year ended December 31, 2018, two customers represented 28% and 27%, respectively, of total revenue. During the year ended December 31, 2019, three customers represented 17%, 11% and 11%, respectively, of total revenue. During the nine months ended September 30, 2019 (unaudited), one customer represented 15% of total revenue. During the nine months ended September 30, 2020 (unaudited), one customer represented 41% of total revenue. As of

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

December 31, 2018, three customers accounted for 34%, 32% and 11%, respectively, of gross accounts receivable. As of December 31, 2019, one customer accounted for 38% of gross accounts receivable. As of September 30, 2020 (unaudited) two customers accounted for 25% and 21%, respectively, of gross accounts receivable.

Certain of the components included in the Company's products are obtained from a sole source, a single source or a limited group of suppliers. Although the Company seeks to reduce dependence on those limited sources of suppliers and manufacturers, the partial or complete loss of certain of these sources, or the requirement to establish a new supplier for the components, could have a material adverse effect on the Company's operating results, financial condition and cash flows and damage its customer relationships.

Deferred Offering Costs

The Company capitalizes certain legal, accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of an equity financing, these costs are recorded in stockholders' equity (deficit) as a reduction of additional paid-in capital generated as a result of the offering. Should the in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the statements of operations and comprehensive loss. The Company had no deferred offering costs recorded as of December 31, 2018 or 2019, and had \$0.9 million of deferred offering costs as of September 30, 2020 (unaudited).

Deferred Financing Costs

Deferred financing costs related to a recognized debt liability are recorded as a reduction of the carrying amount of the debt liability and amortized to interest expense using the effective interest method over the repayment term of the debt.

Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents.

Accounts Receivable, net

Accounts receivable are presented net of a provision for doubtful accounts, which is an estimate of amounts that may not be collectible. The Company performs ongoing credit evaluations of its customers and, if necessary, provides an allowance for doubtful accounts and expected losses. The Company writes off accounts receivable against the allowance when it determines a balance is uncollectible and no longer actively pursues collection of the receivable. As of December 31, 2018 and 2019 and September 30, 2020 (unaudited), the Company's allowance for doubtful accounts was less than \$0.1 million. During the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020 (unaudited), the Company did not record any provisions for doubtful accounts and did not write off any accounts receivable balances.

Inventory

Inventory is valued at the lower of cost or net realizable value. Cost is computed using the first-in, first-out method. The Company regularly reviews inventory quantities on-hand for excess and obsolete inventory and, when circumstances indicate, records charges to write down inventories to their estimated net realizable value, after evaluating historical sales, future demand, market conditions and expected product life cycles. Such charges are classified as cost of revenue in the statements of operations and comprehensive loss. Any write-down of inventory to net realizable value creates a new cost basis.

Assets Recognized from Costs to Obtain a Contract with a Customer

The Company recognizes an asset for the incremental costs of obtaining a contract with a customer if the Company expects the benefit of those costs to be longer than one year. The Company has determined that certain sales incentive programs meet the requirements to be capitalized. Total

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

capitalized costs to obtain a contract were not significant during the periods presented and are included in other current assets and other long-term assets in the Company's balance sheets.

Leases

The Company accounts for leases under ASC 842, *Leases* ("ASC 842"). In accordance with ASC 842, the Company accounts for a contract as a lease when it has the right to control the asset for a period of time while obtaining substantially all of the asset's economic benefits. The Company determines if an arrangement is a lease or contains an embedded lease at inception. For arrangements that meet the definition of a lease, the Company determines the initial classification and measurement of its right-of-use asset and lease liability at the lease commencement date and thereafter if modified. The lease term includes any renewal options that the Company is reasonably assured to exercise. The present value of lease payments is determined by using the interest rate implicit in the lease, if that rate is readily determinable; otherwise, the Company uses its estimated secured incremental borrowing rate for that lease term. The Company's policy is to not record leases with an original term of twelve months or less on its balance sheets and recognizes those lease payments in the statements of operations and comprehensive loss on a straight-line basis over the lease term. The Company's existing leases are for office and laboratory space. In addition to rent, the leases may require the Company to pay additional costs, such as utilities, maintenance and other operating costs, which are generally referred to as non-lease components. The Company has elected to not separate lease and non-lease components. Only the fixed costs for lease components and their associated non-lease components are accounted for as a single lease component and recognized as part of a right-of-use asset and liability. Rent expense for operating leases is recognized on a straight-line basis over the reasonably assured lease term based on the total lease payments and is included in operating expense in the statements of operations and comprehensive loss.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization expense is recognized using the straight-line method over the estimated useful life of each asset as follows:

?	??	Estimated Useful Life	?
Laboratory and demonstration equipment	??	2 to 5 years	?
Computer equipment and software	??	3 years	?
Furniture and fixtures	??	7 years	?
Leasehold improvements	??	Shorter of remaining life of lease or useful life	?

Costs for capital assets not yet placed into service are capitalized as construction-in-progress and depreciated once placed into service. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation and amortization are removed from the accounts and any resulting gain or loss is included in loss from operations. Expenditures for repairs and maintenance are charged to expense as incurred.

Impairment of Long-Lived Assets

Long-lived assets consist of operating lease right-of-use assets and property and equipment. Long-lived assets to be held and used are tested for recoverability whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets. If an impairment review is performed to evaluate a long-lived asset group for recoverability, the Company compares forecasts of undiscounted cash flows expected to result from the use and eventual disposition of the long-lived asset group to its carrying value. An impairment loss can be recognized in loss from operations when

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

estimated undiscounted future cash flows expected to result from the use of an asset group are less than its carrying amount. The impairment loss is based on the excess of the carrying value of the impaired asset group over its fair value, determined based on discounted cash flows. The Company did not record any impairment losses on long-lived assets during the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020 (unaudited).

Software Development Costs

The Company incurs costs to develop computer software that is embedded in the hardware components of the Company's products. Research and development costs related to this software are expensed as incurred, except for costs of internally developed or externally purchased software that qualify for capitalization. Software development costs incurred subsequent to the establishment of technological feasibility, but prior to the general release of the product, are capitalized and, upon general release, are amortized based upon the pattern in which economic benefits related to such assets are realized. Due to the short time period between achieving technological feasibility and product release and the insignificant amount of costs incurred during such periods, the Company did not capitalize any software development costs during the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020 (unaudited).

Fair Value Measurements

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1?—?Quoted prices in active markets for identical assets or liabilities.
- Level 2?—?Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
- Level 3?—?Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The Company's cash equivalents and its preferred stock warrant liability and commercial services agreement liability are carried at fair value, determined according to the fair value hierarchy described above (see Note 3). The carrying values of the Company's accounts receivable, unbilled receivables, accounts payable and accrued expenses approximate their fair values due to the short-term nature of these assets and liabilities. The carrying value of the Company's long-term debt approximates its fair value (a level 2 measurement) at each balance sheet date due to its variable interest rate, which approximates a market interest rate.

Product Warranties

The Company offers a one-year limited warranty on most products, which is included in the selling price. The Company's standard limited warranty covers repair or replacement. The Company provides for estimated warranty expenses as a component of cost of revenue at the time product revenue is recognized. Warranty costs are estimated based on the current expected product replacement or repair cost and expected replacement or repair rates based on historical experience. The Company evaluates its warranty accrual at the end of each reporting period and makes adjustments as necessary.

908 Devices Inc.

Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

Classification and Accretion of Redeemable Convertible Preferred Stock

The Company has classified redeemable convertible preferred stock outside of stockholders' equity (deficit) because the shares contain certain redemption features that are not solely within the control of the Company. Costs incurred in connection with the issuance of each series of redeemable convertible preferred stock are recorded as a reduction of gross proceeds from issuance. The Company records periodic accretion to the values of its outstanding redeemable convertible preferred stock such that the carrying value of the redeemable convertible preferred stock will be equal to the redemption value at the earliest date of redemption. Adjustments to the carrying values of the redeemable convertible preferred stock at each reporting date result in an increase or decrease to net income (loss) attributable to common stockholders.

Preferred Stock Warrant Liability

The Company classifies warrants for the purchase of shares of its redeemable convertible preferred stock (see Notes 3 and 9) as a liability on its balance sheets as these warrants are freestanding financial instruments that may require the Company to transfer assets upon exercise. The warrant liability is initially recorded at fair value upon the date of issuance of each warrant and is subsequently remeasured to fair value at each reporting date. Changes in the fair value of the warrant liability are recognized as a component of other income (expense) in the statements of operations and comprehensive loss. Changes in the fair value of the preferred stock warrant liability will continue to be recognized until the warrants are exercised, expire or qualify for equity classification.

Segment Information

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company provides a suite of purpose-built handheld and desktop mass spectrometry devices for use in a broad array of markets. Operating segments are defined as components of an enterprise for which separate financial information is regularly evaluated by the Company's chief operating decision maker, or decision-making group, in deciding how to allocate resources and assess performance. The Company has determined that its chief operating decision maker is its Chief Executive Officer. All of the Company's long-lived assets are held in the United States.

Revenue Recognition

The Company recognizes revenue from sales to customers under ASC 606, *Revenue from Contracts with Customers* ("ASC 606"), by applying the following five steps: (1) identification of the contract, or contracts, with a customer, (2) identification of the performance obligations in the contract, (3) determination of the transaction price, (4) allocation of the transaction price to the performance obligations in the contract and (5) recognition of revenue when, or as, performance obligations are satisfied.

Product and Service Revenue

The Company derives product and service revenue primarily from the sale of handheld and desktop products and related consumables and services. Revenue is recognized when control of the promised products, consumables or services is transferred to the Company's customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those products, consumables or services (the transaction price). A performance obligation is a promise in a contract to transfer a distinct product or service to a customer and is the unit of accounting under ASC 606. For devices and consumables sold by the Company, control transfers to the customer at a point in time. To indicate the transfer of control, the Company must have a present right to payment, legal title must have passed to the customer, the customer must have the significant risks and rewards of ownership, and where acceptance is other than perfunctory, the customer must have accepted the product or service. The Company's principal terms of sale are freight on board ("FOB") shipping point, or equivalent, and, as such, the Company primarily transfers control and records revenue for product sales upon shipment. Sales arrangements with delivery terms that are not FOB shipping point are not recognized upon shipment

908 Devices Inc.**Notes to Financial Statements?(Continued)****2. Summary of Significant Accounting Policies?(Continued)**

and the transfer of control for revenue recognition is evaluated based on the associated shipping terms and customer obligations. If a performance obligation to the customer with respect to a sales transaction remains to be fulfilled following shipment (typically installation or acceptance by the customer), revenue recognition for that performance obligation is deferred until such commitments have been fulfilled. For extended warranty and support, control transfers to the customer over the term of the arrangement. Revenue for extended warranty and support is recognized based upon the period of time elapsed under the arrangement as this period represents the transfer of benefits or services under the agreement.

For a contract with multiple performance obligations, the Company allocates the contract's transaction price to each performance obligation on a relative standalone selling price basis using the Company's best estimate of the standalone selling price of each distinct product or service in the contract. The primary method used to estimate standalone selling price is the price observed in standalone sales to customers; however, when prices in standalone sales are not available the Company may use third-party pricing for similar products or services or estimate the standalone selling price, which is set by management. Allocation of the transaction price is determined at the contract's inception.

The Company recognizes a receivable at the point in time at which it has an unconditional right to payment. Such receivables are not contract assets. Payment terms for customer orders, including for each of the Company's primary performance obligations, are typically 30 to 90 days after the shipment or delivery of the product, and such payments typically do not include payments that are variable, dependent on specified factors or events. In limited circumstances, there exists a right of return for product if agreed to by the Company. Revenue is only recognized for those goods that are not expected to be returned such that it is probable that there will not be a significant reversal of cumulative revenue. Service arrangements commonly call for payments in advance of performing the work (e.g., extended warranty/service contracts), upon completion of the service or a mix of both. The Company does not enter into significant financing agreements or other forms of variable consideration.

Contract assets arise from unbilled amounts in customer arrangements when revenue recognized exceeds the amount billed to the customer and the Company's right to payment is not only subject to the passage of time. The Company had no contract assets related to product or service revenue as of December 31, 2018 or 2019 or September 30, 2020 (unaudited).

Contract liabilities represent the Company's obligation to transfer goods or services to a customer for which it has received consideration (or the amount is due) from the customer. The Company has determined that its only contract liability related to product and service revenue is deferred revenue, which consists of amounts that have been invoiced but that have not been recognized as revenue. Amounts expected to be recognized as revenue within 12 months of the balance sheet date are classified as current deferred revenue and amounts expected to be recognized as revenue beyond 12 months of the balance sheet date are classified as noncurrent deferred revenue.

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

The following is a summary of the activity of the Company's deferred revenue related to product and service revenue (in thousands):

	Year ended December 31,		Nine Months Ended	
	2018	2019	2019	2020
			(unaudited)	
Balances at beginning of period	\$ 2,632	\$1,057	\$1,057	\$ 1,509
Recognition of revenue included in balance at beginning of the period	(2,076)	(446)	(872)	(1,059)
Revenue deferred during the period, net of revenue recognized	501	898	1,476	8,806
Balances at end of period	\$ 1,057	\$1,509	\$1,661	\$ 9,256

The amount of deferred revenue equals the transaction price allocated to unfulfilled performance obligations for the period presented. Such deferred revenue amounts related to product and service revenue are expected to be recognized in the future as follows (in thousands):

	December 31, 2019	September 30, 2020
	(unaudited)	
Deferred revenue expected to be recognized in:		
One year or less	\$ 937	\$2,227
One to two years	320	3,951
Three years and beyond	252	3,078
	\$1,509	\$9,256

The Company has adjusted \$0.4 million and \$0.6 million for the years ended December 31, 2018 and 2019, respectively, from deferred revenue, current to deferred revenue, net of current portion in the accompanying balance sheet in order to be consistent with the current interim period's classification.

License and Contract Revenue

The Company generates revenue from short and long-term contracts associated with the design and development and delivery of detection devices or related design and support services. To date, these contracts are primarily with the U.S. government or commercial entities contracting with the U.S. government, but the Company has also had such contracts with commercial partners. The Company's contracts with the U.S. government typically are subject to the Federal Acquisition Regulation ("FAR") and are priced based on estimated or actual costs of producing goods or providing services. The FAR provides guidance on the types of costs that are allowable in establishing prices for goods or services provided under U.S. government contracts. The pricing for non-U.S. government contracts is based on the specific negotiations with each customer.

Under the typical payment terms of U.S. government fixed-price contracts, the customer pays in accordance with the terms of the specific agreement, but generally through progress payments. If these progress payments are made in advance, these payments are recorded as a contract liability, classified as deferred revenue within the accompanying balance sheet, until the Company provides the underlying services. For U.S. government cost-type contracts, the customer generally pays for actual costs incurred within a short period of time. For contracts with commercial partners, payments are made in accordance with the terms of the specific agreement. For agreements which call for milestone payments, to the extent the Company does not conclude that it is probable that a significant reversal of

908 Devices Inc.

Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

cumulative revenue will occur, a contract asset is generated until the Company is permitted to bill for costs incurred, which is classified as unbilled receivables in the accompanying balance sheet. In some cases, payments received in advance under license agreements are recorded as deferred revenue and recognized over the respective contract term, absent any other performance obligations.

Generally, revenue for long-term contracts is recognized based upon the cost-to-cost measure of progress, provided that the Company meets the criteria associated with transferring control of the good or service over time such as not creating an asset with an alternative use and having an enforceable right to payment for completed performance. However, the Company evaluates the proper revenue recognition on a contract by contract basis, as each contract generally contains terms specific to the underlying agreement which result in differing performance obligations and payment terms (cost plus, fixed price agreements among others). The Company includes the unconstrained amount of consideration in the transaction price. The amount included in the transaction price is constrained to the amount for which it is probable that a significant reversal of cumulative revenue recognized will not occur. At the end of each subsequent reporting period, as required under ASC 606, the Company re-evaluates the estimated consideration included in the transaction price and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis in the period of adjustment. For example, during the year ended December 31, 2018, the Company determined that \$6.4 million of consideration under a contract with a commercial entity was no longer constrained and the Company recognized \$5.3 million of contract revenue on a cumulative catch up basis that was determined based on the progress that had been made following the cost to cost model.

Contract assets arise from unbilled amounts in customer arrangements when revenue recognized exceeds the amount billed to the customer and the Company's right to payment is not just subject to the passage of time. The Company includes contract assets within unbilled receivables in the accompanying balance sheet. As of December 31, 2018 and 2019, the Company had contract assets related to contract or license revenue totaling \$2.2 million and \$0.1 million, respectively. As of September 30, 2020 (unaudited), the Company had contract assets related to contract or license revenue totaling \$0.1 million.

Contract liabilities represent the Company's obligation to transfer goods or services to a customer for which it has received consideration (or the amount is due) from the customer. Contract liabilities arising from license agreements typically represent payments received for the license of symbolic intellectual property for a defined term. As of December 31, 2017, Company had contract liabilities totaling \$0.5 million related to contract and license revenue which was recognized during the year ended December 31, 2018. As of December 31, 2018, the Company had contract liabilities totaling \$0.3 million related to contract and license revenue which was recognized during the year ended December 31, 2019. As of December 31, 2019, the Company had contract liabilities totaling \$0.6 million related to contract and license revenue, which was recognized during the nine months ended September 30, 2020 (unaudited). As of September 30, 2020 (unaudited), the Company had no deferred revenue related to contract and license revenue. The Company recognizes deferred revenue by first allocating from the beginning deferred revenue balance to the extent that the beginning deferred revenue balance exceeds the revenue to be recognized. Billings during the period are added to the deferred revenue balance to be recognized in future periods. As of December 31, 2019, the Company's wholly- or partially-unsatisfied performance obligations totaled \$2.4 million related to contract and license agreements entered into prior to year end, which the Company expects to recognize during the years ended December 31, 2020 and 2021. As of September 30, 2020 (unaudited), the Company's wholly- or partially-unsatisfied performance obligations totaled \$0.7 million related to contract and license agreements entered into prior to period end, which the Company expects to recognize over the remainder of 2020 and during the year ended December 31, 2021.

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

Distribution Channels

A majority of the Company's revenue is generated by sales in conjunction with its distribution partners, such as its international distributors and, in the United States, for end customers where a government contract is required or a customer has a pre-existing relationship. When the Company transacts with a distribution partner, its contractual arrangement is with the partner and not with the end-use customer. Whether the Company transacts business with and receives the order from a distribution partner or directly from an end-use customer, its revenue recognition policy and resulting pattern of revenue recognition for the order are the same.

Disaggregated Revenue

The Company's product and service revenue consists of sales of devices and consumables and the sale of service and extended warranty plans. The following table presents the Company's revenue by revenue stream (in thousands):

	Year Ended December 31,			Nine Months Ended September 30,		
	2018	2019		2019	2020	
				(unaudited)		
Product and service revenue:						
Device sales revenue	\$12,094	\$13,038		\$6,819	\$16,766	
Consumables and service revenue	1,644	2,306		1,473	2,078	
Total product and service revenue	\$13,738	\$15,344		\$8,292	\$18,844	
License and contract revenue	8,316	2,628		1,332	2,333	
Total revenue	\$22,054	\$17,972		\$9,624	\$21,177	

The following table presents the Company's product and service revenue by device type (in thousands):

	Year Ended December 31,			Nine Months Ended September 30,		
	2018	2019		2019	2020	
				(unaudited)		
Handheld	\$11,582	\$10,518		\$6,141	\$14,491	
Desktop	2,156	4,826		2,151	4,353	
Total product and service revenue	\$13,738	\$15,344		\$8,292	\$18,844	

Revenue based on the end-user entity type for the Company's product and service revenue are presented below (in thousands):

	Year Ended December 31,			Nine Months Ended September 30,		
	2018	2019		2019	2020	
				(unaudited)		
Government	\$11,443	\$10,324		\$6,226	\$14,475	
Pharmaceutical/Biotechnology	2,266	4,474		1,717	4,100	
Academia	29	546		349	269	
Total product and service revenue	\$13,738	\$15,344		\$8,292	\$18,844	

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

The following table disaggregates the Company's revenue from contracts with customers by geography, which are determined based on the customer location (in thousands):

	Year Ended December 31,		Nine Months Ended	
	2018	2019	2019	2020
			(unaudited)	
North America	\$19,015	\$13,686	\$7,961	\$18,130
Europe, Middle East and Africa	2,425	2,954	668	1,591
Asia Pacific	614	1,332	995	1,456
	\$22,054	\$17,972	\$9,624	\$21,177

International sales are comprised of product and service revenue, with all license and contract revenue being attributable to North America.

Shipping and Handling Fees and Costs

Shipping and handling fees billed to customers for product shipments are recorded in product and service revenue in the accompanying statements of operations and comprehensive loss. Shipping and handling costs incurred for inventory purchases and product shipments are recorded in cost of revenue in the accompanying statements of operations and comprehensive loss.

Cost of Revenue

Product cost of revenue primarily consists of costs for raw material parts and associated freight, shipping and handling costs, royalties, contract manufacturer costs, salaries and other personnel costs, overhead and other direct costs related to those sales recognized as product revenue in the period. Cost of revenue for services primarily consists of salaries and other personnel costs, travel related to services provided, facility costs associated with training, warranties and other costs of servicing equipment on a return-to-factory basis and at customer sites. License and contract cost of revenue primarily consists of salaries and other personnel costs, materials, travel and other direct costs related to those revenue recognized as license and contract in the period.

Research and Development Expenses

Research and development expenses consist primarily of employee-related expenses incurred for research activities, product development, hardware and software engineering, consultant services and other costs associated with the Company's technology platform and products, research materials and facilities, depreciation and maintenance expense.

Advertising Expense

The Company expenses costs of advertising as incurred. Advertising costs were \$0.5 million and \$0.6 million during the years ended December 31, 2018 and 2019, respectively, and \$0.5 million and \$0.3 million during the nine months ended September 30, 2019 and 2020 (unaudited), respectively.

Patent Costs

All patent-related costs incurred in connection with filing and prosecuting patent applications are expensed as incurred due to the uncertainty about the recovery of the expenditure. Amounts incurred are classified as general and administrative expenses.

Stock-Based Compensation

The Company measures stock-based option awards granted to employees, consultants and directors based on their fair value on the date of grant using the Black-Scholes option-pricing model. Compensation expense for those awards is recognized, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. The straight-line method of

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

expense recognition is applied to all awards with service-only conditions, while the graded vesting method is applied to all grants with both service and performance conditions.

The Company classifies stock-based compensation expense in its statements of operations and comprehensive loss in the same manner in which the award recipient's payroll costs are classified or in which the award recipient's service payments are classified.

Comprehensive Loss

Comprehensive loss includes net loss as well as other changes in stockholders' equity (deficit) that result from transactions and economic events other than those with stockholders. For the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020 (unaudited), there was no difference between net loss and comprehensive loss.

Net Income (Loss) per Share

The Company follows the two-class method when computing net income (loss) per share, as the Company has issued shares that meet the definition of participating securities. The two-class method determines net income (loss) per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

Basic net income (loss) per share attributable to common stockholders is computed by dividing the net income (loss) attributable to common stockholders by the weighted average number of common shares outstanding for the period. Diluted net income (loss) attributable to common stockholders is computed by adjusting net income (loss) attributable to common stockholders to reallocate undistributed earnings based on the potential impact of dilutive securities. Diluted net income (loss) per share attributable to common stockholders is computed by dividing the diluted net income (loss) attributable to common stockholders by the weighted average number of common shares outstanding for the period, including potential dilutive common shares assuming the dilutive effect of common stock equivalents.

The Company's convertible preferred stock contractually entitles the holders of such shares to participate in dividends but does not contractually require the holders of such shares to participate in losses of the Company. Accordingly, in periods in which the Company reports a net loss, such losses are not allocated to such participating securities. In periods in which the Company reports a net loss attributable to common stockholders, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive. The Company reported a net loss attributable to common stockholders for the years ended December 31, 2018 and 2019 and for the nine months ended September 30, 2019 and 2020 (unaudited).

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the financial statements or in the Company's tax returns. Deferred tax assets and liabilities are determined on the basis of the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of the deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred

908 Devices Inc.

Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued a new standard related to leases to increase transparency and comparability among organizations by requiring the recognition of right-of-use ("ROU") assets and lease liabilities on the balance sheet. Most prominent among the changes in the standard is the recognition of ROU assets and lease liabilities by lessees for those leases classified as operating leases. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. The Company is also required to recognize and measure leases existing at, or entered into after, the beginning of the period of adoption, presented using a current-period adjustment approach, with certain practical expedients available. The Company elected to early adopt the standard effective January 1, 2018, using a modified retrospective method, by applying the transition approach as of the beginning of the period of adoption.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement* which eliminates, modifies, and adds disclosure requirements on fair value measurements. The standard is effective for annual periods beginning after December 15, 2019, including interim periods within those fiscal years. The Company adopted this guidance as of January 1, 2020 and the adoption did not have a material impact on its financial statements.

Recently Issued Accounting Pronouncements

The Company qualifies as "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 and has elected not to "opt out" of the extended transition related to complying with new or revised accounting standards, which means that when a standard is issued or revised and it has different application dates for public and nonpublic companies, the Company will adopt the new or revised standard at the time nonpublic companies adopt the new or revised standard and will do so until such time that the Company either (i) irrevocably elects to "opt out" of such extended transition period or (ii) no longer qualifies as an emerging growth company.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326)*. The new standard adjusts the accounting for assets held at amortized costs basis, including marketable securities accounted for as available for sale, and trade receivables. The standard eliminates the probable initial recognition threshold and requires an entity to reflect its current estimate of all expected credit losses. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial assets to present the net amount expected to be collected. For public entities except smaller reporting companies, the guidance is effective for annual reporting periods beginning after December 15, 2019 and for interim periods within those fiscal years. For non-public entities and smaller reporting companies, the guidance was effective for annual reporting periods beginning after December 15, 2021. In November 2019, the FASB issued ASU No. 2019-10, which deferred the effective date for non-public entities to annual reporting periods beginning after December 15,

908 Devices Inc.
Notes to Financial Statements?(Continued)

2. Summary of Significant Accounting Policies?(Continued)

2022, including interim periods within those fiscal years. Early application is allowed. The Company is currently assessing the date of the adoption and the impact of the adoption of this guidance on its financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (ASC 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"), which is intended to simplify various areas related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in ASC 740 and also clarifies and amends existing guidance to improve consistent application. For public entities the guidance is effective for annual reporting periods beginning after December 15, 2020 and for interim periods within those fiscal years. For non-public entities, the guidance is effective for annual reporting periods beginning after December 15, 2021 and for interim periods within years beginning after December 15, 2022, with early adoption permitted. The Company is currently evaluating the impact of this standard on its financial statements.

3. Fair Value Measurements

The following tables present the Company's fair value hierarchy for its assets and liabilities that are measured at fair value on a recurring basis (in thousands):

	Fair Value Measurements at December 31, 2018 Using:				
	Level 1	Level 2	Level 3	Total	
Cash equivalents:					
Money market funds	\$6,808	\$	\$	\$6,808	
Liabilities:					
Preferred stock warrant liability	\$	\$1,341	\$	\$1,341	
Commercial services agreement liability—related party			750	750	
Totals	\$	\$2,091	\$	\$2,091	

	Fair Value Measurements at December 31, 2019 Using:				
	Level 1	Level 2	Level 3	Total	
Liabilities:					
Preferred stock warrant liability	\$	\$	\$728	\$728	
Commercial services agreement liability—related party			750	750	
Totals	\$	\$	\$1,478	\$1,478	

	Fair Value Measurements at September 30, 2020 (unaudited) Using:				
	Level 1	Level 2	Level 3	Total	
Liabilities:					
Preferred stock warrant liability	\$	\$	\$754	\$754	
Commercial services agreement liability—related party			375	375	
Totals	\$	\$	\$1,129	\$1,129	

Money market funds were valued by the Company based on quoted market prices, which represent a Level 1 measurement within the fair value hierarchy. There were no transfers into or out of Level 3 during the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020 (unaudited).

908 Devices Inc.
Notes to Financial Statements?(Continued)

3. Fair Value Measurements?(Continued)

The preferred stock warrant liability in the table above consisted of the fair value of warrants to purchase the Company’s redeemable convertible preferred stock (see Note 9) and was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. The Company’s valuation of the preferred stock warrants utilized the Black-Scholes option-pricing model, which incorporates assumptions and estimates to value the preferred stock warrants. The Company assesses these assumptions and estimates on a quarterly basis as additional information impacting the assumptions is obtained. Changes in the fair value of the preferred stock warrants are recognized as other income (expense) in the statements of operations and comprehensive loss.

The quantitative elements associated with the Company’s Level 3 inputs impacting the fair value measurement of the preferred stock warrant liability include the fair value per share of the underlying convertible preferred stock, the remaining contractual term of the warrants, risk-free interest rate, expected dividend yield and expected volatility of the price of the underlying preferred stock. The Company determines the fair value per share of the underlying preferred stock by taking into consideration the most recent sales of its convertible preferred stock, results obtained from third-party valuations and additional factors that the Company deems relevant. The Company historically has been a private company and lacks company-specific historical and implied volatility information of its stock. Therefore, it estimates its expected stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the remaining contractual term of the warrants. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrants. The Company has estimated a 0% dividend yield based on the expected dividend yield and the fact that the Company has never paid or declared dividends.

The table below quantifies the weighted average of the most significant inputs used for the warrants:

?	??	December 31,	??	September 30,	?
?	??	2018	??	2019	??
?	???	???	???	???	(unaudited) ?
Fair value of preferred stock	???	\$3.47	???	\$5.67	???
Risk-free interest rate	???	2.6%	???	1.9%	??
Expected volatility	???	67%	???	51%	??
Expected dividend yield	???	—	???	—	??
Remaining contractual term (in years)	???	4	???	8	??

908 Devices Inc.

Notes to Financial Statements?(Continued)

3. Fair Value Measurements?(Continued)

The following table provides a roll-forward of the aggregate fair values of the Company's preferred stock warrants for which fair value is determined by Level 3 inputs (in thousands):

		Total Preferred Stock Warrant Liability	
?	??	??	??
Fair value at December 31, 2017	??	\$ 933	??
Issuance of warrants	??	317	??
Change in fair value	??	91	??
Fair value at December 31, 2018	??	\$1,341	??
Issuance of warrants	??	168	??
Exercise of warrants	??	(722)	??
Change in fair value	??	(59)	??
Fair value at December 31, 2019	??	728	??
Change in fair value	??	26	??
Fair value at September 30, 2020 (unaudited)	??	\$ 754	??

The Company has a commercial services agreement entered into in 2015 with one of its preferred stock investors under which the investor became eligible for payment upon the achievement of certain sales and marketing milestones by December 31, 2016. Payment of the milestones is only upon the occurrence of a Deemed Liquidation Event as defined in the Company's charter and described in Note 8. The investor achieved milestones totaling \$1.5 million, which will become payable only upon a Deemed Liquidation prior to a qualified public offering as described in Note 8. The Company accounts for the commercial services agreement liability as a financial instrument that may require a transfer of assets because of the liquidation features. The liability is remeasured to fair value at each reporting period based on the probability of the occurrence of a Deemed Liquidation Event. As of December 31, 2018 and 2019, the Company assessed the probability of a Deemed Liquidation at 50%. Accordingly, the Company has recorded a liability for the fair value of the commercial services agreement of \$0.8 million as of December 31, 2018 and 2019. As of September 30, 2020 (unaudited), the Company assessed the probability of a Deemed Liquidation at 25%, and, accordingly reduced its commercial services liability by \$0.4 million.

4. Inventory

Inventory consisted of the following (in thousands):

	December 31,	September 30,
	2018	2019
		2020
		(unaudited)
Raw materials	\$1,965	\$2,013
Work-in-progress	250	412
Finished goods	\$1,308	\$2,812
	\$3,523	\$5,237
		\$4,835

908 Devices Inc.
Notes to Financial Statements?(Continued)

5.?Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

?	??	December 31,	?	September 30,	
?	??	2018	??	2019	??
?	???	???	???	???	(unaudited) ?
Laboratory and demonstration equipment	???	\$ 3,664	???	\$ 4,056	??
Computer equipment and software	???	417	???	417	??
Furniture and fixtures	???	193	???	193	??
Leasehold improvements	???	21	???	21	??
?	???	4,295	???	4,687	??
Less: Accumulated depreciation and amortization	???	(2,461)	???	(3,361)	??
?	???	\$ 1,834	???	\$ 1,326	??

Depreciation expense amounted to \$0.9 million in each of the years ended December 31, 2018 and 2019, and \$0.7 million and \$0.6 million in each of the nine months ended September 30, 2019 and 2020 (unaudited), respectively.

6. Accrued Expenses

Accrued expenses consisted of the following (in thousands):

?	??	December 31,	?	September 30,	
?	??	2018	??	2019	??
?	???	???	???	???	(unaudited) ?
Accrued employee compensation and benefits	???	\$1,036	???	\$1,024	??
Accrued warranty	???	679	???	968	??
Accrued professional fees	???	246	???	307	??
Accrued end of term debt charge	???	425	???	—	??
Accrued other	???	467	???	610	??
?	???	\$2,853	???	\$2,909	??

Changes in the Company's product warranty obligation are as follows (in thousands):

?	??	Year ended	??	Nine Months	
?	??	December 31,	??	Ended September 30,	?
?	??	2018	??	2019	??
?	???	???	???	???	(unaudited) ?
Accrual balance at beginning of period	???	\$ 366	???	\$ 679	??
Provision for new warranties	???	488	???	533	??
Settlements and adjustments made during the period	???	(175)	???	(244)	??
Accrual balance at end of period	???	\$ 679	???	\$ 968	??

908 Devices Inc.
Notes to Financial Statements?(Continued)

7. Long-Term Debt

Long-term debt consisted of the following (in thousands):

	December 31,		September 30,
	2018	2019	2020
			(unaudited)
Principal amount of long-term debt	\$10,000	\$15,000	\$15,000
Less: Current portion of long-term debt	—	—	(3,500)
Long-term debt, net of current portion	\$10,000	\$15,000	\$11,500
Debt discount, net of accretion	(350)	(231)	(183)
Long-term debt, net of discount and current portion	\$ 9,650	\$14,769	\$11,317

Loan and Security Agreements

As of December 31, 2018, the Company had outstanding borrowings of \$10.0 million under a loan and security agreement entered into in 2017 (the "2017 Loan"). The borrowings under the 2017 Loan were repayable in monthly interest-only payments at the greater of (i) 8.25% plus the Wall Street Journal prime rate minus 4.25%, and (ii) 8.25% and, commencing May 1, 2019, in 17 monthly payments of equal principal plus interest. In addition, a final payment equal to 4.25% of any amounts drawn under the 2017 Loan was due upon the earlier of the maturity date, acceleration of the term loans or prepayment of all or part of the term loans. In April 2019, the Company amended the 2017 Loan to, among other things, extend the interest-only period through January 2020 and extend the maturity date to June 1, 2021. The Loan was secured by a lien on the Company's assets.

In August 2019, the Company repaid the outstanding balance of the 2017 Loan of \$10.0 million plus the end of term payment of \$0.4 million and entered into a Loan and Security Agreement (the "2019 Loan") with a new financial institution. Upon repayment of the outstanding amounts, the Company recorded a loss on extinguishment of debt of \$0.3 million, which was included in interest expense in the statements of operations and comprehensive loss.

The 2019 Loan provides for up to \$15.0 million in borrowings, of which the entire \$15.0 million was borrowed in 2019. The 2019 Loan calls for monthly interest-only payments through February 28, 2021, followed by 30 monthly payments of principal and interest commencing March 1, 2021. The 2019 Loan matures on August 1, 2023. The 2019 Loan bears interest at a rate equal to the greater of (i) 0.5% plus the Wall Street Journal prime rate and (ii) 6.0%. The collateral for the 2019 Loan includes substantially all of the Company's property (excluding intellectual property, which is subject to a negative pledge).

The 2019 Loan includes financial covenants requiring the Company to maintain a minimum liquidity ratio of unrestricted cash plus 50% of accounts receivable to debt outstanding under the 2019 Loan of at least 1.00 to 1.00. The Company is also required to maintain a balance of unrestricted cash at the lender in an amount not less than \$3.0 million. Further, the Company and the lender agree to amend the 2019 Loan to set financial covenants for 2020 and beyond. The 2019 Loan also contains negative covenants restricting the Company's activities, including limitations on dispositions, mergers or acquisitions; encumbering or granted in a security interest in its intellectual property; incurring indebtedness or liens; paying dividends; making certain investments; and certain other business transactions.

On March 15, 2020, the Company signed the first amendment to the 2019 Loan which set the covenants for the first half of 2020 and increased the balance of minimum unrestricted cash held at the lender to an amount not less than \$4.0 million. On August 7, 2020, the Company signed the second amendment to the 2019 Loan which set the covenants for the second half of 2020 to the achievement of either a minimum revenue amount or a defined liquidity ratio. The second amendment also decreased

908 Devices Inc.

Notes to Financial Statements?(Continued)

7. Long-Term Debt?(Continued)

the balance of minimum unrestricted cash held at the lender to an amount not less than \$3.0 million. As of December 31, 2019 and September 30, 2020 (unaudited), the Company was in compliance with all financial covenants under the 2019 Loan, as amended.

In connection with the 2019 Loan, the Company issued to the lender a warrant to purchase 35,771 shares of Series E Preferred Stock at a purchase price of? \$6.29 per share. The fair value of the warrant at issuance was estimated to be \$0.2 million and was recorded as a debt discount and as a preferred stock warrant liability (see Notes 3 and 9).

As of December 31, 2019 and September 30, 2020 (unaudited), the interest rate applicable to borrowings under the 2019 Loan, as amended was 6.0%. During the nine months ended September 30, 2020 (unaudited), the weighted average effective interest rate on outstanding borrowings under the 2019 Loan was approximately 6.5%.

As of December 31, 2019, future principal payments are as follows (in thousands):

<u>Year Ending December 31:</u>	????	???
2020	???	\$ —??
2021	???	5,000??
2022	???	6,000??
2023	???	4,000??
?	???	<u>\$15,000??</u>

Paycheck Protection Program Loan

On April 18, 2020, the Company issued a Promissory Note to Signature Bank, pursuant to which it received loan proceeds of? \$2.2 million (the "Loan") provided under the Paycheck Protection Program established under the Coronavirus Aid, Relief, and Economic Security Act and guaranteed by the U.S. Small Business Administration (the "Paycheck Protection Program"). However, based on updated guidance related to this program, the Company repaid the Loan on May 4, 2020. The Loan was unsecured, was scheduled to mature on April 18, 2022, had a fixed interest rate of 1.0% per annum and was subject to the standard terms and conditions applicable to loans administered under the Paycheck Protection Program.

8. Redeemable Convertible Preferred Stock

The Company has issued Series A redeemable convertible preferred stock (the "Series A Preferred Stock"), Series B redeemable convertible preferred stock (the "Series B Preferred Stock"), Series C redeemable convertible preferred stock (the "Series C Preferred Stock"), Series D redeemable convertible preferred stock (the "Series D Preferred Stock") and Series E redeemable convertible preferred stock (the "Series E Preferred Stock"). The Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock are collectively referred to as the "Preferred Stock".

In September 2018, the Company issued and sold 709,835 shares of Series D Preferred Stock at a price of? \$5.6351 per share for gross proceeds of? \$4.0 million. The Company incurred issuance costs in connection with this transaction of? \$0.1 million.

In April 2019, the Company issued and sold 2,782,194 shares of Series E Preferred Stock to new and existing investors at a price of? \$6.29 per share for gross proceeds of? \$17.5 million. The Company incurred issuance costs in connection with this transaction of? \$0.2 million.

In November 2019, holders of warrants for the purchase of Series A Preferred Stock and Series B Preferred Stock at an exercise price of? \$0.01 per share exercised their warrants. Accordingly, the Company issued 210,000 shares of Series A Preferred Stock and 163,242 shares of Series B Preferred Stock (see Note 9).

908 Devices Inc.
Notes to Financial Statements?(Continued)

8. Redeemable Convertible Preferred Stock?(Continued)

Upon issuance of each class of Preferred Stock, the Company assessed the embedded conversion and liquidation features of the securities and determined that such features did not require the Company to separately account for these features. The Company also concluded that no beneficial conversion feature existed on the issuance date of each class of Preferred Stock.

As of December 31, 2018 and 2019 and September 30, 2020 (unaudited), Preferred Stock consisted of the following (in thousands, except share amounts):

December 31, 2018						
	Preferred Stock Authorized	Preferred Stock Issued and Outstanding	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion	
Series A Preferred Stock	8,490,778	8,280,778	\$ 8,281	\$ 8,281	5,089,286	
Series B Preferred Stock	4,650,216	4,441,974	8,000	8,000	2,729,994	
Series C Preferred Stock	3,788,068	3,768,068	12,949	13,000	2,315,818	
Series D Preferred Stock	4,409,850	4,259,011	23,859	24,000	2,617,547	
	21,338,912	20,749,831	\$53,089	\$53,281	12,752,645	
December 31, 2019						
	Preferred Stock Authorized	Preferred Stock Issued and Outstanding	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion	
Series A Preferred Stock	8,490,778	8,490,778	\$ 8,491	\$ 8,491	5,218,350	
Series B Preferred Stock	4,650,216	4,605,216	8,294	8,294	2,830,321	
Series C Preferred Stock	3,788,068	3,768,068	12,987	13,000	2,315,818	
Series D Preferred Stock	4,409,850	4,259,011	23,904	24,000	2,617,547	
Series E Preferred Stock	2,817,965	2,782,194	17,341	17,500	1,709,893	
	24,156,877	23,905,267	\$71,017	\$71,285	14,691,929	
September 30, 2020 (unaudited)						
	Preferred Stock Authorized	Preferred Stock Issued and Outstanding	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion	
Series A Preferred Stock	8,490,778	8,490,778	\$ 8,491	\$ 8,491	5,218,350	
Series B Preferred Stock	4,650,216	4,605,216	8,294	8,294	2,830,321	
Series C Preferred Stock	3,788,068	3,768,068	12,999	13,000	2,315,818	
Series D Preferred Stock	4,409,850	4,259,011	23,938	24,000	2,617,547	
Series E Preferred Stock	2,817,965	2,782,194	17,369	17,500	1,709,893	
	24,156,877	23,905,267	\$71,091	\$71,285	14,691,929	

The holders of Preferred Stock have the following rights and preferences:

Voting

The holders of the Preferred Stock are entitled to vote, together with the holders of common stock as a single class, on all matters submitted to stockholders for a vote. Each holder of Preferred Stock is entitled to the number of votes equal to the number of shares of common stock into which each share of Preferred Stock is convertible as of the record date for determining stockholders entitled to vote on such matter.

908 Devices Inc.**Notes to Financial Statements?(Continued)****8. Redeemable Convertible Preferred Stock?(Continued)**

The holders of Series A Preferred Stock, Series B Preferred Stock and Series E Preferred Stock, voting exclusively and as a separate class, are each entitled to elect one director of the Company.

Conversion

Each share of Preferred Stock is convertible into shares of common stock at the option of the holder at any time after the date of issuance. Each share of Preferred Stock will be automatically converted into shares of common stock, at the applicable conversion ratio then in effect, upon either (i) the closing of a firm commitment public offering with at least \$40.0 million of gross proceeds to the Company and at a price of at least \$12.79 per share, subject to appropriate adjustment in the event of any stock split, stock dividend, combination or other similar recapitalization, or (ii) the vote or written consent of the holders of at least a majority of the then-outstanding shares of Preferred Stock and a majority of the then-outstanding shares of Series E Preferred Stock.

The conversion ratio of each series of Preferred Stock is determined by dividing the Original Issue Price of each series by the Conversion Price of each series. The Original Issue Price per share is \$1.00 for Series A Preferred Stock, \$1.801 for Series B Preferred Stock, \$3.45 for Series C Preferred Stock, \$5.6351 for Series D Preferred Stock and \$6.29 for Series E Preferred Stock. The Conversion Price per share is \$1.6271 for Series A Preferred Stock, \$2.9304 for Series B Preferred Stock, \$5.6135 for Series C Preferred Stock, \$9.1689 for Series D Preferred Stock and \$10.2345 for Series E Preferred Stock, each subject to appropriate adjustment in the event of any stock split, stock dividend, combination or other similar recapitalization and other adjustments as set forth in the Company's certificate of incorporation, as amended and restated.

Dividends

The holders of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock shall be entitled to receive, when, as and if declared by the board of directors, noncumulative cash dividends at the rate of 8% per annum of the respective Original Issue Price on each outstanding share of that series of Preferred Stock. The dividends on Series E Preferred Stock are payable in preference and priority to any payment of any dividend on Series D Preferred Stock, Series C Preferred Stock, Series B Preferred Stock, Series A Preferred Stock and common stock. The dividends on Series D Preferred Stock are payable in preference and priority to any payment of any dividend on Series C Preferred Stock, Series B Preferred Stock, Series A Preferred Stock and common stock. The dividends on Series C Preferred Stock are payable in preference and priority to any payment of any dividend on Series B Preferred Stock, Series A Preferred Stock and common stock. The dividends on Series B Preferred Stock and Series A Preferred Stock are payable in preference and priority to any payment of any dividend on common stock. After the foregoing dividends have been paid, the holders of the Preferred Stock and common stock may be paid pro rata based on the number of shares of common stock held by each, determined on an as-if-converted basis.

Through December 31, 2018 and 2019 and September 30, 2020 (unaudited), no dividends have been declared on any series or class of shares.

Liquidation

In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company or Deemed Liquidation Event (as described below), the holders of Preferred Stock then outstanding will be entitled to receive, in preference to any distribution to the holders of common stock, an amount per share equal to the Original Issue Price per share of each respective series of Preferred Stock plus any dividends declared but unpaid thereon. In the event that the assets available for distribution to the stockholders are insufficient to pay the holders of Preferred Stock the full amount to which they are entitled, then the holders of Series E Preferred Stock will be paid in full, prior to payments to the holders of Series D Preferred Stock, Series C Preferred Stock, Series B Preferred Stock, Series A Preferred Stock and common stock. The holders of Series D Preferred Stock will be paid in full, prior to payments to the holders of Series C Preferred Stock, Series B Preferred Stock, Series A Preferred

908 Devices Inc.**Notes to Financial Statements?(Continued)****8. Redeemable Convertible Preferred Stock?(Continued)**

Stock and common stock. The holders of Series C Preferred Stock will be paid in full, prior to payments to the holders of Series B Preferred Stock, Series A Preferred Stock and common stock. The holders of Series A Preferred Stock and Series B Preferred Stock will be paid in full, prior to payments to the holders of common stock. After payment of all preferential amounts to the holders of Preferred Stock, the remaining assets available for distribution to the Company's stockholders shall be distributed among the holders of Preferred Stock and common stock, pro rata based on the number of shares held by each holder, treating for this purpose all such securities as if they had been converted to common stock immediately prior to such dissolution, liquidation, winding up of the Company or Deemed Liquidation Event up to a maximum defined amount per each Series and thereafter, to holders of common stock. The maximum defined amount for Series E redeemable convertible preferred stock is two and one half times the sum of the Series E Original Issue Price per share plus any dividends declared but unpaid thereon. The maximum defined amount for Series D redeemable convertible preferred stock is two times the sum of the Series D Original Issue Price per share plus any dividends declared but unpaid thereon. The maximum defined amount for Series C and Series B redeemable convertible preferred stock is three times the Original Issue Price per share for each series plus any dividends declared but unpaid thereon. The maximum defined amount for Series A redeemable convertible preferred stock is four times the sum of the Series A Original Issue Price per share plus any dividends declared but unpaid thereon.

Unless the holders of at least a majority of the then-outstanding shares Preferred Stock voting together as a single class on an as-converted basis, a majority of the Series E Preferred Stock and, in certain cases the holders of at least 60% of the then-outstanding shares of Series D Preferred Stock, elect otherwise, a Deemed Liquidation Event shall include a merger or consolidation (other than one in which the stockholders of the Company own a majority by voting power of the outstanding shares of the surviving or acquiring corporation) or a sale, lease, transfer, exclusive license or other disposition of all or substantially all the assets of the Company.

Redemption Rights

At any time after April 11, 2024, the holders of a majority of the then-outstanding shares of Preferred Stock may elect to redeem all (but not less than all) of the then outstanding shares of the Series A, B, C, D and E redeemable convertible preferred stock. The holders are entitled to receive, commencing 15 days after written notice, an amount equal to the Original Issuance Price of the respective series of redeemable convertible preferred stock plus accrued and declared but unpaid dividends (subject to adjustment to reflect subsequent stock dividends, stock splits or recapitalizations).

Common Stock Reserved

The Company is required, at all times, to reserve a sufficient number of shares of common stock to effect the conversion of all outstanding shares of the Series A, B, C, D and E redeemable convertible preferred stock.

9. Warrants to Purchase Preferred Stock

The Company classifies all of its Preferred Stock warrants as a liability on its balance sheet because the warrants are freestanding financial instruments that may require the Company to transfer assets upon exercise. The liability associated with each of these warrants was initially recorded at fair value upon the issuance date of each warrant and is subsequently remeasured to fair value at each reporting date. Fair value of these warrants was determined using the Black-Scholes option-pricing model (see Note 3), and the resulting change in fair value of the warrant liability was recorded in other income (expense) in the Company's statements of operations and comprehensive loss (see Note 3). Changes in the fair value of each warrant comprising the Preferred Stock warrant liability will continue to be recognized until each respective warrant is exercised, expires or qualifies for equity classification.

In connection with the Company's lease agreement entered into in January 2018 (see Note 11), the Company issued to its landlord a warrant to purchase 70,983 shares of Series D Preferred Stock,

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Notes to Financial Statements?(Continued)

9. Warrants to Purchase Preferred Stock?(Continued)

at an exercise price of? \$5.6351 per share. The warrant was immediately exercisable and expires ten years from date of issuance. The fair value of the warrant on the issuance date of? \$0.3 million was recorded as part of the Company's operating lease right-of-use asset and as a component of the preferred stock warrant liability.

In connection with the 2019 Loan (see Note 7), the Company issued to the lender a warrant to purchase 35,771 shares of Series E Preferred Stock at an exercise price of? \$6.29 per share. The warrant was immediately exercisable upon issuance and expires ten years from date of issuance. The fair value of the warrant on the issuance date of? \$0.2 million was recorded as deferred financing costs and as a component of the preferred stock warrant liability.

During the year ended December 31, 2019, outstanding warrants to purchase 210,000 shares of Series A Preferred Stock and 163,242 shares of Series B Preferred Stock were exercised. Immediately prior to exercise, the warrants were revalued with the change in the fair value of the outstanding warrant liability recorded in other income (expense) in the statements of operations and comprehensive loss as the warrants are recorded at fair value at each reporting period. Upon exercise of the warrant for preferred stock, the liability was reclassified to the carrying value of redeemable convertible preferred stock for the redemption value and the difference between the fair value of the preferred stock warrant liability and the carrying value of the preferred stock of? \$0.2 million recorded to additional paid in capital as a deemed contribution of capital.

The Company also has outstanding warrants to purchase shares of Preferred Stock issued in connection with previous debt agreements.

As of each balance sheet date, the Company's outstanding preferred stock warrants consisted of the following:

December 31, 2018									
Issuance Date	Contractual Term	Series of Preferred Stock	Number of Preferred Shares Issuable under Warrant	Exercise Price	Warrant Fair Value				
December 6, 2012	7	Series A	210,000	\$ 0.01	\$ 369				
December 6, 2012	7	Series B	163,242	\$ 0.01	353				
March 6, 2014	10	Series B	45,000	\$ 1.801	54				
June 23, 2015	10	Series C	20,000	\$ 3.45	37				
March 15, 2017	10	Series D	79,856	\$5.6351	264				
September 7, 2018	10	Series D	70,983	\$5.6351	264				
			589,081		\$1,341				
December 31, 2019									
Issuance Date	Contractual Term	Series of Preferred Stock	Number of Preferred Shares Issuable under Warrant	Exercise Price	Warrant Fair Value				
March 6, 2014	10	Series B	45,000	\$ 1.801	\$ 50				
June 23, 2015	10	Series C	20,000	\$ 3.45	34				
March 15, 2017	10	Series D	79,856	\$5.6351	244				
September 7, 2018	10	Series D	70,983	\$5.6351	236				
August 29, 2019	10	Series E	35,771	\$ 6.29	164				
			251,610		\$728				

908 Devices Inc.
Notes to Financial Statements?(Continued)

9. Warrants to Purchase Preferred Stock?(Continued)

September 30, 2020 (unaudited)									
<u>Issuance Date</u>	<u>Contractual Term</u> ?? (in years)	<u>Series of Preferred Stock</u> ??	<u>Number of Preferred Shares Issuable under Warrant</u> ??	<u>Exercise Price</u> ??	<u>Warrant Fair Value (in thousands)</u> ??				
March 6, 2014	10	Series B	45,000	\$ 1.801	\$ 81				
June 23, 2015	10	Series C	20,000	\$ 3.450	\$ 43				
March 15, 2017	10	Series D	79,856	\$5.6351	\$241				
September 7, 2018	10	Series D	70,983	\$5.6351	\$229				
August 29, 2019	10	Series E	35,771	\$ 6.290	\$160				
?	?	?	251,610	?	\$754				

10. Stock-Based Compensation

2012 Stock Option and Grant Plan

The Company's 2012 Stock Option and Grant Plan (the "2012 Plan") provides for the Company to sell or issue incentive stock options or nonqualified stock options, stock appreciation rights, restricted stock, restricted stock units and other stock-based awards to employees, directors and non-employee consultants of the Company. The 2012 Plan is administered by the board of directors or, at the discretion of the board of directors, by a committee of the board of directors. The exercise prices, vesting and other restrictions are determined at the discretion of the board of directors, or its committee if so delegated.

Stock options granted under the 2012 Plan with service-based vesting conditions typically vest over three or four years and expire after ten years. The total number of shares of common stock that may be issued under the 2012 Plan was 3,146,519 as of December 31, 2019, of which 640,414 shares remained available for future issuance as of December 31, 2019. The total number of shares of common stock that may be issued under the 2012 Plan was 3,761,109 as of September 30, 2020 (unaudited), of which 220,348 shares remained available for future issuance as of September 30, 2020 (unaudited). Shares that are expired, terminated, surrendered or canceled without having been fully exercised will be available for future grant under the 2012 Plan.

The exercise price for stock options granted is not less than the fair value of common shares as determined by the board of directors as of the date of grant. The Company's board of directors values the Company's common stock, taking into consideration its most recently available valuation of common stock performed by third parties as well as additional factors which may have changed since the date of the most recent contemporaneous valuation through the date of grant.

Stock Option Valuation

The fair value of stock option grants is estimated using the Black-Scholes option-pricing model. The Company historically has been a private company and lacks company-specific historical and implied volatility information. Therefore, it estimates its expected stock volatility based on the historical volatility of a publicly traded set of peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. For options with service-based vesting conditions, the expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

908 Devices Inc.
Notes to Financial Statements?(Continued)

10. Stock-Based Compensation?(Continued)

The following table presents, on a weighted average basis, the assumptions used in the Black-Scholes option-pricing model to determine the grant-date fair value of stock options granted:

	Year Ended December 31,							Nine Months Ended September 30,			
	2018			2019				2019		2020	
								(unaudited)			
Risk-free interest rate		2.8%		2.5%		2.5%		0.4%			
Expected volatility		47%		52%		52%		60%			
Expected dividend yield		—		—		—		—			
Expected term (in years)		6		6		6		6		6	

The following table summarizes the Company's option activity since December 31, 2018:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Contractual Term	Aggregate Intrinsic Value
			(in years)	(in thousands)
Outstanding as of December 31, 2018	1,897,608	\$1.14	7.2	\$ 924
Granted	392,397	\$1.62	?	?
Exercised	(430)	\$1.75	?	?
Forfeited	(41,918)	\$1.68	?	?
Outstanding as of December 31, 2019	2,247,657	\$1.23	6.7	\$1,282
Granted	2,051,231	\$2.76	?	?
Exercised	(10,610)	\$0.83	?	?
Forfeited	(16,575)	\$1.42	?	?
Outstanding as of September 30, 2020 (unaudited)	3,271,703	\$1.72	7.2	\$4,988
Vested and expected to vest as of December 31, 2019	2,211,100	\$1.23	6.6	\$1,275
Options exercisable as of December 31, 2019	2,154,515	\$1.05	5.9	\$1,135
Vested and expected to vest as of September 30, 2020 (unaudited)	3,196,290	\$1.70	7.2	\$4,926
Options exercisable as of September 30, 2020 (unaudited)	2,761,161	\$1.13	5.5	\$3,736

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had exercise prices lower than the fair value of the Company's common stock. The aggregate intrinsic value of stock options exercised during the years ended December 31, 2018 and 2019 was \$0.1 million and less than \$0.1 million, respectively. The aggregate intrinsic value of stock options exercised during the nine months ended September 30, 2019 and 2020 (unaudited) was less than \$0.1 million each.

The weighted average grant-date fair value of stock options granted during the years ended December 31, 2018 and 2019 was \$0.77 per share and \$0.85 per share, respectively. The weighted average grant-date fair value of stock options granted during the nine months ended September 30, 2019 and 2020 (unaudited) was \$0.85 per share and \$1.87 per share, respectively.

908 Devices Inc.
Notes to Financial Statements?(Continued)

10. Stock-Based Compensation?(Continued)

Stock-Based Compensation

The Company recorded stock-based compensation expense in the following expense categories of its statements of operations and comprehensive loss (in thousands):

	Year Ended December 31,				Nine Months Ended September 30,			
	2018	2019	2019	2020	2019	2020	2020	
					(unaudited)			
Cost of revenue	\$ 6	\$ 9	\$ 9	\$ 6	\$ 12	\$ 12	\$ 12	
Research and development expenses	69	78	78	60	52	52	52	
Selling, general and administrative expenses	142	180	180	134	154	154	154	
	\$217	\$267	\$267	\$200	\$218	\$218	\$218	

As of December 31, 2019, total unrecognized compensation cost related to unvested stock-based awards was \$0.5 million, which is expected to be recognized over a weighted average period of 1.7 years. As of September 30, 2020 (unaudited), total unrecognized compensation cost related to unvested employee and director stock-based awards was \$2.1 million, which is expected to be recognized over a weighted average period of 2.3 years.

11. Leases

The Company has leases for office space and certain equipment. All of the leases recorded on the balance sheets as ROU assets are operating leases. The Company's leases have remaining lease terms ranging from less than one year to approximately six years. Some of the leases include options to extend the lease for up to two years and these options were not included for the purpose of determining the right-of-use assets and associated lease liabilities as the Company determined that the renewal of these leases is not reasonably certain. The leases do not include any restrictions or covenants that had to be accounted for under the lease guidance.

On January 2, 2018, the Company entered a new operating lease in Boston, Massachusetts (the "Lease"), for 37,500 rentable square feet of office space and is considered the Company's corporate headquarters. A security deposit of \$0.5 million was paid to the landlord and the Company issued a warrant to purchase 70,983 shares of Series D preferred stock at a purchase price of \$5.6351 per share. The initial fair value of the warrants of \$0.3 million was recorded as additional rent payments, increasing the value of the ROU asset and preferred stock warrant liability (see Notes 3 and 9).

The initial term of the lease is through July 2025 and has additional renewal options. The annualized base rent will increase by 2.5% annually on the anniversary of the commencement date. The Company is obligated to pay its portion of real estate taxes and costs related to the premise, including costs of operations, maintenance, repair, replacement and management of the new leased premises.

The Company has a facility lease in California for approximately 1,500 square feet that expires in February 2021. The Company also has a facility lease in North Carolina for approximately 2,000 square feet that had an expiration date of November 2020. In October 2020 (unaudited), the Company entered into an extension agreement for the North Carolina lease to extend it for an additional two years until November 2022. Future lease payments will increase by approximately \$0.1 million over the next two years as a result of this extension.

908 Devices Inc.
Notes to Financial Statements?(Continued)

11. Leases?(Continued)

The components of lease expense under ASC 842 were as follows (in thousands):

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
			(unaudited)	
Operating lease cost	\$ 858	\$1,763	\$1,322	\$1,322
Short-term lease cost	15	12	8	10
Variable lease cost	133	268	171	158
	\$1,006	\$2,043	\$1,501	\$1,490

Supplemental disclosure of cash flow information related to leases was as follows (in thousands):

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
			(unaudited)	
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 645	\$1,092	\$646	\$1,338
Operating lease liabilities arising from obtaining right-of-use assets	\$8,162	\$ 46	\$ —	\$ —

The weighted-average remaining lease term and discount rate were as follows:

	December 31,	September 30,
	2018	2019
		(unaudited)
Weighted-average remaining lease term—operating leases (in years)	6.6	5.6
Weighted-average discount rate—operating leases	9.5%	9.5%

The interest rate implicit in lease contracts is typically not readily determinable and as such, the Company uses its incremental borrowing rate based on information available at the lease commencement date, which represents an internally developed rate that would be incurred to borrow, on a collateralized basis, over a similar term, an amount equal to the lease payments in a similar economic environment.

Future annual minimum lease payments under operating leases as of December 31, 2019 were as follows (in thousands):

Year Ending December 31,	
2020	\$ 1,792
2021	1,752
2022	1,788
2023	1,833
2024	1,878
Thereafter	1,435
Total future minimum lease payments	10,478
Less: imputed interest	(2,459)
Total operating lease liabilities	\$ 8,019

908 Devices Inc.
Notes to Financial Statements?(Continued)

12. Commitments and Contingencies

Leases

The Company's commitments under its leases are described in Note 11.

Royalty Arrangements

The Company has entered into royalty arrangements with two parties whereby the Company owes low- to mid-single digit royalty percentages related to revenue that is derived pursuant to in-licensed technologies. Royalty obligations are expensed when incurred or over the minimum royalty periods and have not been material. Some of the arrangements include minimum royalties over a defined term. The future minimum royalty payments are \$0.1 million per year in 2020 and beyond, through the end of the patents' lives. The Company has the right to terminate the agreements with written notice.

401(k) Savings Plan

The Company has a defined-contribution savings plan under Section 401(k) of the Internal Revenue Code. This plan covers substantially all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. Company contributions to the plan may be made at the discretion of the board of directors. As of December 31, 2018 and 2019 and September 30, 2020 (unaudited), the Company had not made any contributions to the plan.

Indemnification Agreements

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its board of directors that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or services as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company is not currently aware of any indemnification claims and had not accrued any liabilities related to such obligations in its financial statements as of December 31, 2018 and 2019 or September 30, 2020 (unaudited).

Legal Proceedings

The Company is not currently party to any material legal proceedings. At each reporting date, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses as incurred the costs related to such legal proceedings.

13. Net Loss per Share and Unaudited Pro Forma Net Loss per Share

Net Loss per Share

Basic and diluted net loss per share attributable to common stockholders was calculated as follows (in thousands, except share and per share amounts):

	Year Ended December 31, ??		Nine Months Ended September 30, ??	
	2018	2019	2019	2020
	???	???	???	???
	???	???	(unaudited)	??
Numerator:	??	?	?	?
Net loss and comprehensive loss	???(7,536)?	???(13,373)?	???(12,884)?	???(2,593)?
Accretion of redeemable convertible preferred stock to redemption value	???(76)?	???(109)?	???(79)?	???(74)?
Net loss attributable to common stockholders	???(7,612)?	???(13,482)?	???(12,963)?	???(2,667)?

908 Devices Inc.
Notes to Financial Statements?(Continued)

13. Net Loss per Share and Unaudited Pro Forma Net Loss per Share?(Continued)

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
	???	?????	????	(unaudited) ?
Denominator:	????	??????	??????	??????
Weighted average common shares outstanding basic and diluted	???	4,907,075	4,990,416	4,990,314
Net loss per share attributable to common stockholders, basic and diluted	???	(1.55)?	(2.70)?	(2.60)?

The Company's potential dilutive securities have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	Year Ended December 31,		Nine Months Ended September 30,	
	2018	2019	2019	2020
	???	?????	????	(unaudited) ?
Redeemable convertible preferred stock (as converted to common stock)	???	12,752,645	14,691,929	14,691,929
Warrants for the purchase of redeemable convertible preferred stock (as converted to common stock)	???	362,040	154,634	384,024
Stock options to purchase common stock	???	1,897,608	2,247,657	2,243,196
	???	15,012,293	17,094,220	17,319,149

Unaudited Pro Forma Net Loss per Share

Unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2019 and the nine months ended September 30, 2020 have been prepared to give effect to adjustments arising from the Company's IPO. The unaudited pro forma net loss attributable to common stockholders used in the calculation of unaudited pro forma basic and diluted net loss per share attributable to common stockholders does not include the change in the fair value of the preferred stock warrant liability or the accretion of redeemable convertible preferred stock to redemption value because the calculation gives effect to the IPO, including the conversion of all warrants to purchase shares of convertible preferred stock into warrants to purchase shares of common stock as if the IPO had occurred on the later of January 1, 2019 or the issuance date of the Preferred Stock or preferred stock warrants.

Unaudited pro forma basic and diluted weighted average common shares outstanding used in the calculation of unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2019 and the nine months ended September 30, 2020 have been prepared to give effect upon the closing of a qualified IPO, to the conversion of all outstanding shares of redeemable convertible preferred stock shares of common stock as if the IPO had occurred on the later of January 1, 2019 or the issuance date of the redeemable convertible preferred stock.

908 Devices Inc.

Notes to Financial Statements?(Continued)

13. Net Loss per Share and Unaudited Pro Forma Net Loss per Share?(Continued)

Unaudited pro forma basic and diluted net loss per share attributable to common stockholders was calculated as follows (in thousands, except share and per share amounts):

	Year Ended		Nine Months Ended	
	December 31, 2019		September 30, 2020	
	(unaudited)		(unaudited)	
Numerator:				
Net loss attributable to common stockholders	??	??\$ (13,482)	???	??\$ (2,667)
Plus: Change in fair value of preferred stock warrant liability	??	?? (59)	???	?? 26
Plus: Accretion of redeemable convertible preferred stock to redemption value	??	?? 109	???	?? 74
Pro forma net loss attributable to common stockholders	??	??\$ (13,432)	???	??\$ (2,567)
Denominator:				
Weighted average common shares outstanding, basic and diluted	??	?? 4,990,416	???	?? 4,995,878
Pro forma adjustment to reflect automatic conversion of redeemable convertible preferred stock to common stock upon the completion of the proposed IPO	??	?? 13,992,676	???	?? 14,691,929
Pro forma weighted average common shares outstanding, basic and diluted	??	?? 18,983,092	???	?? 19,687,807
Pro forma net loss per share attributable to common stockholders, basic and diluted	??	??\$ (0.71)	???	??\$ (0.13)

14. Income Taxes

During the years ended December 31, 2018 and 2019 and the nine months ended September 30, 2019 and 2020 (unaudited), the Company did not record income tax benefits for the net operating losses incurred or for the research and development tax credits generated in each year, due to its uncertainty of realizing a benefit from those items. The Company does not have any foreign operations and therefore, has not provided for any foreign taxes.

A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Year Ended December 31,	
	2018	2019
Federal statutory income tax rate	?? (21.0)%	?? (21.0)%
State income taxes, net of federal benefit	?? (3.1)	?? (3.7)
Federal and state research and development tax credits	?? (12.7)	?? (5.7)
Nondeductible items	?? 1.2	?? 0.6
Other	?? 0.8	?? (0.4)
Change in valuation allowance	?? 34.8	?? 30.2
Effective income tax rate	?? 0.0%	?? 0.0%

908 Devices Inc.
Notes to Financial Statements?(Continued)

14. Income Taxes?(Continued)

Net deferred tax assets consisted of the following (in thousands):

?	??	December 31,	?
?	??	2018	?? 2019 ?
Deferred tax assets:	????	??????	???
Net operating loss carryforwards	???	\$ 10,143???	\$ 13,123??
Research and development tax credit carryforwards	???	4,945???	5,706??
Lease liability	???	2,008???	1,986??
Capitalized start up costs	???	154???	140??
Capitalized research and development costs	???	445???	333??
Accrued expenses and other	???	1,206???	1,426??
Total deferred tax assets	???	18,901???	22,714??
Deferred tax liabilities:	???	??????	???
Right-of-use asset	???	(1,983)???	(1,794)?
Depreciation and amortization	???	(57)???	(17)?
Total deferred tax liabilities	???	(2,040)???	(1,811)?
Valuation allowance	???	(16,861)???	(20,903)?
Net deferred tax assets	???	\$ —???	\$ —??

As of December 31, 2019, the Company had U.S. federal and state net operating loss carryforwards of \$53.0 million and \$31.7 million, respectively, which may be available to offset future taxable income and begin to expire in 2032 and 2025, respectively. As of December 31, 2019, the Company also had U.S. federal and state research and development tax credit carryforwards of \$4.0 million and \$2.1 million, respectively, which may be available to offset future tax liabilities and begin to expire in 2032 and 2029, respectively. During the nine months ended September 30, 2020 (unaudited), gross deferred tax assets, before valuation allowance, increased by approximately \$0.9 million due to the operating loss incurred by the Company during that period.

Utilization of the U.S. federal and state net operating loss carryforwards and research and development tax credit carryforwards may be subject to a substantial annual limitation under Sections 382 and 383 of the Internal Revenue Code of 1986, and corresponding provisions of state law, due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of carryforwards that can be utilized annually to offset future taxable income or tax liabilities. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain stockholders or public groups in the stock of a corporation by more than 50% over a three-year period. The Company has not conducted a study to assess whether a change of control has occurred or whether there have been multiple changes of control since inception due to the significant complexity and cost associated with such a study. If the Company has experienced a change of control, as defined by Section 382, at any time since inception, utilization of the net operating loss carryforwards or research and development tax credit carryforwards would be subject to an annual limitation under Section 382, which is determined by first multiplying the value of the Company's stock at the time of the ownership change by the applicable long-term tax-exempt rate, and then could be subject to additional adjustments, as required. Any limitation may result in expiration of a portion of the net operating loss carryforwards or research and development tax credit carryforwards before utilization. Further, until a study is completed by the Company and any limitation is known, no amounts are being presented as an uncertain tax position.

908 Devices Inc.

Notes to Financial Statements?(Continued)

14. Income Taxes?(Continued)

The Company has evaluated the positive and negative evidence bearing upon its ability to realize the deferred tax assets. Management has considered the Company's history of cumulative net operating losses incurred since inception and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets. Accordingly, a full valuation allowance has been established against the net deferred tax assets as of December 31, 2018 and 2019 and September 30, 2020 (unaudited). Management reevaluates the positive and negative evidence at each reporting period.

Changes in the valuation allowance for deferred tax assets related primarily to the increase in net operating loss carryforwards and research and development tax credit carryforwards and were as follows (in thousands):

?	??	Year Ended December 31, ?	
?	??	2018	?? 2019 ?
Valuation allowance as of beginning of year	??	?\$14,325	?? ?\$16,861 ??
Increases recorded to income tax provision	??	?? 2,536	?? ? 4,042 ??
Valuation allowance as of end of year	??	?\$16,861	?? ?\$20,903 ??

As of December 31, 2018 and 2019 and September 30, 2020 (unaudited), the Company had not recorded any amounts for unrecognized tax benefits. The Company's policy is to record interest and penalties related to income taxes as part of its income tax provision. As of December 31, 2018 and December 30, 2019 and September 30, 2020 (unaudited), the Company had no accrued interest or penalties related to uncertain tax positions and no amounts had been recognized in the Company's statements of operations and comprehensive loss. The Company files income tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal and state jurisdictions, where applicable. The Company is open to future tax examination under statute from 2017 to the present; however, carryforward attributes that were generated prior to 2016 may still be adjusted upon examination by federal, state or local tax authorities if they either have been or will be used in a future period. The Company is currently under examination by the Internal Revenue Service for the year ending December 31, 2018. No adjustments have been proposed to date. The Company has not received notice of examination by any other jurisdictions for any other tax year open under statute.

15. Related Party Transactions

Commercial Services Agreement

As described in Note 3, in 2015, the Company entered into a commercial services agreement with one of its preferred stock investors. The Company will pay up to \$1.5 million to the investor for the milestones previously achieved upon the occurrence of a Deemed Liquidation event. The Company has recorded a liability for the fair value of the commercial services agreement of? \$0.8 million as of December 31, 2018 and 2019, and \$0.4 million as of September 30, 2020 (unaudited).

16. Subsequent Events

For its annual financial statements as of December 31, 2019 and for the year then ended, the Company evaluated subsequent events through October 2, 2020, the date on which those financial statements were issued and, with respect to the reverse stock split discussed below, through December 14, 2020.

Grant of Stock Options under the 2012 Plan

During the third quarter of 2020, the Company granted options for the purchase of an aggregate of 989,164 shares of common stock with a weighted average exercise price of? \$2.84 per share. The aggregate grant-date fair value of these options was \$1.9 million, which is expected to be recognized as stock-based compensation expense over a period of approximately four years.

908 Devices Inc.**Notes to Financial Statements?(Continued)****16. Subsequent Events?(Continued)*****Increase in Shares Authorized for Issuance under the 2012 Plan***

In September 2020, the Company increased the number of shares available under the 2012 Plan from 3,146,519 shares to 3,761,109 shares.

Reverse Stock Split

On December 11, 2020, the Company effected a one-for-1.6271 reverse stock split of its issued and outstanding shares of common stock and a proportional adjustment to the existing conversion ratios for each series of the Company's Preferred Stock (see Note 8). Accordingly, all share and per share amounts for all periods presented in the accompanying financial statements and notes thereto have been adjusted retroactively, where applicable, to reflect this reverse stock split and adjustment of the Preferred Stock conversion ratios.

17. Subsequent Events (Unaudited)

For its interim financial statements as of September 30, 2020 and for the nine months then ended, the Company evaluated subsequent events through December 17, 2020, the date of the submission of this registration statement.

Grant of Stock Options under the 2012 Plan

On November 3, 2020, the Company granted options for the purchase of an aggregate of 125,376 shares of common stock with a weighted average exercise price of \$7.91 per share. The aggregate grant-date fair value of these options was \$0.6 million, which is expected to be recognized as stock-based compensation expense over a period of approximately four years.

2020 Stock Option and Incentive Plan

On November 23, 2020, the Company's board of directors adopted, and on December 11, 2020, the Company's stockholders approved the 2020 Stock Option and Incentive Plan (the "2020 Stock Plan"), which will become effective as of the date immediately preceding the effectiveness of the registration statement on Form S-1 related to the Company's initial public offering. The 2020 Stock Plan provides for the grant of incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock, restricted stock units, unrestricted stock, unrestricted stock units, dividend equivalent rights and cash-based awards to employees, directors and consultants of the Company. The number of shares of common stock of the Company available for issuance under the 2020 Stock Plan is 1,843,771 shares, plus the number of shares underlying awards under the 2012 Plan that expire or are terminated, surrendered or cancelled without the delivery of shares, are forfeited to or repurchased by the Company or otherwise become available again for grant under the 2012 Plan. The 2020 Stock Plan provides that the number of shares reserved and available for issuance under the 2020 Stock Plan will automatically increase on January 1, 2022 and each January 1 thereafter, by 4% of the outstanding number of shares of our common stock on the immediately preceding December 31 or such lesser number of shares as determined by the administrator of the 2020 Stock Plan.

2020 Employee Stock Purchase Plan

On November 23, 2020, the Company's board of directors adopted, and on December 11, 2020, the Company's stockholders approved the 2020 Employee Stock Purchase Plan (the "2020 ESPP"), which will become effective as of the date immediately preceding the effectiveness of the registration statement on Form S-1 related to the Company's initial public offering. A total of 288,857 shares of common stock of the Company are reserved for issuance under the 2020 ESPP. The 2020 ESPP provides that the number of shares reserved and available for issuance will automatically increase on January 1, 2022 and each January 1 thereafter through January 1, 2030, by the least of: (i) 307,295 shares of our common stock, (ii) 1% of the outstanding number of shares of common stock on the immediately preceding December 31, or (iii) such lesser number of shares of common stock as determined by the administrator of the 2020 ESPP.

6,500,000 Shares



908 Devices Inc.
Common Stock

PROSPECTUS

COWEN SVB LEERINK WILLIAM BLAIR STIFEL

December 17, 2020

Through and including January 11, 2021 (25 days after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.