Risk Factors Comparison 2024-03-18 to 2023-03-02 Form: 10-K

Legend: **New Text** ~~Removed Text~~ Unchanged Text Moved Text Section

Risks Related to Our Business and Industry Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter. We operate in a highly competitive market characterized by rapid technological advances, frequent new product introductions, evolving industry standards and changing customer preferences. Our limited operating history makes it difficult to evaluate our future prospects and our ability to respond to our competitors, changes in our market and the risks and challenges we may encounter as we expand our business operations. If we fail to address the risks, uncertainties and difficulties that we face, including those described elsewhere in this " Risk Factors " section, our business, financial condition and results of operations could be adversely affected. We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by companies developing and introducing new products in competitive and rapidly changing markets. If our assumptions regarding ~~these~~ -- **the** risks and uncertainties ~~, which~~ we use to plan and operate our business ~~,~~ are incorrect or change, or if we do not address these risks and uncertainties successfully, our results of operations could differ materially from our expectations, and our business, financial condition and results of operations could be adversely affected. We have incurred significant losses since inception, we expect to incur significant losses in the future and we may not be able to generate sufficient revenue to achieve and maintain profitability. We have incurred significant losses since we were formed in 2016 and have only recently generated revenue. We expect to continue to incur significant losses for the foreseeable future as we expand our business operations, manufacture and commercialize the G4, **develop and commercialize the G4X,** continue to enhance and develop our **current and future** products and implement our business plans and strategies. Our net loss was $ **94. 8 million and $** 90. 9 ~~million and $ 98. 8~~ million for the years ended December 31, **2023 and** 2022 ~~and 2021~~ , respectively. As of December 31, ~~2022~~ **2023** , we had an accumulated deficit of $ ~~242~~ **337** . ~~8~~ **6** million. We expect that our losses will continue for the foreseeable future as we continue to invest significant additional ~~funds~~ **resources** toward the commercialization of our products and ongoing research and development. We have experienced these losses and accumulated deficit primarily due to the investments we have made in developing our proprietary technologies and products, building our team and manufacturing capabilities and commercially launching our first product, the G4. Over the next several years, we expect to continue to incur significant expenses as we continue our research and development activities, continue to commercialize the G4, ~~finalize~~ **continue** the development of the ~~PX~~ **G4X and our product pipeline** , continue to build our sales and marketing organization and increase our manufacturing and commercialization capabilities. These efforts may prove to be more costly, or take longer, than we currently anticipate. Additionally, we may encounter unforeseen expenses, product development or manufacturing delays, declines in revenue or other unknown factors that may result in losses in future periods. We have only recently generated revenue, and we may never generate revenue sufficient to offset our expenses. In addition, as a public company, we have incurred and will incur significant legal, accounting, administrative, insurance and other expenses that we did not incur as a private company. To date, we have financed our operations principally from the sale of common stock, convertible preferred stock, convertible notes and the incurrence of other indebtedness. There can be no assurance that our revenue and gross margin will increase sufficiently such that our net losses decrease, or that we attain profitability, in the future. Further, our limited operating history makes it difficult to effectively plan for and model our operating expenses and our ability to generate revenue. Our ability to achieve and then sustain profitability is based on numerous factors, many of which are beyond our control, including the impact of market acceptance of our products, product development results and timing, offerings or actions taken by our competitors, our market penetration and margins and current and future litigation. We may never be able to generate sufficient revenue to achieve or sustain profitability, which could negatively impact the value of our common stock. We have only recently generated revenue and have limited experience developing and commercializing our products or technology, which makes it difficult to evaluate our prospects and predict our future performance. We commercially launched our first product, the G4, in December of 2021, and we began recognizing revenue on sales of the G4 in the fourth quarter of 2022. There can be no assurance that we will be able to generate sufficient revenue in the future to support our operations and plans. Our operations to date have been focused on developing and commercializing our technologies and products, including developing and commercializing the G4 and ~~developing the PX~~ **our product pipeline and product enhancements** . The performance of our products in our beta pilot program and early access program may not be indicative of the performance our customers experience following commercial launch, and we may need to make modifications to improve our products. For example, we expect to make modifications to improve the reliability, quality and / or functionality of the G4 as we manufacture the G4 and in response to customer feedback, and we expect the G4 to improve in time as further units are sold. However, there can be no assurance that this will occur or that we will avoid delays in finalizing these improvements. There can be no assurance that we will be able to timely achieve market acceptance for the G4 in the future. We have limited experience manufacturing the G4 for commercial use, conducting sales and marketing activities at scale and managing customer support at the commercial level. Further, while we **commenced the** ~~are continuing to develop~~ **development of** the ~~PX~~ **G4X** , we **have not completed its development and** have no experience manufacturing or commercializing the **G4X. Further, while we had commenced development of the** PX **, we have paused its development to focus our efforts on the development of the G4X** . Consequently, predictions about our future success or viability are highly uncertain and hard to predict as a result of our limited operating history, the development stage of our products and our limited history commercializing our technologies or products. Our prospects must be considered in light of the uncertainties, risks, expenses, and difficulties frequently encountered by companies in their early stages of operations. Further, we are transitioning from a company with a focus on research and

development to a company capable of supporting both research and development and robust manufacturing and commercial activities, and we may not be successful in this transition. We have encountered in the past, and will encounter in the future, risks and uncertainties, delays and scientific setbacks frequently experienced by development stage companies with limited operating histories in competitive and rapidly changing industries, such as the genomics industry. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, manufacturing and commercialization activities, are incorrect or change, or if we do not address these risks, delays or uncertainties successfully, our results of operations could differ materially from our expectations, and our business, financial condition and results of operations could be adversely affected. The life sciences technology market is highly competitive. If we fail to compete effectively, our business and operating results will suffer. We face significant competition in the life sciences technology market. More specifically, the NGS **and spatial** ~~market~~ **markets** ~~is~~ **are** characterized by rapid technological changes, frequent new product introductions, established and emerging competition, extensive intellectual property disputes and litigation, price competition, aggressive marketing practices, evolving industry standards and changing customer preferences. Our primary competitors and potential competitors are large publicly traded companies or are divisions of large publicly traded companies, including 10x Genomics Inc., Becton, Dickinson and Company, Bio- Rad Laboratories, Inc., Illumina Inc., MissionBio Inc., Nanostring Technologies, Inc., Oxford Nanopore Technologies Inc., Pacific Biosciences Inc. and Thermo Fisher Scientific Inc. There are other companies, both established and early stage, such as Element Biosciences, Inc. and Ultima Genomics, Inc., who have begun commercializing NGS **and / or spatial** technologies and **offering** products to our target customers. We also face competition from companies and research institutes developing their own products or applications for omics research. This is particularly true for the largest research centers and laboratories who are continually testing and trying new technologies, whether from a third- party vendor or developed internally. Our current competitors, including those who are large publicly traded companies, or are divisions of large publicly traded companies, enjoy a number of competitive advantages over us, including: • greater name and brand recognition; • greater financial and human resources; • established and trusted commercial relationships with our target customers; • broader product lines; • superior product offerings, features or capabilities; • greater pricing flexibility, including the ability to offer significant discounts and to bundle products and services; • larger sales and customer service forces and more established distributor networks; • substantial intellectual property portfolios; • exclusive or long- term supply agreements with our target customers; • approvals with the U. S. Food and Drug Administration (the " FDA ") that allow our competitors to market their products for additional uses; • numerous scientific papers and publications supporting their technologies and product claims; and • better established, larger scale and lower cost manufacturing capabilities. We cannot assure investors that we can successfully compete with these competitors or that the G4, **the G4X** ~~our planned PX~~ or any other technologies and products we **may** develop can compete favorably with the offerings from such competitors. We also cannot assure investors that we can successfully defend our technologies and products from lawsuits filed by our competitors without significant expenses, the requirement to complete additional product and technology development, potential manufacturing or commercialization delays, or at all. Further, we cannot assure investors that we will be successful in the face of increasing competition from products and technologies introduced by our existing or future competitors, or developed by our customers internally. In addition, we cannot assure investors that our competitors do not have or will not develop products or technologies that currently or in the future will enable them to offer products with greater capabilities or at lower costs than ours or that are able to run comparable experiments at a lower total experiment cost. Many of our competitors have also been able to enter into long- term, exclusive agreements with major potential customers, often by offering favorable pricing and other terms. Until these agreements expire, our ability to place our products with these customers will be limited. Even after exclusive agreements expire, we may not be able to compete with the terms offered by our competitors in their efforts to extend exclusive relationships with these major potential customers. Any failure to compete effectively could materially and adversely affect our business, financial condition and operating results. If our products fail to achieve early customer and scientific acceptance, we may not be able to achieve broader market acceptance for our products, and our revenue and prospects may be harmed. We cannot guarantee that customer experiences or reviews of the G4 **and / or the G4X** from our customers will be favorable. Initial negative perception of the G4 **or G4X** by customers could irreparably damage our reputation and ability to successfully commercialize the G4, **G4X** ~~our planned PX~~ or any of our other future products. Further, the life sciences scientific community is comprised of a small number of early adopters and key opinion leaders (" KOLs ") who significantly influence the rest of the community and the marketplace in general. 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 current system of academic and scientific research views publishing in a peer- reviewed journal as a measure of success. In such journal publications, the researchers will describe not only their discoveries, but also the methods and typically the products used to fuel such discoveries. Mentions in peer-reviewed journal publications are a good barometer for the general acceptance of our products as best practices. Ensuring that early adopters and KOLs publish research involving the use of our products is critical to ensuring our products gain widespread acceptance and market growth. Continuing to maintain good relationships with such KOLs is vital to growing the acceptance of our products in the marketplace. If early adopters and KOLs do not favorably describe the use of our products, do not compare our products favorably to existing products and technologies, or negatively describe the use and operation of our products in publications, it may drive potential customers away from our products and prevent broader market acceptance of our products, which could harm our business, financial condition and results of operations. We expect to be highly dependent upon revenue generated from the sale of the G4 **, G4X** and ~~the planned PX~~ **future products,** and any delay or failure by us to successfully develop and commercialize the G4 **, G4X** or ~~PX~~ **other future products** could have a substantial adverse effect on our business and results of operations. We have commercially launched the G4 and began recognizing revenue on sales of the G4 in the fourth quarter of 2022 **and have commenced development of** ~~. Our second planned product,~~ the ~~PX~~ **G4X** , **which** is ~~under development. For the PX, we plan to collaborate with select partners to conduct~~ a **platform we** ~~technology access program~~

designed to **target** ~~bring samples and collaborators in- house, which we initiated in~~ the **spatial multiomics market** ~~fourth quarter of 2022 and executed our first technology access partner agreement in February 2023. Following our technology access program, we plan to expand collaborations with additional potential customers in an early access program~~ . As a result, we expect to generate substantially all of our revenue in the near term from the sale of the G4 and, **over time** ~~in the future~~ , ~~from~~ the ~~sale of the G4~~ **G4X** ~~and planned PX~~ . There can be no assurance of the following: that the G4 will meet the expectations of our customers, including those relating to cost, reliability, performance and features, or otherwise gain market acceptance; that we can manufacture the G4 in commercial quantities; that we will be able to successfully commercialize the G4; or that we will be able to service and maintain the ~~G4~~ products that we have sold. Further, there is no assurance that we will be able to successfully complete the development of, or commercialize, **the G4X** ~~our planned PX~~ or any other future products or product enhancements we elect to pursue. To date, we have limited experience simultaneously designing, testing, manufacturing and selling products and there can be no assurances we will be successful in doing so or doing so on our intended timelines. In addition, as technologies change in the life sciences research tools marketplace in general, and in the omics technologies marketplace specifically, we will be expected to upgrade or adapt our products in order to keep up with the latest technology. Further, our competitors may offer or develop products or technologies that cause the G4 ~~or~~ **, G4X** ~~our~~ **or** ~~planned PX~~ **other future products** to not be commercially attractive to our customers. Our future financial performance will be dependent on our ability to increase penetration and utilization in our existing markets. Our financial performance will be driven by, and a key factor to our future success will be, the rate of commercial adoption of the G4 **, G4X** and ~~planned PX~~ **future products** . In addition, our financial performance will be dependent on our ability to increase customer utilization of our products, and thereby, increase sales of our consumables and any other associated products and services we offer. There is no assurance that we will be successful in demonstrating our product performance claims and value proposition to potential customers. There also is no assurance that our direct sales and marketing organization in the United States or our direct or distributor sales and marketing efforts in markets outside the United States will drive broad customer adoption of our products. Further, we may not be successful in increasing our customers' usage of our products, or their associated purchase of our consumables and other products and services. Any failure to establish a broad installed base of the G4 ~~and~~ **, G4X** ~~our~~ **or** ~~planned PX~~ **other future products** among our target customers, or failure to increase the usage of our products and the associated sales of our consumables and other products and services, will limit our revenue growth and harm our results of operations and financial performance. Our business will depend significantly on research and development spending by academic institutions and other research institutions, and any reduction in spending could limit demand for our products and adversely affect our business, results of operations, financial condition and prospects. We are initially targeting customers who are already familiar with genomic analysis, including academic institutions, genomic research centers / core labs and government laboratories, as well as pharmaceutical, clinical research organizations (" CROs "), biotechnology, consumer genomics, commercial molecular diagnostic laboratories and agrigenomics companies. We believe that a substantial amount of our sales revenue in the near term will be generated from sales to academic and other research institutions. Therefore, we expect much of these customers' funding will be, in turn, provided by various state, federal and international governmental agencies. As a result, the demand for the G4, **G4X** ~~our planned PX~~ and any other product or product enhancements we elect to develop in the future may depend in part upon the research and development budgets of these customers, which are impacted by factors beyond our control, such as: • decreases in government funding of research and development; • changes to programs that provide funding to research laboratories and institutions, including changes in the amount of funds allocated to different areas of research or changes that have the effect of increasing the length of the funding process; • macroeconomic conditions and the political climate; • scientists' and customers' opinions of the utility of new products or services; • researchers' opinions of the utility of the G4, ~~our planned PX~~ **the G4X, once developed,** or any other product or product enhancements we elect to develop in the future; • citation of the G4 ~~and planned PX~~ **, G4X or our other future products** in published research; • potential changes in the regulatory environment; • differences in budgetary cycles, especially government- or grant- funded customers, whose cycles often coincide with government fiscal year ends; • competitor product offerings or pricing; • the effect of inflation on budgets of our potential customers; • market acceptance of new technologies; and • market driven pressures to consolidate operations and reduce costs. In addition, various state, federal and international agencies that provide grants and other funding may be subject to stringent budgetary constraints that could result in spending reductions, reduced grant making, reduced allocations or budget cutbacks, which could jeopardize the ability of these customers, or the customers to whom they provide funding, to purchase our products. For example, congressional appropriations to the National Institutes of Health (the " NIH ") have generally increased year- over- year for the last 20 years, but the NIH also experiences occasional year- over- year decreases in appropriations, including as recently as 2013. There is no guarantee that NIH appropriations will not decrease in the future. A decrease in the amount of, or delay in the approval of, appropriations to NIH or other similar United States or international organizations, such as the Medical Research Council in the United Kingdom, could result in fewer grants benefiting life sciences research. These reductions or delays could also result in a decrease in the aggregate amount of grants awarded for life sciences research or the redirection of existing funding to other projects or priorities, any of which in turn could cause our customers and potential customers to reduce or delay purchases of our products. Our operating results may fluctuate substantially due to any such reductions and delays. Any decrease in our customers' budgets or expenditures, or in the size, scope or frequency of their capital or operating expenditures, could materially and adversely affect our business, results of operations, financial condition and prospects. Our operating results may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide. We have very limited operating history in manufacturing, commercializing and providing customer support for our first product, the G4 **,** and have limited history in developing ~~our PX~~ **the G4X and other products** . As a result, our quarterly and annual operating results may fluctuate significantly as we ~~finalize the development of~~ **commercialize and continue to enhance** the G4 and begin or

continue these new manufacturing, commercialization and customer support activities and continue the development of ~~the PX~~ **our product pipeline** , which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including but not limited to: • our ability to successfully manufacture and commercialize the G4 on our anticipated timelines and costs; • our ability to ~~continue the development~~ **develop** and successfully manufacture and commercialize the ~~PX~~ **G4X** or other products and technologies on our anticipated timelines and costs; • the timing and cost of, and level of investment in, research and development, manufacturing and commercialization activities relating to our products and technologies, which may change from time to time; • the level of demand for any products or product enhancements we are able to commercialize, particularly the G4 and ~~our planned PX~~ **any future products, such as the G4X** , which may vary significantly from period to period; • market acceptance of our products, especially by early adopters and KOLs; • our ability to drive adoption of our products and technologies, including the G4 and ~~our planned PX~~ **any future products, such as the G4X** , in our target markets and our ability to expand into any future target markets; • the prices at which we will be able to sell our products and technologies; • our ability to lower the cost of manufacturing our products and product enhancements; • the availability and cost of components and raw materials; • actions taken by our competitors, including new product introductions, pricing changes, product bundling and aggressive marketing practices; • intellectual property disputes and litigation; • the outcomes of and related rulings in litigation and administrative proceedings in which we may in the future become involved in; • the operating performance and financial results of our competitors; • the volume and mix of our sales between the G4 and ~~our planned PX and~~ other products and technologies, including consumables, or changes in the manufacturing or sales costs related to our products; • the utilization of our instruments and the volume and mix of the sales of our consumables; • the length of time of the sales cycle for purchases of our products and technologies, including the G4 and ~~our planned PX~~ **any future products, such as the G4X** ; • the timing and amount of expenditures that we may incur to develop, commercialize or acquire additional products and technologies or for other purposes, such as the expansion of our facilities; • changes in governmental funding of life sciences research and development or changes that impact budgets or budget cycles; • the timing of when we recognize revenue; • future accounting pronouncements or changes in our accounting policies; • the outcome of any future governmental investigations involving us, our industry or both; • higher than anticipated service, replacement and warranty costs; • the impact of **recent macroeconomic conditions** ~~the COVID- 19 pandemic~~ on ~~the economy,~~ our business **, financial condition, liquidity** and **results of** operations, **including inflation** ~~investment in life sciences and research industries~~ , **increasing interest rates** and **volatile market conditions** ~~resources and operations of our customers~~ , ~~suppliers~~ **instability in the global banking system,** and ~~distributors~~ **other global events, including the ongoing war in Ukraine and conflicts in the Middle East** ; • general industry, economic and market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors; and • the other factors described in this " Risk Factors " section. The cumulative effects of the factors discussed above could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period- to- period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If we are unable to commercialize products or generate sufficient revenue, or if our operating results fall below the expectations of analysts or investors or below any guidance we may provide, or if the guidance we provide is below the expectations of analysts or investors, it could cause the market price of our common stock to decline. We expect to continue to incur substantial operating expenses in the future, which will negatively impact our ability to achieve or maintain profitability. We have experienced net losses and negative cash flows from operations since our formation in 2016. As of December 31, ~~2022~~ **2023** , we had an accumulated deficit of $ ~~242~~ **337** . ~~8~~ **6** million. Over the next several years, we expect to continue to incur significant expenses as we continue to build our sales and marketing organization, increase our manufacturing and commercialization capabilities, continue our research and development activities and continue the development and enhancement of our products. These efforts may prove to be more costly, or take longer, than we currently anticipate. We have only recently recognized revenue, and we may never generate revenue sufficient to offset our expenses. If our revenue does not eventually grow to a level that exceeds our expenses, we will not be able to achieve or maintain profitability. Additionally, we may encounter unexpected development delays, unforeseen expenses, operating delays, declines in revenue or other unknown factors that may result in losses in future periods. If we are unable to achieve and maintain sustained profitability, our business, results of operations, financial condition and prospects will be materially harmed. ~~The COVID- 19 pandemic and efforts to reduce its spread have adversely impacted and may materially and adversely impact our business and operations; recent~~ **Recent** downward macroeconomic pressures **, unfavorable market conditions and changing circumstances, some of which may be beyond our control,** could **adversely affect our business, financial condition, stock price and results of operations. Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. Market conditions and changing circumstances, some of which may be beyond our control, could impair our ability to access our existing cash, cash equivalents and investments and to timely pay key vendors and others. For example, Silicon Valley Bank (" SVB ") was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (" FDIC ") as receiver, and all of SVB' s deposits and substantially all of SVB' s assets were transferred into a new entity, Silicon Valley Bridge Bank, N. A. (" SVBB "). On March 12, 2023, the Department of the Treasury, the Federal Reserve and the FDIC jointly released a statement indicating that depositors at SVB would have access to their funds, even those in excess of the standard FDIC insurance limits, under a systemic risk exception. Such parties** also ~~materially~~ **announced, among other items, that SVBB had assumed the obligations** and **commitments of former SVB and that commitments to advance under existing credit agreements with former SVB will be honored pursuant to the terms of such credit agreements by SVBB. On March 27, 2023, First Citizens Bank assumed all of SVBB'**

s obligations and commitments and SVBB began operations as Silicon Valley Bank, a division of First Citizens Bank. While we only had a minimal amount of our cash directly at SVB, and, since that date, the FDIC has stated that all depositors of SVB will be made whole, and First Citizens Bank has assumed our deposits from SVB, there is no guarantee that the federal government would guarantee all depositors as they did with SVB depositors in the event of further bank closures, and continued instability in the global banking system may adversely impact our business and **financial condition** ~~operations. The COVID- 19 pandemic spread worldwide, and caused many governments to implement measures to slow the spread of the outbreak through quarantines, travel restrictions, heightened border scrutiny and other measures~~ . In addition, in ~~response~~ **such circumstances, we might not be able** to **timely pay key vendors, our employees and others. Further, prior to** ~~the~~ **these** ~~COVID~~ **events we did not have a business relationship with First Citizens Bank or with SVB, a division of First Citizens Bank. Therefore, we may have conflicts with SVB regarding the interpretation of contractual obligations under the SVB Loan, including those relating to our ability to draw down additional capital. For example, in order for us to draw down on the Second Tranche, we must achieve a six - month trailing revenue hurdle** ~~19 pandemic, many state, local~~ and ~~foreign governments put in place quarantines, executive orders, shelter- in- place orders and similar government orders and restrictions in order to control the spread of the disease. Such orders or restrictions resulted in business closures, work stoppages, slowdowns and delays, work- from- home policies, travel restrictions and cancellation of events, among other effects that impacted our business, personnel, personnel at third- party manufacturing facilities and the availability or cost of materials. For instance,~~ there **must not be** ~~were previously standing " stay- at- home " orders in California, and~~ - **an** ~~specifically in San Diego County~~ **event of default under the SVB Loan** , ~~where our headquarters~~ **each of which** is **determined** ~~located. We have continued to operate within the rules applicable to our business; however, while these mandates have generally expired, a reinstatement of these governmental mandates or institution of other mandates could impact our ability to operate effectively and conduct ongoing research and development or other activities. Additionally, we have experienced longer lead times from our suppliers of components used in our product development and manufacturing operations, including due to supply chain challenges currently being experienced generally in the economy. Further, our operating costs have increased, and may continue to increase, due to the recent growth in inflation, which could have an adverse effect on our results of operation and financial condition. Existing pandemic precautions and preventative measures or such precautions or preventative measures that are reinstituted could also impact our commercialization plans due to restrictions on our customers' ability to access laboratories, causing delays in the delivery and installation of our products, training such customers on our products and their ability to conduct research. The ongoing build- out of our new headquarters and manufacturing facilities may also be delayed~~ by **SVB** ~~the reinstitution of COVID- 19 related restrictions. The COVID- 19 pandemic has also had an adverse effect on our ability to attract, recruit, interview and hire at the pace we would typically expect to support our rapidly expanding operations. To the extent that any governmental authority imposes additional regulatory requirements or re- imposes regulatory requirements or changes existing laws, regulations and policies that apply to our business and operations, such as additional workplace safety measures, our product development plans may be delayed, and we may incur further costs~~ in **its sole discretion** ~~bringing our business and operations into compliance with new laws, regulations and policies. In the near term, we expect that a substantial amount of our revenue will be derived from sales of the G4 to academic and research institutions~~ . Our ability to **draw down** ~~drive the adoption of our products will depend~~ on ~~our ability to visit customer sites to install and train customers on the G4, and the ability of our customers to access laboratories and conduct research in light of the COVID- 19 pandemic. While we don't believe our customers have experienced substantial issues in accessing laboratories to conduct research, we cannot be certain they~~ - **the Second Tranche under** ~~won't experience difficulties in the future. Additionally, the research and development budgets of these customers, the ability of such customers to receive funding for research, and the ability of such customers to receive instrument installations and visitors to their facilities and to travel to~~ our **SVB Loan** ~~facilities, other laboratories and industry events, will become increasingly important to the adoption of the G4. All of these activities have been impacted~~ by **March 31** ~~the COVID- 19 pandemic in multiple ways~~ , **2024** ~~such as: • reductions in capacity or shutdowns of laboratories and other institutions as well as other impacts stemming from the COVID- 19 pandemic, such as reduced or delayed spending on instruments or consumables as a result of such delays and shutdowns; • re- allocation of resources by potential customers toward COVID- 19 research, testing or treatment; • delays in or the inability to obtain supplies and materials used to produce our products; • decreases in government funding of research and development; and • changes to programs that provide funding to research laboratories and institutions, including changes in the amount of funds allocated to different areas of research and changes that have the effect of increasing the length of the funding process. The ultimate impact of the COVID- 19 pandemic~~ is highly uncertain ~~and subject to sudden change, despite expiration of most of the mandates and a waning effect of the pandemic~~ . ~~Any future impacts~~ **Our inability to satisfy or otherwise renegotiate this revenue hurdle, or any disagreement between us and SVB as to the interpretation of contractual provisions,** could ~~have a material, adverse impact~~ **result in our inability to draw down** on ~~our liquidity, capital resources, operations and business and those~~ -- **the Second Tranche under SVB Loan** ~~of the third parties we rely on, and could worsen over time. The extent to which the COVID- 19 pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of COVID- 19 and the actions to contain COVID- 19 or treat its impact, among others. While we do not yet know the full extent of the potential future impacts on our business~~ , any of ~~these occurrences could significantly harm our business, results of operations and financial condition. Further, the COVID- 19 pandemic and its related effects has resulted in, and may continue to result in, downward pressure, extreme volatility, and disruptions in the capital and credit markets, reducing our ability to raise additional capital through equity, equity- linked or debt financings,~~ which could negatively impact our **financial condition** ~~short- term and long- term liquidity and our ability to operate in accordance with our operating plan, or at all~~ . ~~Additionally~~ **Likewise** , the ~~economy has recently begun to experience~~ **capital and credit markets may be adversely affected by the ongoing conflict**

between Russia and Ukraine, conflicts in the Middle East, and the possibility of a ~~downturn~~ **wider European or global conflict, global sanctions imposed in response thereto or an energy crisis** . A severe or prolonged economic downturn **, such as the global financial crisis,** could result in a variety of risks to our business, including **a** weakened demand for our products and technologies and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy could strain our customers' budgets or cause delays in their payments to us. Any of the foregoing could harm our business and results of operations, and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business, results of operations, financial condition or our ability to raise capital. **Further, our stock price may continue to decline due in part to the volatility of the stock market and any general economic downturn.** Risks Related to the Development and Commercialization of Our Products Our efforts to manufacture and commercialize the G4 and to ~~finalize~~ **complete** the development and commercially launch **the G4X** ~~our~~ **or** ~~planned PX~~ **any future products** may not be successful ~~. With respect to the G4, we completed our beta pilot program, have concluded our early access program, and have commercially launched the G4~~ . We began recognizing revenue on sales of the G4 **and its associated consumables** in the fourth quarter of 2022. **In addition** ~~With respect to our planned PX~~ , we are currently ~~in an advanced prototype development~~ **developing** ~~stage for~~ the **G4X** ~~initial products. For the PX, we plan to collaborate with select partners to conduct a technology access program designed to bring samples and collaborators in- house~~ , which **will share** ~~we initiated in~~ the **same platform as the G4** ~~fourth quarter of 2022 and executed our first technology access partner agreement in February 2023. Following our technology access program, we plan to expand collaborations with additional potential customers in an early access program~~ . Our commercialization and product development plans **for these products and other products or technologies we elect to pursue** may not progress as planned or meet our expected timelines or may not be successful due to: • the level of customer demand for the G4; • the ability of our commercial products to regularly meet target specifications; • our ability to manufacture and ship the G4 efficiently and at sufficient commercial scale to meet demand; • ~~potential~~ delays in completing development of **the G4X** ~~our~~ **or any** ~~planned PX or~~ future products **, whether as a result of limited resources, changes in priorities or other factors** ; • our ability to complete the development and manufacture **of the G4X** ~~our~~ **or** ~~planned PX~~ **any future products, whether as a result of limited resources, changes in priorities or other factors** ; • our inability to establish the capabilities and value proposition of our products with KOLs and early adopters in a timely fashion, including through information included in scientific publications and presentations; • our inability to establish broad scientific acceptance of our products; • potential litigation brought by our competitors against our products, technology or intellectual property; • the ~~continued effect and lasting~~ impact of ~~the COVID- 19 pandemic and~~ recent ~~downward~~ macroeconomic ~~pressure~~ **conditions on our business, financial condition, liquidity and results of operations, including inflation, increasing interest rates and volatile market conditions, instability in the global banking system, and global events, including the ongoing war in Ukraine and conflicts in the Middle East** ; • our inability to overcome the long- term relationships, including exclusive agreements, that our competitors have established with our target customers; • actions taken by our competitors, including new product introductions and the ability to offer significant discounts and to bundle products and services to our target customers; • our customers' willingness and ability to adopt new products and workflows, including in light of commercial pressures applied by our competitors and pre- existing long- term contracts with our competitors; • our ability to demonstrate that the G4 ~~and~~ **, G4X** ~~our~~ **or** ~~planned PX~~ **any future products** provide meaningful advantages over competing products and technologies; • the prices we charge for the G4 **, G4X** and **any** ~~planned PX and~~ other products and technologies; • our ability to develop new products and workflows and solutions for customers, and the impact of our investments in product innovation and commercial growth; • our ability to provide service and maintain the products we have sold; • changing industry or market conditions, customer expectations or requirements; • delays in building out our sales, customer support and marketing organization as needed for our commercial launch plans; and • delays in ramping up manufacturing, including obtaining required materials and components from third- party suppliers, to meet expected or actual demand for our products. We cannot assure you that we will be successful in addressing each of the risks and uncertainties that might affect the development and market acceptance of any products we commercialize. Initial negative perception of the G4 by customers could irreparably damage our reputation and ability to successfully commercialize the G4 or ~~our planned PX or~~ future products. In addition, as we continue to commercialize the G4 **and / or the G4X,** we will also need to continue to make corresponding improvements to other operational functions, such as our customer support, service and billing systems, compliance programs and our internal quality assurance programs. We cannot assure you that any increases in scale, required manufacturing improvements and quality assurance will be successfully implemented or that appropriate personnel will be available. To the extent any of our commercial plans and related activities are delayed, unsuccessful or more expensive than we currently anticipate, our financial results may be adversely impacted and we may never generate sufficient revenue to achieve and maintain profitability. If we are unable to establish sales and marketing capabilities, we may not be successful in commercializing the G4 ~~or our planned PX~~ **and any future products** . We have limited experience commercializing our products, and our ability to achieve profitability depends on being able to successfully commercialize the G4 and ~~our planned PX~~ **any future products, such as the G4X** . Although members of our management team have considerable industry experience, we are in the process of expanding our sales, marketing, distribution and customer service and support capabilities with the appropriate technical expertise. To perform sales, marketing, distribution, and customer service and support successfully, we will face a number of risks, including: • our ability to attract, train, retain and manage the sales, marketing and customer service and support force necessary to commercialize and gain market acceptance for our products and train and support our customers in the use of our systems; • our ability to adopt successful marketing and pricing strategies; • the time and cost of establishing a specialized sales, marketing and customer service and support force; and • our sales, marketing and customer service and support force may be unable to initiate and execute successful commercialization activities. We may seek to enlist one or more third parties to assist with sales, distribution and customer service and support globally or in certain regions of the world. There is no guarantee, if we do seek to enter into such arrangements, that we will be

successful in attracting desirable sales and distribution partners or that we will be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any third- party sales and distribution partners, are not successful, the G4 or ~~our planned PX~~ **any future products, such as the G4X,** may not gain market acceptance, which could materially impact our business and results of operations. Our products could fail to achieve key performance metrics we are targeting and our prospects could be harmed. We believe our Sequencing Engine can impart commercially marketable capabilities to our products, including power, speed, flexibility and accuracy. To successfully commercialize our products, we are targeting certain performance metrics, including cycle times for each base, accuracy for base reads, quality scores and the number of independent flow cells that can run **independently and** concurrently. If our Sequencing Engine or our products are unable to meet and to consistently achieve key performance metrics, including once commercially deployed, or, if the data supporting our preliminary achievement of certain key performance metrics are incorrect or not viewed favorably by KOLs or potential customers, demand for the G4 ~~and planned PX~~ **, G4X or any future products** may not develop as anticipated, which could adversely affect our revenue and our results of operations. If we fail to continue to expand the capabilities of the G4 and complete the development of the ~~PX~~ **G4X** , our revenue and our prospects could be harmed. We completed our beta pilot program, have concluded our early access program, and have commercially launched the G4. We began recognizing revenue on sales of the G4 in the fourth quarter of 2022. We are working to expand the capabilities of the G4 by providing novel kits for targeted applications. Any delay or failure by us to successfully develop and release these enhancements could have a substantial adverse effect on our business and results of operations. **We commenced** ~~Our planned PX is in the~~ development ~~phase~~ **of the G4X,** and **it** is subject to all the risks and uncertainties associated with product development of highly complex and novel life sciences instruments. We have not met a number of technical and performance metrics that we believe will be necessary to achieve prior to commercialization. If we do not achieve the required technical specifications and performance metrics for **the G4X** ~~our planned PX~~ or if development work is **delayed, reprioritized, or otherwise** not performed according to ~~our planned~~ schedule, then we may not be successful in ~~finalizing our planned PX~~ **completing development of the G4X** and its commercial launch may be adversely affected, delayed or not occur at all. Additionally, **the G4X** ~~our planned PX~~ could be subject to redesign or further improvements, and result in delays in finalizing development and commencing commercialization, after feedback from ~~beta~~ collaborators ~~, collaborators in our early access program,~~ and KOLs. Any delay or failure by us to successfully develop, release, commercialize and maintain the ~~PX~~ **G4X or other multiomic technologies** could have a substantial adverse effect on our business and results of operations. If we fail to continue to improve our planned products or ~~,~~ introduce compelling new products, product enhancements or product configurations, our revenue and our prospects could be harmed. Our ability to attract customers and earn revenue will depend in large part on our ability to continue to enhance and improve our products and to introduce compelling new products and product capabilities. The success of any enhancements to the G4 or ~~our planned PX, or~~ the introduction of any new products and product capabilities **, such as the G4X,** depends on several factors, including timely completion and delivery of such enhancements and products, competitive pricing, adequate quality testing, integration with existing products and technologies, appropriately timed and staged introduction, overall market acceptance and our ability to properly manufacture, service and maintain these products. Any new products or enhancements that we develop **, such as the G4X,** may not be introduced in a timely or cost effective manner, may contain defects, errors, vulnerabilities or bugs, or may not achieve the market acceptance necessary to increase our revenue and improve our operating results. Further, if we are unable to successfully develop any new products, enhance the capabilities of our existing products to meet evolving customer requirements and demands, compete with alternative products and technologies, or otherwise gain and maintain market acceptance, our business, results of operations and financial condition could be harmed. The sizes of the markets for our products and technologies may be smaller or grow slower than we estimate, and new markets may not develop as quickly as we expect, or at all, limiting our ability to successfully sell our products. The market for NGS **and** ~~, single- cell,~~ spatial **multiomics** ~~and proteomics~~ products and technologies is evolving, making it difficult to predict with any accuracy the market opportunity for our current and future products and technologies. Our estimates of the total addressable market for our current and future products and technologies are based on a number of internal and third- party estimates and assumptions. In particular, while we believe that our target markets may be underserved by existing genomics products and technologies and that our target customers will recognize the value proposition offered by our products, we cannot be certain that our target customers will recognize enough value from our products to purchase our products in place of, or in addition to, tools and technologies they already use. Further, we cannot be certain that our target customers will view our products as competitive alternatives to existing tools and technologies in our target markets, especially given that our competitors have long relationships, including exclusive arrangements, with our target customers and may be able to offer significant discounts and / or ~~buddle~~ **bundle** products or offerings to our target customers. While we believe our assumptions and the data underlying our estimates of the total annual addressable market for our products and technologies 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 products and technologies may be incorrect. Further, the future growth of the market for our current and future products depends on many factors beyond our control, and if the markets for our current and future products are smaller than estimated or do not develop as we expect, our growth may be limited and our business, financial condition and ~~operational~~ results of operations could be adversely affected. We expect to commercialize the G4 and ~~our planned PX~~ **other future product offerings including the G4X** outside of the United States, which could expose us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the United States. Engaging in international business inherently involves a number of difficulties and risks, including: • required compliance with existing and changing foreign regulatory requirements and laws that are or may be applicable to our business in the future, such as the **EU** ~~European Union~~ ' s ~~(" EU ")~~ General Data Protection Regulation (" GDPR ") and other data privacy requirements, labor and employment regulations, anti-

competition regulations, the U. K. Bribery Act of 2010 and other anti- corruption laws, regulations relating to the use of certain hazardous substances or chemicals in commercial products, and require the collection, reuse, and recycling of waste from products we manufacture; • required compliance with U. S. laws such as the Foreign Corrupt Practices Act, and other U. S. federal laws and regulations established by the office of Foreign Asset Control; • export requirements and import or trade restrictions; • laws and business practices favoring local companies; • foreign currency exchange, longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems; • changes in social, economic, and political conditions or in laws, regulations and policies governing foreign trade, manufacturing, research and development, and investment both domestically as well as in the other countries and jurisdictions in which we operate and into which we may sell our products ~~including as a result of the separation of the United Kingdom from the European Union (" Brexit ")~~; • potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers; • difficulties and costs of staffing and managing foreign operations; and • difficulties protecting, maintaining, enforcing or procuring intellectual property rights. If one or more of these risks occurs, it could require us to dedicate significant resources to remedy such occurrence, and if we are unsuccessful in finding a solution, our financial results ~~will~~ **would** suffer. Risks Related to Our Financial Position and Need for Additional Capital We may require substantial additional funding, which may not be available to us on acceptable terms, or at all, and, if not available, may require us to delay, scale back, or cease our product development or commercialization activities. Based on our current plans, we believe that our current cash and cash equivalents, short- term investments and anticipated cash flow from operations, if any, will be sufficient to meet our anticipated cash requirements for at least 12 months from the date of this report. If our available cash resources and anticipated cash flows from operations, if any, are insufficient to satisfy our liquidity requirements, we may be required to raise significant additional capital to support our continued operations and the implementation of our business plans. Our future funding requirements will depend on many factors, including but not limited to: • our rate of progress in commercializing and scaling the manufacturing of the G4; • the costs of the sales and marketing activities associated with establishing adoption of the G4; • the effect of competing technological and market developments, including any requirement to provide discounts for the G4 because of competitive pressures; • litigation expenses we incur to defend against claims, including claims that we infringe the intellectual property of others or judgments we must pay to satisfy such claims; • contractual obligations to third parties; • our ~~rate of~~ progress **, if any,** in developing, launching and commercializing **the G4X** ~~our planned PX~~ and any new products or product enhancements we pursue; • our ability to control our manufacturing and operating costs; • our ability to satisfy our outstanding debt obligations; and • the costs of responding to the other risks and uncertainties described in this report. We may also be required to raise additional capital in the future to expand our business and operations to pursue strategic investments or for other reasons, including but not limited to: • increasing our sales and marketing and other commercialization efforts to drive market adoption of the G4; • **completing the development of and** commercializing **the G4X** ~~our~~ **or** ~~planned PX~~ **any other future products** ; • scaling up our manufacturing and customer support capabilities; • funding development and marketing efforts of our other future products and product enhancements; • expanding our technologies into additional markets; • acquiring, licensing or investing in technologies and other intellectual property rights; • acquiring or investing in complementary businesses or assets; and • financing capital expenditures and general and administrative expenses. We may seek required funding through issuances of equity or convertible debt securities, entering into additional loan facilities or drawing down additional funds under our **SVB Loan, if available due to the requirement that we must achieve a six- month trailing revenue hurdle in order to draw down additional funds under the** SVB Loan. Each of the various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our stockholders would result. If we raise funds by issuing additional debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our common stock. Our SVB Loan restricts our ability to pursue certain transactions that we may believe to be in our best interest, including incurring additional indebtedness without the prior written consent of the lender under the SVB Loan. If we raise funds through collaborations or licensing arrangements, we might be required to relinquish significant rights to our technologies or products or grant licenses on terms that are not favorable to us. If we are unable to obtain adequate financing or financing on terms satisfactory to us, ~~if~~ we ~~require it~~ **may have to delay, reduce the scope of, or discontinue one or more development or commercial programs, delay potential commercialization or reduce the scope of sales or marketing activities and pursue other cost cutting measures, including the reduction of headcount, scope of operations and planned capital expenditures, which may have a material adverse effect on our business, results of operations, financial condition or ability to fund our scheduled obligations on a timely basis or continue as a going concern. Further** , our ability to continue to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances could be significantly limited and could have a material adverse effect on our business, financial condition, results of operations and prospects. Our results of operations could be materially harmed if we are unable to accurately forecast customer demand for the G4, **G4X** ~~our planned PX if and once developed and commercialized,~~ and any other future products and product enhancements we elect to pursue. To ensure adequate supply of the G4 to meet demand, we must forecast our future inventory needs and appropriately scale- up our manufacturing operations and personnel. We must also place orders with our third- party suppliers based on such forecasts. Our ability to accurately forecast demand for the G4 could be negatively affected by many factors, including: our ability to timely scale our manufacturing operations and capabilities; the success of our sales and marketing activities; customer acceptance of the G4; and ~~potential adverse impacts resulting from the COVID- 19 pandemic and related matters, including~~ supply delays and shortages. These same risks and uncertainties ~~will~~ **would** also apply to **the G4X** ~~our planned PX~~ and any other future products and product enhancements we elect to pursue. Inventory levels in excess of customer demand may result in inventory write- downs or write- offs, which would cause our gross margin to be adversely affected and could impair the strength of our brand. Similarly, a portion of our inventory could become obsolete or expire, which could have a material and adverse effect on our earnings and cash flows due to the resulting costs associated with inventory impairment charges and costs

required to replace obsolete inventory. Any of these occurrences could negatively impact our financial performance. Conversely, if we underestimate customer demand for the G4, **G4X** ~~our planned PX~~ or any other future products and product enhancements we elect to pursue, we may not be able to deliver sufficient products to meet our customer requirements, which could result in damage to our reputation and customer relationships. In addition, if we experience a significant increase in demand, we may not be able to increase our manufacturing capacity on a timely basis. Further, we may not be able to obtain the components for our products when required on terms that are acceptable to us, or at all, which could have an adverse effect on our ability to meet customer demand and harm our business and results of operations. Our existing indebtedness may limit our flexibility in financing and operating our business and adversely affect our business, financial condition and results of operations. As of December 31, ~~2022~~ **2023** , ~~there was~~ **we owed** $ 10. 5 million of principal ~~owed~~ under our SVB Loan (as defined in Note 8 to our financial statements ~~included~~ **elsewhere** in ~~Item 8~~ **this report**). In addition to this outstanding amount, we may borrow substantial funds in the future to provide a portion of the capital needed in our business and may secure the repayment of such borrowings by placing additional liens or other encumbrances on our assets. Our SVB Loan contains customary conditions to borrowing, events of default and affirmative and negative covenants, including covenants that restrict our ability (and the ability of certain of our subsidiaries) to incur additional indebtedness, grant liens, make certain fundamental changes and asset sales, pay dividends or make other distributions to holders of our stock, make investments or engage in transactions with our affiliates. Such restrictions could limit our ability to take certain actions ~~could~~ **and** reduce our flexibility to run and manage our business **,** which could have an adverse effect on our results of operations. The obligations under the SVB Loan are also secured by liens on substantially all of our assets, excluding our intellectual property on which there is a negative pledge, subject to customary exceptions. If we were unable to repay amounts due under the SVB Loan, **SVB** ~~Silicon Valley Bank~~ could proceed against such assets. Any declaration by **SVB** ~~Silicon Valley Bank~~ of an event of default could significantly harm our business and prospects and could cause the price of our common shares to decline. Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited. We have incurred substantial losses during our history, which we expect to continue for the foreseeable future, and we may never achieve profitability. As of December 31, ~~2022~~ **2023** , we had federal and California tax loss carryforwards of approximately $ ~~148~~ **195** . ~~6~~ **3** million and $ ~~126~~ **188** . ~~7~~ **8** million, respectively. As of December 31, ~~2022~~ **2023** , we had federal and state tax credit carry forwards of approximately $ ~~6~~ **9** . ~~0~~ **4** million and $ ~~5~~ **7** . ~~8~~ **7** million, respectively. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, (the " Code "), if a corporation undergoes an " ownership change, " generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three- year period, the corporation' s ability to use its pre- change net operating loss carryforwards (" NOLs "), and other pre- change tax attributes (such as research tax credits) to offset its post- change income or taxes may be limited. We have not yet completed an ownership change analysis. If a requisite ownership change occurs, the amount of remaining tax attribute carryforwards available to offset taxable income and reduce income tax expense in future years may be restricted or eliminated. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, even if we attain profitability, we may be unable to use a material portion of our NOLs and other tax attributes based on restrictions in the Code, which could adversely affect our future cash flows and results of operations. U. S. federal income tax reform and the implementation of such reforms could adversely affect us. On December 22, 2017, the United States enacted the Tax Cuts and Jobs Act (the " TCJA ") that significantly reformed the Code. The TCJA, among other things, contained significant changes to corporate taxation, including a reduction of the corporate tax rate from a top marginal rate of 35 % to a flat rate of 21 %, the limitation of the tax deduction for net interest expense to 30 % of adjusted earnings (except for certain small businesses), the limitation of the deduction for NOLs arising in taxable years beginning after December 31, 2017 to 80 % of current year taxable income and elimination of NOL carrybacks for losses arising in taxable years ending after December 31, 2017 (though any such NOLs may be carried forward indefinitely), the imposition of a one- time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, the elimination of U. S. tax on foreign earnings (subject to certain important exceptions), the allowance of immediate deductions for certain new investments instead of deductions for depreciation expense over time, and the modification or repeal of many business deductions and credits. The financial statements contained herein reflect the effects of the TCJA based on current guidance. However, there remain uncertainties and ambiguities in the application of certain provisions of the TCJA, and, as a result, we made certain judgments and assumptions in the interpretation thereof. As part of Congress' s response to the COVID- 19 pandemic, the Families First Coronavirus Response Act (the " FFCR Act "), was enacted on March 18, 2020, and the Coronavirus Aid, Relief, and Economic Security Act, (the " CARES Act "), was enacted on March 27, 2020. Both contain numerous tax provisions. In particular, the CARES Act retroactively and temporarily (for taxable years beginning before January 1, 2021) suspends application of the 80 %- of- income limitation on the use of NOLs, which was enacted as part of the TCJA. It also provides that NOLs arising in any taxable year beginning after December 31, 2017 and before January 1, 2021 are generally eligible to be carried back up to five years. The CARES Act also temporarily (for taxable years beginning in 2019 or 2020) relaxes the limitation of the tax deductibility for net interest expense by increasing the limitation from 30 % to 50 % of adjusted taxable income. Risks Related to Manufacturing Our Products We may be unable to manufacture the G4 **or the G4X** to meet our commercialization plans on a timely or cost effective basis. We must successfully increase our manufacturing output to meet our long- term commercialization plans. We currently manufacture ~~the G4~~ **our instruments and consumables** in our facilities in San Diego, California. ~~We have signed a lease for a manufacturing facility that is being constructed at a new location in La Jolla, California to support our growth and commercialization plans.~~ In order to manufacture sufficient ~~G4~~ instruments and consumables to meet our commercialization plans, we will need to hire and train a sufficient number of manufacturing, engineering and quality personnel. Manufacturing ~~the G4~~ **our instruments** requires complex processes, and depends on the skill and experience of our manufacturing personnel. The manufacturing process for ~~the~~

~~G4~~ **our instruments** also includes sourcing components from various third- party suppliers and then assembling and testing the final product offerings. We must manufacture ~~the G4~~ **our instruments** in compliance with our demanding specifications in a timely and efficient manner and at an acceptable cost in order to achieve and maintain profitability. We have a limited history of manufacturing and assembling ~~the G4~~ **our instruments** , and, as a result, we may have difficulty manufacturing and assembling sufficient quantities of such products in a timely and cost- effective manner. For example, we had previously experienced delays in the scale- up of our manufacturing process when producing our first commercial units of the G4, and we have since improved this process. In addition, to manage our manufacturing operations and the supply of components from our third- party suppliers, we will need to forecast anticipated demand to predict our inventory needs from six months to a year in advance and enter into purchase orders on the basis of these requirements. Our limited manufacturing history may not provide us with enough data to allow us to accurately and effectively predict our manufacturing capacity requirements or our need for components from our third- party suppliers, including appropriately anticipating supply shortages or unavailability and fluctuations in the pricing of required components. We may experience delays in obtaining components required for ~~the G4~~ **our instruments and consumables** , including due to recent supply chain challenges being experienced in the economy generally, or not have sufficient manufacturing capabilities and personnel for such products, which could impede our ability to manufacture and assemble these products on our expected timeline. As a result of this or any other delays, we may encounter difficulties in **instrument and / or consumable** production ~~of the G4~~ , including problems with quality control and assurance, component supply shortages or surpluses, increased costs, shortages of qualified personnel and difficulties associated with compliance with local, state, federal and foreign regulatory requirements. Our costs may also significantly increase as a result of inflation, and we may not be able to offset those higher costs by increasing our prices to our customers to the extent we have generated sales. Our operating costs have increased, and may continue to increase, due to the recent growth in inflation, which could have an adverse effect on our results of operation and financial condition. We are dependent on single source suppliers for some components to our consumables and the loss of any of these suppliers could harm our business. We do not have long- term contracts with third-party suppliers from whom we obtain some components to manufacture ~~the G4~~ **our instruments and consumables** . We are, therefore, subject to the risk that these third- party suppliers will not continue to provide us with components that meet our specifications, quality standards and delivery schedules. Factors that could impact our suppliers' willingness and ability to continue to provide us with the required components include disruption at or affecting our suppliers' facilities, such as work stoppages or natural disasters, demand for and availability of raw materials and subcomponents, adverse weather or other conditions that affect their supply, the financial condition of our suppliers and deterioration in our relationships with these suppliers. In addition, we cannot be sure that we will be able to obtain these components on satisfactory terms. Any increase in component costs could reduce any potential future sales and harm our gross margins. While we have qualified second sources for several of our critical components, including flow cells, optics and oligonucleotides, we do not have qualified secondary sources for all components that we source through a single supplier and we cannot assure investors that the qualification of a secondary supplier will prevent future supply issues. Disruption in the supply of materials or components would impair our ability to sell our products and meet customer demand, and also could delay the launch of new products, any of which could harm our business and results of operations. If we were to have to change suppliers, the new supplier may not be able to provide us components in a timely manner and in adequate quantities that are consistent with our quality standards and on satisfactory pricing terms. In addition, alternative sources of supply may not be available for components for which there are a limited number of suppliers which could result in a requirement to redesign certain aspects of our products. Further, supply shortages could require us to redesign our products to be compatible with components that are more readily available, which could lead to manufacturing and commercialization delays. We have limited experience manufacturing the G4, and we may be unable to consistently manufacture or supply the G4 to the necessary specifications or in quantities necessary to meet demand on a timely basis and at acceptable performance and cost levels. The G4 is a complex product with many different components that must work together to obtain the desired results. As such, a quality defect in a single component can compromise the performance of the entire product. In order to successfully generate sufficient revenue from the G4, we need to supply our customers with products that meet their expectations for quality and functionality in accordance with established specifications on a timely basis. Given the complexity of the G4, individual G4 units may require additional installation and service time prior to becoming available for customer use and we may be required to replace lots of reagents or consumables. **Even after installation, additional warranty services may be required to continue to make the instrument available for customer use.** We manufacture the G4 at our existing facilities in San Diego, California. We procure certain components of the G4 from third-party suppliers, which include both commonly available raw materials and custom components. Many of these manufacturing processes are complex. For example, we had previously experienced delays in the scale- up of our manufacturing process when producing our first commercial units of the G4, and we have since improved this process. If we are not able to repeatedly produce the G4 at commercial scale and source required components from third- party suppliers, our business will be adversely impacted. We have limited manufacturing experience and there is no assurance that we will be able to manufacture our products so that they repeatedly provide accurate results consistent with product specifications. Further, our consumables have a limited shelf life, after which their performance is not ensured. Shipment of consumables that effectively expire early or shipment of defective instruments or consumables to customers may result in recalls and warranty replacements, which would increase our costs, and depending upon our inventory levels and the availability and lead time for additional inventory, could lead to availability issues. 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. Any future design issues, unforeseen manufacturing problems, equipment malfunctions, aging components, quality issues with components and materials sourced from third- party suppliers, or failures to strictly follow procedures or meet specifications, may have a material adverse effect on our brand, business, results of operations and financial condition. The G4 could have defects or errors, which may give rise to

claims against us, adversely affect market adoption and adversely affect our business, financial condition, and results of operations. The G4 utilizes novel and complex technologies and may develop or contain undetected defects or errors. We cannot assure you that material performance problems, defects, or errors will not arise, and as we commercialize our products, these risks may increase. We provide and expect to continue to provide warranties that our products will meet performance expectations and will be free from defects. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins. In manufacturing the G4, we depend on third parties for the supply of various components, many of which require a significant degree of technical expertise to produce. If our suppliers fail to produce our components to specification or provide defective products to us and our quality control tests and procedures fail to detect such errors or defects, or if we or our suppliers use defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised. If the G4 contains defects, we may experience: • a failure to achieve market acceptance for our products or increased sales; • loss of customer orders or delays in order fulfillment; • damage to our brand reputation; • increased warranty and customer service and support costs due to product repair or replacement; • product recalls or replacements; • inability to attract new customers or gain market acceptance; • diversion of resources from our manufacturing and research and development departments into our service department; and • legal claims against us, including product liability claims, which could be costly and time consuming to defend and result in substantial damages. In addition, we expect that the G4 will be used with our customers' and potential customers' own lab equipment and third- party products, and the performance of such equipment and products is outside of our control. If our customers' equipment or the third- party products they utilize are not produced to specification, are produced in accordance with modified specifications, or are defective, they may not be compatible with or perform as intended with the G4. In such case, the reliability, results and performance of the G4 may be compromised. The occurrence of any one or more of the foregoing could negatively affect our business, financial condition, and results of operations. Additionally, we expect that we will need to train our customers on properly using the G4. If we are unable to adequately train our customers to use the G4 or they fail to follow our training and protocols we have established, the performance of the G4 may be compromised. Our ability to achieve profitability will depend, in part, on our ability to reduce the per unit manufacturing costs of the G4. To achieve our operating and strategic goals, we will need to, among other things, reduce the per unit manufacturing cost of the G4. Manufacturing the G4 involves complex processes, and depends on the skills and experience of our manufacturing personnel. For example, we had previously experienced delays in the scale- up of our manufacturing process when producing our first commercial units of the G4, and we have since improved this process. We may in the future experience delays or low manufacturing yields for the G4. In addition, we will need to continually focus on reducing the per unit manufacturing cost of the G4, which cannot be **fully** achieved without increasing the volume of components that we purchase in order to take advantage of volume- based pricing discounts, improving our manufacturing efficiency or increasing our volumes to leverage manufacturing overhead costs. For example, gross margin for the year ended December 31, ~~2022~~ **2023** is negative as a result of both additional incentives we provided to certain customers for their early adoption of the G4 sequencing platform, as well as higher direct costs for **warranty and** " white- glove " services to our initial customers, and we will need to improve our gross margins in the future, which we may be unable to achieve. If we are unable to improve our manufacturing efficiency **and instrument reliability** and reduce our manufacturing overhead costs per unit, our ability to achieve profitability will be severely constrained. Any increase in manufacturing volumes is dependent upon a corresponding increase in sales. Our costs may also significantly increase as a result of inflation, and we may not be able to offset those higher costs by increasing our prices to our customers. The occurrence of one or more factors that negatively impact the manufacturing or sales of the G4 or reduce our manufacturing efficiency may prevent us from achieving our desired reduction in manufacturing costs, which would negatively affect our operating results and may prevent us from attaining profitability. If our facilities or our third- party suppliers' facilities become unavailable or inoperable, our research and development ~~program~~ **programs , including for the G4X,** and commercialization launch plan could be adversely impacted and manufacturing of ~~the G4~~ **our products** could be interrupted. Our existing facilities in San Diego, California house our corporate, research and development, manufacturing, sales and marketing, customer support and quality assurance teams. Our facilities and those of our third- party suppliers are vulnerable to natural disasters, **pandemics,** public health crises, including ~~the impact of~~ the COVID- 19 pandemic, civil unrest, wars and other catastrophic events. For example, our San Diego facilities are located near earthquake fault zones and are vulnerable to damage from earthquakes as well as other types of disasters, including fires, floods, power loss, communications failures and similar events **. Also, for example, our San Diego headquarters is located next to a site currently undergoing significant construction of new office and laboratory space; accidents caused by such construction activities could cause significant or even catastrophic damage to our facilities. Further, for example, our facilities are located near U. S. military bases, out of which military flight training is regularly conducted and regularly cross the skies above our facilities; accidents during such training exercises, or military or other attacks directed to our region, could cause significant or even catastrophic damage to our facilities and company** . If any disaster, any new or continuing public health crisis or catastrophic event were to occur, our ability to operate our business would be seriously, or potentially completely, impaired. If our facilities or our third- party suppliers' facilities become unavailable for any reason, we cannot provide assurances that we will be able to secure alternative facilities with the necessary capabilities and equipment or alternative suppliers on acceptable terms, if at all. We may encounter particular difficulties in replacing our San Diego facilities given the specialized equipment housed within it. The inability to manufacture ~~the G4~~ **our instruments and consumables** , combined with our limited inventory of such manufactured products, may result in the loss of future customers or harm our reputation, and we may be unable to re- establish relationships with those customers in the future. Because our consumables are perishable and must be kept in temperature controlled storage, the loss of power to our facilities, mechanical or other issues with our storage facilities or other events that impact our temperature controlled storage could result in the loss of some or all of such products, and we may not be able to replace them without disruption to our customers or at all. If our

business operations are disrupted by a disaster, war or other catastrophe, the launch of the G4 and ~~our planned PX~~ **any future products, such as the G4X** , and the timing of improvements to such products **,** could be significantly delayed and could adversely impact our ability to compete with other available products and solutions. If our or our third- party suppliers' capabilities are impaired, we may not be able to manufacture and ship our products in a timely manner, which would adversely impact our business. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all. The costs to maintain and provide customer support for the G4, and any future products or product enhancements that we commercialize, **such as the G4X,** may exceed our expectations. As we continue to commercialize the G4 **and develop and prepare to commercialize the G4X** , we are building a commercial organization and infrastructure to support the following activities: • installing ~~the G4~~ **our instruments** in customer locations; • training customers on the use of ~~the G4~~ **our instruments** ; • providing customer support services; and • providing maintenance, repair and warranty services. We may not be successful in developing the organization or commercial infrastructure necessary to provide these customer support activities in a timely manner to meet commercial demand, and on a cost effective basis. Any failure to provide our customers with a superior customer experience, to timely respond to their requests and questions and to provide maintenance and warranty services, may adversely affect our brand and our results of operations. **Further, the costs to providing these services may exceed our expectations and negatively impact our gross margin and results of operations.** Risks Related to Our Planned Growth If we do not successfully manage our current **headcount** and anticipated growth, our business and prospects will be harmed. **Our overall growth since inception has** ~~From December 31, 2021 to December 31, 2022, the number of our full- time employees~~ increased ~~from 221to 275. Since that time, we have continued to increase our employee headcount and expand our operations and expect to continue to do so as we commercialize~~ the ~~G4 and develop the PX. Our recent growth has placed significant strains~~ **strain** on our management, financial systems and internal controls. We expect that the growth associated with the commercial launch of the G4 and the development and commercial launch of ~~our planned PX~~ **any future products** will also strain our operational and manufacturing systems and processes, sales and marketing team, financial systems and internal controls and other aspects of our business. Commercializing the G4 ~~,~~ and ~~continuing to develop our planned PX and then~~ **the development and** ~~commercializing~~ **commercialization** ~~our planned PX~~ **of any future products, including the G4X** , will require us to **retain and, in the longer term,** hire ~~and retain~~ scientific, sales and marketing, software, manufacturing, customer service and quality assurance personnel ~~. In addition, we expect that we will need to hire additional accounting, finance and other personnel in connection with our becoming, and our efforts to comply with the requirements of being, a public company~~ . As a public company, our management and other personnel devote a substantial amount of time toward maintaining compliance with these requirements and effectively ~~manage~~ **managing** these growth activities. We have faced challenges integrating, developing and motivating our rapidly growing employee base, especially during the COVID- 19 pandemic, and may continue to face related challenges as we ~~continue to~~ grow. To effectively manage our growth, we must continue to improve our operational and manufacturing systems and processes, our financial systems and internal controls and other aspects of our business and continue to effectively expand, train and manage our personnel in ~~a~~ **an in- person and** virtual environment ~~during the COVID- 19 pandemic and related governmental work from home mandates~~ . Our ability to successfully manage our expected growth is uncertain given the fact that we have been in operation only since 2016. As our organization ~~continues to grow~~ **grows** , we will be required to implement more complex organizational management structures ~~,~~ and may find it increasingly difficult to maintain the benefits of our corporate culture, including our ability to quickly develop and launch new and innovative products and technologies. If we do not successfully manage our anticipated growth, our business, results of operations, financial condition and prospects will be harmed. We depend on our senior management team, and the loss of one or more of our key employees or an inability to attract and retain highly skilled employees, particularly in this highly competitive labor market, will negatively affect our business, financial condition and results of operations. Our future success depends upon our ability to recruit, train, retain and motivate our senior management team and our other highly qualified personnel. Our senior management team, including Andrew Spaventa, our founder, Chief Executive Officer and Chairperson of the Board, and Eli Glezer, our founder and Chief Scientific Officer, is critical to our vision, strategic direction, product development and commercialization efforts. The departure of one or more of these individuals or any of our other executive officers, senior management team members, or other key employees could be disruptive to our business until we are able to hire qualified successors. We do not have long- term employment contracts or maintain " key man " life insurance on our senior management team. Our ~~continued~~ growth and ability to successfully transition from a company primarily focused on research and development to commercialization depends, in part, on attracting, retaining and motivating qualified personnel, including highly- trained sales and marketing personnel with the necessary scientific background and ability to understand our products at a technical level to effectively identify, market and sell to potential new customers. New hires will require significant training and, in most cases, take significant time before they achieve full productivity. Our failure to successfully integrate these key personnel into our business could adversely affect our business. In addition, competition for qualified personnel in the life sciences space is intense and has recently become even more intense, particularly in the San Diego metropolitan area. Recently, the labor market to retain and replace highly skilled personnel has become even more competitive. We compete for qualified scientific and information technology personnel with other life science and information technology companies as well as academic institutions and research institutions. Some of our scientific personnel are qualified foreign nationals whose ability to live and work in the United States is contingent upon the continued availability of appropriate visas. Due to the competition for qualified personnel, particularly in the current labor market and in the San Diego metropolitan area, we expect to continue to utilize foreign nationals to fill part of our recruiting needs. As a result, changes to United States immigration policies could restrain the flow of technical and professional talent into the United States and may inhibit our ability to hire qualified personnel. We do not maintain fixed term employment contracts with any of our employees, including the members of our

senior management team. As a result, our executives and other key employees could leave our company with little or no prior notice and would be free to work for a competitor. **Further, declines in our stock price could impact the retentive value of our equity awards, including for stock option grants that are out- of- the- money.** The failure to properly manage succession plans, develop leadership talent or replace the loss of services of senior management or other key employees and qualified personnel, could significantly delay or prevent the achievement of our objectives. We may acquire or invest in other companies or technologies, which could divert our management' s attention, result in additional dilution to our stockholders and otherwise disrupt our operations and harm our operating results. We may in the future seek to acquire or invest in businesses, applications or technologies that we believe could complement or expand the G4, **the G4X** ~~our planned PX~~ or any other future products and product enhancements we elect to pursue. We may also pursue acquisitions or investments to expand our technical capabilities or otherwise offer growth opportunities **. We may also pursue partnering or other strategic investments in order to fund the development of the PX or other products** . The pursuit of potential acquisitions or investments may divert the attention of management and cause us to incur various costs and expenses in identifying, investigating and pursuing suitable acquisitions or investments, whether or not they are consummated. We may not be able to identify desirable acquisition targets or be successful in entering into an agreement with any particular target or obtain the expected benefits of any acquisition or investment. To date, the growth of our operations has been organic, and we have limited experience in acquiring or investing in other businesses or technologies. We may not be able to successfully integrate acquired personnel, operations and technologies, or effectively manage the combined business following an acquisition. Acquisitions could also result in dilutive issuances of equity securities, the use of our available cash, or the incurrence of debt, which could harm our operating results. In addition, if an acquired business fails to meet our expectations, our operating results, business and financial condition may suffer. Also, our SVB Loan may restrict our ability to pursue certain mergers, acquisitions, amalgamations or consolidations without obtaining the prior consent of **SVB** ~~Silicon Valley Bank~~ or repaying our outstanding loan amounts. Additionally, future acquisitions or investments could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write- offs of goodwill, any of which could harm our financial condition. If we experience a 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 and those of our vendors and partners are potentially vulnerable to disruption due to breakdown, malicious intrusion and computer viruses or other disruptive events, including, but not limited to, natural disasters and catastrophes. Cyberattacks and other malicious internet- based activity continue to increase and cloud- based platform providers of services have been and are expected to continue to be targeted. Methods of attacks on information technology systems and data security breaches change frequently, are increasingly complex and sophisticated, including social engineering and phishing scams, and can originate from a wide variety of sources. In addition to traditional computer " hackers, " malicious code, such as viruses and worms, stolen or fraudulently obtained log- in credentials, employee errors, actions, inaction, theft, or misuse, and denial- of- service attacks, there are sophisticated nation-state and nation- state supported actors that now engage in attacks, including advanced persistent threat intrusions. Our information technology and data security procedures continue to evolve and therefore, our information technology systems may be more susceptible to cybersecurity attacks. Despite any of our current or future efforts to protect against cybersecurity attacks and data security breaches, there is no guarantee that our efforts are adequate to safeguard against all such attacks and breaches. Moreover, it is possible that we may not be able to anticipate, detect, appropriately react and respond to, or implement effective preventative measures against, all cybersecurity incidents. If our security measures, or those of our vendors and partners, are compromised due to any cybersecurity attacks or data security breaches, our business and reputation may be harmed, we could become subject to litigation and we could incur significant liability. If we were to experience a prolonged system disruption in our information technology systems or those of certain of our vendors and partners, it could negatively impact our ability to serve our customers, which could adversely impact our business, financial condition, results of operations and prospects. If operations at our facilities were disrupted, it may cause a material disruption in our business if we are not capable of restoring functionality in an acceptable timeframe. In addition, our information technology systems, and those of our vendors and partners, are potentially vulnerable to data security breaches and supply chain attacks, whether by internal bad actors, such as employees or other third parties with legitimate access to our or our third- party providers' systems, or external bad actors, which could lead to the exposure of personal data, sensitive data and confidential information to unauthorized persons. Further, due to the political uncertainty involving Russia and Ukraine resulting from Russia' s invasion of Ukraine **and conflicts in the Middle East** , there is also an increased likelihood that escalation of tensions could result in cyber- attacks or cybersecurity incidents that could either directly or indirectly impact our operations. Any such data security breaches or cyber- attacks 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. Further, defending a suit, regardless of its merit, could be costly, divert management' s attention and harm our reputation. In addition, although we seek to detect and investigate all data security incidents, security breaches and other incidents of unauthorized access to our information technology systems and data can be difficult to detect and any delay in identifying such breaches or incidents may lead to increased harm and legal exposure of the type described above. Moreover, there could be public announcements regarding any cybersecurity incidents and any steps we take to respond to or remediate such incidents, and if

securities analysts or investors perceive these announcements to be negative, it could, among other things, have a material adverse effect on the price of our common stock. The cost of protecting against, investigating, mitigating and responding to potential breaches of our information technology systems and data security breaches and complying with applicable breach notification obligations to individuals, regulators, partners and others can be significant. As cybersecurity incidents continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities. The inability to implement, maintain and upgrade adequate safeguards could have a material adverse effect on our business, financial condition, results of operations and prospects. Our insurance policies may not be adequate to compensate us for the potential costs and other losses arising from such disruptions, failures or security breaches. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co- insurance requirements, could have a material adverse effect on our business, financial condition, results of operations and prospects. Risks Related to ~~our~~ **Our** Intellectual Property If we are sued for infringing, misappropriating or otherwise violating intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our products. Our commercial success depends on our ability to develop, manufacture, market and sell our products and use our products and technologies without infringing, misappropriating or otherwise violating the intellectual property rights of third parties. We operate in a crowded technology area in which there are numerous issued patents and patent applications and in which there has been substantial litigation regarding patent and other intellectual property rights. There also is a substantial number of administrative proceedings for challenging patents, including interference, derivation, inter partes review (“ IPR ”), post grant review, and reexamination proceedings before the United States Patent and Trademark Office (“ USPTO ”), or oppositions and other comparable proceedings in foreign jurisdictions. We expect to be exposed to, or threatened with, future litigation by third parties, including our primary competitors, who have patent and other intellectual property rights and may allege that our research and development activities, products, manufacturing methods, software and / or technologies infringe, misappropriate or otherwise violate their intellectual property rights. Our competitors have numerous issued patents and pending patent applications in the fields covered by our products and in which we are developing our products and technologies. It is not always clear to industry participants, including us, the claim scope that may issue from pending patent applications owned by third parties or which patents cover various types of products, technologies or their methods of use or manufacture. In addition, many patent applications are unpublished for up to 18 months from their first filing date and are not accessible to us. We expect that our competitors may, either in connection with our launch of the G4 ~~, our planned PX~~ or other product offerings **, such as the G4X** , assert that we are infringing, or have in the past infringed as part of our research and development activities, their patent and other intellectual property rights and that we are employing their proprietary technology without authorization. If third parties, including our competitors, believe that our products or technologies infringe, misappropriate or otherwise violate their intellectual property, such third parties may seek to enforce their intellectual property, including patents, against us by filing an intellectual property- related lawsuit, including a patent infringement lawsuit, against us. There is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, or priority. If any of our competitors, or any other third parties, were to assert their patents against us and we are unable to successfully defend against any such assertion, we may be required, including by court order, to cease the development and commercialization of the infringing products or technology and we may be required to redesign such products and technologies so they do not infringe such patents, which may not be possible or may require substantial monetary expenditures and time. We could also be required to pay damages, which could be significant, including treble damages and attorneys’ fees if we are found to have willfully infringed such patents. We could also be required to obtain a license to such patents in order to continue the development and commercialization of the infringing product or technology, which may not be on commercially reasonable terms or may not be obtainable at all. Even if such license were available, it may require substantial payments or cross- licenses under our intellectual property rights, and it may only be available on a nonexclusive basis, in which case third parties, including our competitors, could use the same licensed intellectual property to compete with us. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operation or prospects. We may choose to challenge the patentability, validity or enforceability of any third- party patent that we believe may have applicability in our field, and any other third- party patent that may be asserted against us. Such challenges may be brought either in court or by requesting that the USPTO, or other foreign patent offices review the patent claims. However, there can be no assurance that any such challenge will be successful and if not successful, we may be estopped from asserting in a district court any grounds already raised or that could have been raised in certain proceedings, such as IPR at the USPTO. Even if such proceedings are successful, these proceedings are expensive and may consume our time or other resources, distract our management and technical personnel. Third parties, including our existing and future competitors, may be infringing, misappropriating or otherwise violating our owned and in- licensed intellectual property rights. Monitoring unauthorized use of our intellectual property will be difficult and costly. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. From time to time, we seek to analyze our competitors’ products and services, and may in the future seek to enforce our rights against potential infringement, misappropriation or violation of our intellectual property. However, the steps we have taken to protect our intellectual property rights may not be adequate to enforce our rights. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete and reduce demand for our products and technologies. Litigation proceedings may be necessary for us to enforce our patent and other intellectual property rights. We may not be successful in such proceedings. Further, in such proceedings, the defendant could counterclaim that our intellectual property is invalid or unenforceable and the court may agree, in which case we could lose valuable intellectual property rights. The outcome in any such proceedings ~~are~~ **is** unpredictable.

Third parties may also bring challenges to our patents in the USPTO or foreign patent offices seeking to invalidate them. Regardless of whether we are defending against or asserting any intellectual property- related proceeding, any such intellectual property- related proceeding that may be necessary in the future, regardless of outcome, could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition, results of operations and prospects. Further, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of such ongoing litigation, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Some of our competitors and other third parties may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. We may not have sufficient financial or other resources to adequately conduct these types of litigation or proceedings. Any of the foregoing, or any uncertainties resulting from the initiation, continuation and results of any litigation, could have a material adverse effect on our ability to raise the funds necessary to continue our operations or could otherwise have a material adverse effect on our business, financial condition, results of operations and prospects. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar adverse effect on our business, financial condition, results of operations and prospects. If we are unable to obtain and maintain sufficient intellectual property protection for our products and technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired. We rely on patent, trademark, copyright, trade secret and other intellectual property rights and contractual restrictions to protect our proprietary products and technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We currently have ~~three~~ **over 30** issued patents covering **various aspects of** our proprietary ~~next- generation sequencing~~ **NGS and spatial multiomics** ~~technology~~ **technologies** . If we fail to obtain additional patent protection for our products and technology and maintain and protect our intellectual property rights, third parties may be able to compete more effectively against us. In addition, we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property. Further, if we are unable to obtain and maintain sufficient intellectual property protection for our products and technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our ability to successfully commercialize our products may be impaired. We have and intend to continue to apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, obtaining and enforcing patents is costly, time- consuming and complex, and we may fail to apply for patents on important products and technologies in a timely fashion or at all, or we may fail to apply for patents in potentially relevant jurisdictions. We may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, we may not develop additional proprietary products, methods and technologies that are patentable. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed from or to third parties. Therefore, these patents and applications may not be prosecuted and enforced by such third parties in a manner consistent with the best interests of our business. In addition, the patent position of life sciences technology companies such as ours is generally highly uncertain, involves complex legal and factual questions, and our industry has **experienced** ~~been to~~ widespread and intense litigation in recent years. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries or regions may diminish the value of our intellectual property. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. It is possible that none of our pending patent applications will result in issued patents in a timely fashion or at all, and even if patents are granted, they may not provide a basis for intellectual property protection of commercially viable products or technologies, may not provide us with any competitive advantages, or may be challenged, narrowed and invalidated by third parties. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third- party patents. It is possible that third parties will design around our current or future patents such that we cannot prevent such third parties from using similar technologies and commercializing similar products to compete with us. Some of our owned or licensed patents or patent applications may be challenged at a future point in time and we may not be successful in defending any such challenges made against our patents or patent applications. Any successful third- party challenge to our patents could result in the narrowing, unenforceability or invalidity of such patents and increased competition to our business. The outcome of patent litigation or other proceeding can be uncertain, and any attempt by us to enforce our patent rights against others or to challenge the patent rights of others may not be successful, or, regardless of success, may take substantial time and result in substantial cost, and may divert our efforts and attention from other aspects of our business. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations. We cannot ensure that patent rights relating to inventions described and claimed in our pending patent applications will issue and will provide sufficient protection for our products and technologies. We also cannot ensure that our patents or patents based on our patent applications will not be challenged and rendered invalid and / or unenforceable. Our success depends in large part on our ability to obtain and maintain intellectual property protection, particularly patents, for our products and technologies in the both the United States and other foreign countries. Patents are of national or regional effect, and filing, prosecuting and defending patents on all of our products and technologies throughout the world would be prohibitively expensive, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. As such, we may not be able to prevent third parties from practicing our inventions in 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. Further, the legal systems of certain countries, particularly certain developing countries, do not favor the

enforcement of patents, trade secrets and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. As such, we may not be able to prevent third parties from practicing our inventions in 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. Further, certain foreign and developing countries, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third- party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. 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 have pending U. S. and foreign patent applications in our portfolio, however, we cannot predict: • if and when patents may issue based on our patent applications; • the scope of protection of any patent issuing based on our patent applications; • whether the claims of any patent issuing based on our patent applications will provide protection against competitors; • whether or not third parties will find ways to invalidate or circumvent our patent rights; • whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; • whether we will need to initiate litigation or administrative proceedings to enforce and / or defend our patent rights which will be costly whether we win or lose; and / or • whether the patent applications that we own or in- license will result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries. We cannot be certain that the claims in our pending patent applications directed to our product candidates and / or technologies will be considered patentable by the USPTO or by patent offices in foreign countries. One aspect of the determination of patentability of our inventions depends on the scope and content of the " prior art, " information that was or is deemed available to a person of skill in the relevant art prior to the priority date of the claimed invention. There may be prior art of which we are not aware that may affect the patentability of our patent claims or, if issued, affect the validity or enforceability of a patent claim. Even if the patents do issue based on our patent applications, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Further, even if they are unchallenged, patents in our portfolio may not adequately exclude third parties from practicing relevant technology or prevent others from designing around our claims. If the breadth or strength of our intellectual property position with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop and threaten our ability to commercialize our product candidates. In the event of litigation or administrative proceedings, we cannot be certain that the claims in any of our issued patents will be considered valid by courts in the United States or foreign countries. We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties. We have employed and expect to employ individuals who were previously employed at universities, research institutions or other companies, including our competitors or potential competitors. Although we seek to protect our ownership of intellectual property rights by ensuring that our agreements with our employees, collaborators, and other third parties with whom we do business include provisions requiring such parties to not disclose the confidential information of their previous employers or other third parties, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. We or our licensors may also be subject to claims that former employers or other third parties have an ownership interest in our patents. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and if we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Even if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees. If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business could be harmed. We rely heavily on trade secrets and confidentiality agreements to protect our unpatented know- how, technology and other proprietary information, including the design and features of the G4 **, G4X** and **other products** ~~our planned PX~~, and to maintain our competitive position. However, trade secrets and know- how can be difficult to protect. In particular, we anticipate that with respect to our technologies, these trade secrets and know how will over time be disseminated within the industry through independent development, the publication of journal articles describing the methodology, and the movement of personnel from academic to industry scientific positions. In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into agreements, including confidentiality agreements, non- disclosure agreements and intellectual property assignment agreements, with our employees, consultants, academic institutions, corporate partners and, when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors or other third parties will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure, which could adversely impact our ability to establish or maintain a competitive advantage in the market, business, financial condition, results of operations and prospects. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third- party had wrongfully obtained and was using our trade secrets, it would be expensive and time- consuming, it could distract our personnel, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. We also seek to preserve the integrity and confidentiality of our confidential proprietary

information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor or other third- party, absent patent protection, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Competitors or third parties could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, design around our protected technology, develop their own competitive technologies that fall outside the scope of our intellectual property rights or independently develop our technologies without reference to our trade secrets. If any of our trade secrets were to be disclosed to or independently discovered by a competitor or other third- party, it could materially and adversely affect our business, financial condition, results of operations and prospects. We could have disputes with contractual counterparties regarding our or their performance under those contracts or we could be unable to fulfill such contractual commitments. For example, we in- licensed certain patents and other intellectual property rights from The Trustees of Columbia University in the City of New York (" Columbia "). If we fail to comply with the terms of our agreement with Columbia or have a disagreement with Columbia regarding our obligations thereunder, we may be subject to breach of contract claims or other actions by Columbia, which could harm our business, results of operations and financial condition. We could have disputes with contractual counterparties regarding our or their performance under those contracts or could be unable to fulfill such contractual commitments. For example, in August 2016, we entered into **the** ~~an Exclusive~~ License Agreement with Columbia, which was subsequently amended in September 2016, November 2016 and June 2017 (the " License Agreement "). Under the License Agreement, we received (i) an exclusive, sublicensable, worldwide license under certain patents owned by Columbia to discover, develop, make and sell products or services covered by the claims of such licensed patents (the " Patent Products "), and (ii) an exclusive, sublicensable, worldwide license under certain materials and technical information provided by Columbia to discover, develop, make and sell products or services that directly use or incorporate such materials or information (the " Other Products "). Under the License Agreement, we are required to use commercially reasonable efforts to research, discover, develop and market Patent Products and / or Other Products and to achieve certain fundraising and development milestone events. For any products within the scope of the License Agreement that we commercialize, we are required to pay royalties ranging from low to mid- single digits on net sales of Patent Products and low single- digit royalty rates on net sales of Other Products. We are also required to make milestone payments to Columbia upon our achievement of certain development and commercialization milestones, which could total up to $ 3. 9 million over the life of the License Agreement. The License Agreement includes a number of diligence obligations that require us to use commercially reasonable efforts to research, discover, develop and market Patent Products and / or Other Products by certain dates. Columbia could take the position that the License Agreement should convert to a non- exclusive license or pursue actions to terminate the License Agreement alleging that we have not satisfied our diligence obligations. Columbia could also disagree with our interpretation of our milestone and royalty obligations under the License Agreement and contend that we are in breach of the License Agreement. Columbia has a right to pursue a termination of the License Agreement in the event we become insolvent or otherwise cease operations, in the event we materially breach our obligations under the License Agreement, or in the event we assert any claim challenging the validity or enforceability of any patent licensed to us by Columbia under the License Agreement. For example, Columbia may assert that we have breached the License Agreement if it disagrees with our interpretation regarding the application of the License Agreement to the G4 and ~~PX~~ **G4X** instruments and the associated consumables. Columbia may take the position that we have not complied with our diligence obligations under the License Agreement. There is no assurance that we can satisfy our obligations under the License Agreement, or that we and Columbia will agree on whether or not we have satisfied our obligations under the License Agreement, including whether any royalty or milestones, or the amount thereof, are payable under the terms of the License Agreement or whether we have satisfied our diligence obligations. If we fail to comply with our obligations, or if we and Columbia do not agree on whether we have satisfied our obligations under the License Agreement, Columbia could exercise its right to assert a breach of contract, convert the License Agreement to a non- exclusive license and / or pursue actions to terminate the License Agreement. If we are required to defend against breach of contract or other claims and actions asserted by Columbia or if Columbia is successful in terminating the License Agreement or converting the License Agreement to a non- exclusive license, our business may be adversely affected. Further, if we are required to make additional milestone payments or pay Columbia royalties on the G4 and ~~PX~~ **G4X** ~~Instruments~~ **instruments** , and the consumables we have developed to date, beyond what we believe would be due under the License Agreement, our resulting operations and financial condition may be adversely affected. If we are unable to fulfill our contractual commitments with Columbia or other parties, or if we have disputes with Columbia or other contractual counterparties regarding our or their performance under those contracts, our results of operations and financial condition may be adversely affected. Patent terms may be inadequate to protect our competitive position on our products for an adequate amount of time. Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U. S. non- provisional filing date. While extensions may be available, the life of a patent, and the protection it affords, is limited. In the United States, a patent' s term may, in certain cases, be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over a commonly owned patent or a patent naming a common inventor and having an earlier expiration date. Even if patents covering our products are obtained, once the patent life has expired, we may be open to competition from competitive products. If one of our products requires extended development, testing and / or regulatory review, patents protecting such products might expire before or shortly after such products are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours, which could have a material adverse effect on our business, financial condition and results of operations. We may not be able to protect and enforce our trademarks and trade names, or build name

recognition in our markets of interest thereby harming our competitive position. The registered or unregistered trademarks or trade names that we own may be challenged, infringed, circumvented, declared generic, lapsed or determined to be infringing on or dilutive of other marks. We may not be able to protect our rights in these trademarks and trade names, which we need in order to build name recognition. In addition, third parties have filed, and may in the future file, for registration of trademarks similar or identical to our trademarks, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Further, we may in the future enter into agreements with owners of such third- party trade names or trademarks to avoid potential trademark litigation which may limit our ability to use our trade names or trademarks in certain fields of business. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively, and our business, financial condition, results of operations and prospects may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations. The U. S. law relating to the patentability of certain inventions in the life sciences technology industry is uncertain and rapidly changing, which may adversely impact our existing patents or our ability to obtain patents in the future. Changes in either the patent laws or interpretation of the patent laws in the United States or in other jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. For instance, under the Leahy- Smith America Invents Act **(** ~~, or~~ the **“** America Invents Act **”)** , enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application is entitled to the patent on an invention regardless of whether a third- party was the first to invent the claimed invention. These changes include allowing third- party submission of prior art to the USPTO during patent prosecution and additional procedures to challenge the validity of a patent by USPTO administered post- grant proceedings, including post- grant review, inter partes review and derivation proceedings. The America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Various courts, including the U. S. Supreme Court, have rendered decisions that impact the scope of patentability of certain inventions or discoveries relating to the life sciences technology. Specifically, these decisions stand for the proposition that patent claims that recite laws of nature are not themselves patentable unless those patent claims have sufficient additional features that provide practical assurance that the processes are genuine inventive applications of those laws rather than patent drafting efforts designed to monopolize the law of nature itself. What constitutes a “ sufficient ” additional feature is uncertain. Further, in view of these decisions, since December 2014, the USPTO has published and continues to publish revised guidelines for patent examiners to apply when examining process claims for patent eligibility. In addition, U. S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events may create uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U. S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that may have a material adverse effect on our ability to obtain new patents and to defend and enforce our existing patents and patents that we might obtain in the future. We cannot be certain that our patent portfolio will not be negatively impacted by the current uncertain state of the law, new court rulings or changes in guidance or procedures issued by the USPTO or other similar patent offices around the world. From time to time, the U. S. Supreme Court, other federal courts, the U. S. Congress or the USPTO may change the standards of patentability, scope and validity of patents within the life sciences ~~technology~~ **industry** and any such changes, or any similar adverse changes in the patent laws of other jurisdictions, could have a negative impact on our business, financial condition, prospects and results of operations. If we cannot license rights to use technologies on reasonable terms, we may not be able to commercialize new products in the future. We may identify third- party technology that we may need to license or acquire in order to develop or commercialize our products or technologies. However, we may be unable to secure such licenses or acquisitions. The licensing or acquisition of third- party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third- party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third- party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. In return for the use of a third- party’ s technology, we may agree to pay the licensor royalties based on sales of our products or services. Royalties are a component of cost of products or technologies and affect the margins on our products. We may also need to negotiate licenses to patents or patent applications before or after introducing a commercial product. We may not be able to obtain necessary licenses to patents or patent applications, the commercial release of our products could be delayed and our business may suffer if we are unable to enter into the necessary licenses on acceptable terms or at all, if any necessary licenses are subsequently terminated, if the licensor fails to abide by the terms of the license or fails to prevent infringement by third parties, or if the licensed intellectual property rights are found to be invalid or unenforceable. Certain of our future owned and in- licensed patents may be subject to a reservation of rights by one or more third parties, including government march- in rights, which may limit our ability to exclude third parties from commercializing products similar or identical to ours. Our future in- licensed patents may be subject to a reservation of rights by one or more third parties. For example, when new technologies are developed with government funding, in order to secure ownership of such patent

rights, the recipient of such funding is required to comply with certain government regulations, including timely disclosing the inventions claimed in such patent rights to the U. S. government and timely electing title to such inventions. Any failure to timely elect title to such inventions may provide the U. S. government **the option** to, at any time, take title such inventions. Additionally, the U. S. government generally obtains certain rights in any resulting patents, including a non- exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. If the government decides to exercise these rights, it is not required to engage us as its contractor in connection with doing so. These rights may permit the U. S. government to disclose our confidential information to third parties and to exercise march- in rights to use or allow third parties to use our licensed technology. The U. S. government can exercise its march- in rights if it determines that action is necessary because we fail to achieve practical application of the government- funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U. S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any exercise by the government of any of the foregoing rights could have a material adverse effect on our business, financial condition, results of operations and prospects. Our use of open source software may pose particular risks to our proprietary software and systems. We use open source software in our products and anticipate that we will continue to use open source software in the future. The licenses applicable to our use of open source software may require that source code that is developed using open source software be made available to the public and that any modifications or derivative works to certain open source software continue to be licensed under open source licenses. From time to time, we may face claims from third parties claiming infringement of their intellectual property rights, or demanding the release or license of the open source software or derivative works that we developed using such software (which could include our proprietary source code) or otherwise seeking to enforce the terms of the applicable open source license. These claims could result in litigation and could require us to purchase a costly license, publicly release the affected portions of our source code, be limited in or cease using the implicated software unless and until we can re- engineer such software to avoid infringement or change the use of, or remove, the implicated open source software. Our use of open source software may also present additional security risks because the source code for open source software is publicly available. Any of these risks could be difficult to eliminate or manage, and, if not addressed, could have a material adverse effect on our business, results of operations, financial condition, and prospects. Risks Related to Regulatory and Legal Compliance Matters If we elect to label and promote any of our products as clinical diagnostics tests or medical devices, we would be required to obtain prior approval or clearance by the FDA, which would take significant time and expense and could fail to result in FDA clearance or approval for the intended uses we believe are commercially attractive. We intend to market and sell the G4 and **future products** ~~our planned PX primarily~~ to academic and research institutions and research companies, government laboratories, hospitals, and biotechnology, consumer genomics and proteomics, commercial molecular diagnostic laboratories, and agrigenomics companies as research use only (“ RUO ”) products. Our products are not currently designed, or intended to be used, for clinical diagnostic tests or as medical devices. If we elect to label and market our products for use as, or in the performance of, clinical diagnostics in the United States, thereby subjecting them to U. S. Food and Drug Administration (“ FDA ”) regulation as medical devices, we would be required to obtain premarket 510 (k) clearance or premarket approval from the FDA, unless an exception applies. We may in the future register with the FDA as a medical device manufacturer and list some of our products with the FDA pursuant to an FDA Class I listing for general purpose laboratory equipment. While this regulatory classification is exempt from certain FDA requirements, such as the need to submit a premarket notification commonly known as a 510 (k), and some of the requirements of the FDA’ s Quality System Regulations (“ QSRs ”), we would be subject to ongoing FDA “ general controls, ” which include compliance with FDA regulations for labeling, inspections by the FDA, complaint evaluation, corrections and removals reporting, promotional restrictions, reporting adverse events or malfunctions for our products, and general prohibitions against misbranding and adulteration. In addition, we may in the future submit 510 (k) premarket notifications to the FDA to obtain FDA clearance of certain of our products on a selective basis. It is possible, in the event we elect to submit 510 (k) applications for certain of our products, that the FDA would take the position that a more burdensome premarket application, such as a premarket approval application (PMA) or a de novo application is required for some of our products. If such applications were required, greater time and investment would be required to obtain FDA approval. Even if the FDA agreed that a 510 (k) was appropriate, FDA clearance can be expensive and time consuming. It generally takes a significant amount of time to prepare a 510 (k), including conducting appropriate testing on our products, and several months to years for the FDA to review a submission. Notwithstanding the effort and expense, FDA clearance or approval could be denied for some or all of our products for which we choose to market as a medical device or a clinical diagnostic device. Even if we were to seek and obtain regulatory approval or clearance, it may not be for the intended uses we request or that we believe are important or commercially attractive. There can be no assurance that future products for which we may seek premarket clearance or approval will be approved or cleared by FDA or a comparable foreign regulatory authority on a timely basis, if at all, nor can there be assurance that labeling claims will be consistent with our anticipated claims or adequate to support continued adoption of such products. Compliance with FDA or comparable foreign regulatory authority regulations will require substantial costs, and subject us to heightened scrutiny by regulators and substantial penalties for failure to comply with such requirements or the inability to market our products. The lengthy and unpredictable premarket clearance or approval process, as well as the unpredictability of the results of any required clinical studies, may result in our failing to obtain regulatory clearance or approval to market such products, which would significantly harm our business, results of operations, reputation, and prospects. If we sought and received regulatory clearance or approval for certain of our products, we would be subject to ongoing FDA obligations and continued regulatory oversight and review, including the general controls listed above and the FDA’ s QSRs for our development and manufacturing operations. In addition, we would be required to obtain a new 510 (k) clearance before we could introduce subsequent modifications or improvements to such products. We could also be subject to additional FDA post- marketing obligations for

such products, any or all of which would increase our costs and divert resources away from other projects. If we sought and received regulatory clearance or approval and are not able to maintain regulatory compliance with applicable laws, we could be prohibited from marketing our products for use as, or in the performance of, clinical diagnostics and / or could be subject to enforcement actions, including warning letters and adverse publicity, fines, injunctions and civil penalties, recall or seizure of products, operating restrictions and criminal prosecution. In addition, we could decide to seek regulatory clearance or approval for certain of our products in countries outside of the United States. Sales of such products outside the United States will likely be subject to foreign regulatory requirements, which can vary greatly from country to country. As a result, the time required to obtain clearances or approvals outside the United States may differ from that required to obtain FDA clearance or approval and we may not be able to obtain foreign regulatory approvals on a timely basis or at all. For example, in Europe we would need to comply with the new Medical Device Regulation 2017 / 745 and In Vitro Diagnostic Regulation 2017 / 746, which became effective May 26, 2017, with application dates of May 26, 2021 (postponed from 2020) and May 26, 2022 respectively. This will increase the difficulty of regulatory approvals in Europe in the future. In addition, the FDA regulates exports of medical devices. Failure to comply with these regulatory requirements or obtain and maintain required approvals, clearances and certifications could impair our ability to commercialize our products for diagnostic use outside of the United States. The G4 is **, and the G4X will be,** sold as an RUO product; changes in the regulatory landscape could affect the market for such a product. Our products could become subject to government regulation as medical devices by the FDA and other regulatory agencies even if we do not elect to seek regulatory clearance or approval to market our products for diagnostic purposes, which would adversely impact our ability to market and sell our products and harm our business. If our products become subject to FDA regulation, the regulatory clearance or approval and the maintenance of continued and post- market regulatory compliance for such products will be expensive, time- consuming, and uncertain both in timing and in outcome. The G4 is **, and the G4X will be,** sold as an RUO product, and we do not currently expect either the G4 or **G4X** ~~our planned PX~~ to be subject to the clearance or approval of the FDA, as they are not intended to be used for the diagnosis, treatment or prevention of disease. However, as we expand our product line and the applications and uses of our products into new fields, certain of our future products could become subject to regulation by the FDA, or comparable international agencies, including requirements for regulatory clearance or approval of such products before they can be marketed. Also, even if our products are labeled, promoted, and intended as RUO, the FDA or comparable agencies of other countries could disagree with our conclusion that our products are intended for RUO or deem our sales, marketing and promotional efforts as being inconsistent with RUO products. For example, our customers may independently elect to use our RUO labeled products in their own laboratory developed tests (“ LDTs ”) for clinical diagnostic use, which could subject our products to government regulation, and the regulatory clearance or approval and maintenance process for such products may be uncertain, expensive and time- consuming. Regulatory requirements related to marketing, selling and distribution of RUO products could change or be uncertain, even if clinical uses of our RUO products by our customers were done without our consent. Further, regulations may change causing RUO products to be subject to regulatory clearance or approval. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected. The FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against laboratories offering LDTs. However, on October 3, 2014, the FDA issued two draft guidance documents that set forth the FDA’ s proposed risk- based framework for regulating LDTs, which are designed, manufactured, and used within a single laboratory. The draft guidance documents provide the anticipated details through which the FDA would propose to establish an LDT oversight framework, including premarket review for higher- risk LDTs, such as those that have the same intended use as FDA- approved or cleared companion diagnostic tests currently on the market. In January 2017, the FDA announced that it would not issue final guidance on the oversight of LDTs and manufacturers of products used for LDTs, but would seek further public discussion on an appropriate oversight approach, and give Congress an opportunity to develop a legislative solution. More recently, the FDA has issued warning letters to certain genomics labs for illegally marketing genetic tests that claim to predict patients’ responses to specific medications, noting that the FDA has not created a legal “ carve- out ” for LDTs and retains discretion to take action when appropriate, such as when certain genomic tests raise significant public health concerns. **Further, in September 2023, the FDA published a proposed rule that would change decades of LDT regulation by expressly considering LDTs as in vitro diagnostics medical devices. The proposed rule would require companies performing LDTs to comply with medical device statutes and regulations, including submission requirements, quality system regulations, medical device reporting, registration and listing, and manufacturing standards. If and when the proposed rule takes effect, the FDA would gradually phase out its current general enforcement discretion approach of many LDTs.** As manufacturers develop more complex diagnostic tests and diagnostic software, the FDA may increase its regulation of LDTs. Any future legislative or administrative rule **-** making or oversight of LDTs, if and when finalized, may impact the sales of our products and how customers use our products, and may require us to change our business model in order to maintain compliance with these laws. We cannot predict how these various efforts will be resolved, how Congress or the FDA will regulate LDTs in the future, or how that regulatory system will impact our business. Changes to the current regulatory framework, including the imposition of additional or new regulations, including regulation of our products, could arise at any time during the development or marketing of our products, which may negatively affect our ability to obtain or maintain FDA or comparable regulatory approval of our products, if required. Further, sales of devices for diagnostic purposes may subject us to additional healthcare regulation and enforcement by the applicable government agencies. Such laws include, without limitation, state and federal anti- kickback or anti- referral laws, healthcare fraud and abuse laws, false claims laws, privacy and security laws, Physician Payments Sunshine Act and related transparency and manufacturer reporting laws, and other laws and regulations applicable to medical device manufacturers. Our operations may subject us to certain of these health care laws through our customers who use our platform for the development or sale of diagnostic tests. Failure to comply with such laws and regulations, as applicable, may result in

substantial penalties. Additionally, on November 25, 2013, the FDA issued Final Guidance " Distribution of In Vitro Diagnostic Products Labeled for Research Use Only. " The guidance emphasizes that the FDA will review the totality of the circumstances when it comes to evaluating whether equipment and testing components are properly labeled as RUO. The final guidance states that merely including a labeling statement that the product is for RUO will not necessarily render the device exempt from the FDA' s clearance, approval, and other regulatory requirements if the circumstances surrounding the distribution, marketing and promotional practices indicate that the manufacturer knows its products are, or intends for its products to be, used for clinical diagnostic purposes. These circumstances may include written or verbal sales and marketing claims or links to articles regarding a product' s performance in clinical applications and a manufacturer' s provision of technical support for clinical applications. As part of the previous Administration' s efforts to combat COVID- 19 and consistent with former President Trump' s direction in Executive Orders 13771 and 13924, the Department of Health and Human Services (**"** HHS **"**) announced rescission of guidance and other informal issuances of the FDA regarding premarket review of ~~LDT~~ **LDTs** absent notice- and- comment rulemaking, stating that, absent notice- and- comment rulemaking, those seeking approval or clearance of, or an emergency use authorization, for an LDT may nonetheless voluntarily submit a premarket approval application, premarket notification or an Emergency Use Authorization request, respectively, but are not required to do so. However, laboratories opting to use LDTs without FDA premarket review or authorization would not be eligible for liability protection under the Public Readiness and Emergency Preparedness Act. While this action by HHS is expected to reduce the regulatory burden on clinical laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 that develop LDTs, it is unclear how this action as well as future legislation by federal and state governments and the FDA will impact the industry, including our business and that of our customers. Such HHS measure may compel the FDA to formalize earlier enforcement discretionary policies and informal guidance through notice- and- comment rulemaking and / or impose further restrictions on LDTs. HHS' rescission policy may change over time and we cannot be certain if the new administration will withdraw Executive Orders 13771 and 13924. Congress could also enact legislation restricting LDTs. Any restrictions on LDTs by the FDA, HHS, Congress, or state regulatory authorities may decrease the demand for our products. The adoption of new restrictions on RUO products, whether by the FDA or Congress, could adversely affect demand for our specialized reagents and instruments. Further, we could be required to obtain premarket clearance or approval before we can sell our products to certain customers. Additionally, in the United States and some foreign jurisdictions there have been, and continue to be, several legislative and regulatory changes and proposed reforms of the healthcare system in an effort to contain costs, improve quality, and expand access to care. Further, third- party payors have attempted to control costs by limiting coverage and the amount of reimbursement for medications and other health care products and services. Our ability to commercialize any of our products successfully, and our customers' ability to commercialize their products successfully, will depend in part on the extent to which coverage and adequate reimbursement for these products and will be available from third- party payors. As such, cost containment reform efforts may result in an adverse effect on our operations. We are currently subject to, and may in the future become subject to **,** additional ~~,~~ U. S. federal and state laws and regulations imposing obligations on how we collect, store and process personal information. Our actual or perceived failure to comply with such obligations could harm our business. Ensuring compliance with such laws could also impair our efforts to maintain and expand our future customer base, and thereby decrease our revenue. In the ordinary course of our business, we currently, and in the future will, collect, store, transfer, use or process sensitive data, including personally identifiable information of employees, and intellectual property and proprietary business information owned or controlled by ourselves and other parties. The secure processing, storage, maintenance, and transmission of this critical information is vital to our operations and business strategy. We are, and may increasingly become, subject to various laws and regulations, as well as contractual obligations, relating to data privacy and security in the jurisdictions in which we operate. The regulatory environment related to data privacy and security is increasingly rigorous, with new and constantly changing requirements applicable to our business, and enforcement practices are likely to remain uncertain for the foreseeable future. These laws and regulations may be interpreted and applied differently and inconsistently over time and from jurisdiction to jurisdiction, and it is possible that they will be interpreted and applied in ways that may have a material adverse effect on our business, financial condition, results of operations and prospects. In the United States, various federal and state regulators, including governmental agencies like the Consumer Financial Protection Bureau and the Federal Trade Commission, have adopted, or are considering adopting, laws and regulations concerning personal information and data security. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than federal, international or other state laws, and such laws may differ from each other, all of which may complicate compliance efforts. For example, the California Consumer Privacy Act (" CCPA "), which increases privacy rights for California residents and imposes obligations on companies that process their personal information, came into effect on January 1, 2020. Among other things, the CCPA requires covered companies to provide new disclosures to California consumers and provide such consumers new data protection and privacy rights, including the ability to opt- out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. This private right of action may increase the likelihood of, and risks associated with, data breach litigation. In addition, laws in all 50 U. S. states require businesses to provide notice to consumers whose personal information has been disclosed as a result of a data breach. State laws are changing rapidly and there is discussion in the U. S. Congress of a new comprehensive federal data privacy law to which we would become subject if it is enacted. Additionally, California voters approved a new privacy law, the California Privacy Rights Act (" CPRA "), in the November 3, 2020 election. Effective ~~starting~~ on January 1, 2023, the CPRA will significantly modify the CCPA, including by expanding consumers' rights with respect to certain sensitive personal information. The CPRA also creates a new state agency that will be vested with authority to implement and enforce the CCPA and the CPRA. New legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally. Certain state laws may be more stringent or broader in scope, or offer greater

individual rights, with respect to confidential, sensitive and personal information than federal, international or other state laws, and such laws may differ from each other, which may complicate compliance efforts. Further, regulations promulgated pursuant to the Health Insurance Portability and Accountability Act of 1996 (" HIPAA "), establish privacy and security standards that limit the use and disclosure of individually identifiable health information (known as " protected health information " or " PHI ") and require the implementation of administrative, physical and technological safeguards to protect the privacy of PHI and ensure the confidentiality, integrity and availability of electronic PHI. Determining whether protected health information has been handled in compliance with applicable privacy standards and our contractual obligations can require complex factual and statistical analyses and may be subject to changing interpretation. Although we take measures to protect sensitive data from unauthorized access, use or disclosure, our information technology and infrastructure may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other malicious or inadvertent disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, manipulated, publicly disclosed, lost or stolen. Any such access, breach or other loss of information could result in legal claims or proceedings, liability under federal or state laws that protect the privacy of personal information (such as the HIPAA and the Health Information Technology for Economic and Clinical Health Act (" HITECH "), and regulatory penalties. Notice of breaches must be made to affected individuals, the Secretary of the Department of Health and Human Services, and for extensive breaches, notice may need to be made to the media or State Attorneys General. Such a notice could harm our reputation and our ability to compete. In Europe, the collection, use, storage, disclosure, transfer, or other processing of personal data regarding individuals in the European Economic Area (" EEA "), including personal health data, is subject to the GDPR, which became effective on May 25, 2018. The GDPR is wide- ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches and taking certain measures when engaging third- party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EEA, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to € 20 million or 4 % of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR includes restrictions on cross- border data transfers. The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Compliance with the GDPR will be a rigorous and time- intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation and reputational harm in connection with our European activities. The exit of the United Kingdom (" UK **"**) from the EU, often referred to as Brexit, also has created uncertainty with regard to data protection regulation in the UK. Specifically, the UK exited the EU on January 1, 2020, subject to a transition period that ended December 31, 2020. Under the post- Brexit Trade and Cooperation Agreement between the EU and the UK, the UK and EU have agreed that transfers of personal data to the UK from EEA member states will not be treated as ' restricted transfers' to a non- EEA country for a period of up to four months from January 1, 2021, plus a potential further two months extension (the " Extended Adequacy Assessment Period "). Although the current maximum duration of the Extended Adequacy Assessment Period is six months, it may end sooner, for example, in the event that the European Commission adopts an adequacy decision in respect of the UK, or the UK amends the UK GDPR and / or makes certain changes regarding data transfers under the UK GDPR / Data Protection Act 2018 without the consent of the EU (unless those amendments or decisions are made simply to keep relevant UK laws aligned with the EU' s data protection regime). If the European Commission does not adopt an ' adequacy decision' in respect of the UK prior to the expiry of the Extended Adequacy Assessment Period, from that point onwards the UK will be an ' inadequate third country' under the GDPR and transfers of personal data from the EEA to the UK will require a ' transfer mechanism' such as the Standard Contractual Clauses. Further, the European Court of Justice (" ECJ ") invalidated the EU- U. S. Privacy Shield, which had enabled the transfer of personal data from the EU to the U. S. for companies that had self- certified to the Privacy Shield in July 2020. The ECJ decision also raised questions about the continued validity of one of the primary alternatives to the EU- U. S. Privacy Shield, namely the European Commission' s Standard Contractual Clauses, and EU regulators have issued additional guidance regarding considerations and requirements that we and other companies must consider and undertake when using the Standard Contractual Clauses. Although the EU has presented a new draft set of contractual clauses, at present, there are few, if any, viable alternatives to the EU- U. S. Privacy Shield and the Standard Contractual Clauses. To the extent that we were to rely on the EU- U. S. or Swiss- U. S. Privacy Shield programs, we will not be able to do so in the future, and the ECJ' s decision and other regulatory guidance or developments otherwise may impose additional obligations with respect to the transfer of personal data from the EU and Switzerland to the U. S., each of which could restrict our activities in those jurisdictions, limit our ability to provide our products and services in those jurisdictions, or increase our costs and obligations and impose limitations upon our ability to efficiently transfer personal data from the EU and Switzerland to the U. S. We are in the process of evaluating compliance needs, and are still finalizing formal policies and procedures related to the storage, collection and processing of information, and still need to conduct internal or external data privacy audits, to ensure our compliance with all applicable data protection laws and regulations. Additionally, we still need to assess our third- party vendors' compliance with applicable data protection laws and regulations. All of these evolving compliance and operational requirements impose significant costs, such as costs related to organizational changes, implementing additional protection technologies, training employees and engaging consultants, which are likely to increase over time. In addition, such requirements may require us to

modify our data processing practices and policies, distract management or divert resources from other initiatives and projects, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Any failure or perceived failure by us or our third- party vendors, collaborators, contractors and consultants to comply with any applicable federal, state or similar foreign laws and regulations relating to data privacy and security ~~, or~~ could result in damage to our reputation, as well as proceedings or litigation by governmental agencies or other third parties, including class action privacy litigation in certain jurisdictions, which could subject us to significant fines, sanctions, awards, penalties or judgments, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business. We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our research and development and manufacturing operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risks of contamination or injury from these materials. We could be held liable for any resulting damages in the event of contamination or injury resulting from the use of hazardous materials by us, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties. Although we maintain general liability insurance as well as workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research and development. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions. Further, with respect to the operations of our any future third- party contract manufacturers, it is possible that if they fail to operate in compliance with applicable environmental, health and safety laws and regulations or properly dispose of wastes associated with our products, we could be held liable for any resulting damages, suffer reputational harm or experience a disruption in the manufacture and supply of our product candidates or products. In addition, our supply chain may be adversely impacted if any of our third- party contract manufacturers become subject to injunctions or other sanctions as a result of their non- compliance with environmental, health and safety laws and regulations. We are subject to U. S. and certain foreign export and import controls, sanctions, embargoes, anti- corruption laws, and anti- money laundering laws and regulations. Compliance with these legal standards could impair our ability to compete in domestic and international markets. We can face criminal liability and other serious consequences for violations, which can harm our business. We are subject to export control and import laws and regulations, including the U. S. Export Administration Regulations, U. S. Customs regulations, various economic and trade sanctions regulations administered by the U. S. Treasury Department' s Office of Foreign Assets Controls, the U. S. Foreign Corrupt Practices Act of 1977, as amended, (" FCPA "), the U. S. domestic bribery statute contained in 18 U. S. C. § 201, the U. S. Travel Act, the USA PATRIOT Act, and other state and national anti- bribery and anti- money laundering laws in the countries in which we conduct activities. Anti- corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third parties to sell our products outside the United States, to conduct clinical trials, and / or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government- affiliated hospitals, universities, and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

Risks Related to Ownership of ~~our~~ **Our** Common Stock **We are not currently in compliance with the minimum bid price rule of the Nasdaq Capital Market, and if we cannot regain and maintain compliance, our securities may be delisted, which could negatively impact the price of our securities, the liquidity of our common stock, and hinder our ability to raise capital. On July 17, 2023, we received a letter from The Nasdaq Stock Market LLC (" Nasdaq ") indicating that we were not in compliance with Nasdaq Listing Rule 5450 (a) (1) because the closing bid price per share for our common stock had closed below $ 1. 00 for the previous 30 consecutive business days (the " Minimum Bid Price Requirement "). In response, we filed an application to transfer the listing of our common stock from the Nasdaq Global Select Market to the Nasdaq Capital Market, which Nasdaq approved on January 16, 2024 (the " Approval "). Our common stock was transferred to the Nasdaq Capital Market effective as of the open of business on January 18, 2024, and will continue to trade under the symbol " OMIC. " The Nasdaq Capital Market operates in substantially the same manner as the Nasdaq Global Select Market, and listed companies must meet certain financial requirements and comply with Nasdaq' s corporate governance requirements. As a result of the Approval, we were granted an additional 180- day compliance period, or until July 15, 2024, to regain compliance with the Minimum Bid Price Requirement. To regain compliance with the Minimum Bid Price Requirement and qualify for continued listing on the Nasdaq Capital Market, the minimum bid price per share of our common stock must be at least $ 1. 00 for at least ten consecutive business days during the additional 180- day compliance period. If we fail to regain compliance during the additional compliance period, then Nasdaq will notify us of its determination to delist our common stock, at which point we would have an opportunity to appeal the delisting determination to a Nasdaq Hearings Panel. In connection with obtaining the**

Approval, we notified Nasdaq of our intention to cure the deficiency in satisfying the Minimum Bid Price Requirement by effecting a reverse stock split prior to July 15, 2024, if necessary. If we effect a reverse stock split in order to satisfy the Minimum Bid Price Requirement before the applicable deadline, our common stock may experience increased volatility, and there is no guarantee that implementing a reverse stock split will allow us to maintain compliance with applicable Nasdaq requirements. If we are unable to comply with applicable Nasdaq listing standards, shares of our common stock would be subject to delisting, which could have a material adverse effect on the market for, and liquidity and price of, our common stock and impair our ability to raise capital. Delisting from Nasdaq could also have other negative results, including, without limitation, the reduction or elimination of our coverage by securities analysts and other market participants, the potential loss of confidence by customers and employees, the loss of institutional investor interest, and fewer business development opportunities. If our common stock is delisted from Nasdaq and is ineligible for quotation or listing on another market or exchange, it could become significantly more difficult to dispose of our common stock, which could cause the price of our common stock to decline further. We have a limited market for our common stock. The stock price of our common stock has been and may continue to be volatile or may decline regardless of our operating performance. While our common stock is traded on the Nasdaq **Capital** ~~Global Select~~ Market, we currently have a limited trading history and an active trading market may not be sustained. The market price of our common stock has fluctuated and declined substantially and may continue to do so significantly in response to numerous factors, many of which are beyond our control, including: • the timing of our launch and commercialization of our products and degree to which such launch and commercialization meets the expectations of securities analysts and investors; • actual or anticipated fluctuations in our operating results, including fluctuations in our quarterly and annual results; • operating and research and development expenses exceed our plans and expectations; • the failure or discontinuation of any of our product development and research programs; • changes in the structure or funding of research at academic and research laboratories and institutions, including changes that would affect their ability to purchase our instruments or consumables; • our ability to reduce the per unit cost of our commercialized products; • financing or other corporate transactions, or inability to obtain additional funding; • sales by us of a substantial number of shares of our capital stock or other securities to raise capital; • variations in the financial results of competitive companies; • the introduction and success of existing or new competitive businesses or technologies; • announcements about new research programs or products by us or our competitors; • announcements of new pricing or product bundling terms offered by our competitors; • intellectual property litigation or developments in disputes concerning infringement of patents or other proprietary rights; • the recruitment or departure of key personnel; • litigation and governmental investigations involving us, our industry or both; • regulatory or legal developments in the United States and other countries; • volatility and variations in market conditions in the life sciences technology sector generally, or the genomics and proteomics sectors specifically; • investor perceptions of us or our industry; • the level of expenses related to any of our research and development programs or future products or product enhancements; • actual or anticipated changes in our estimates as to our financial results or development timelines; • changes in estimates or recommendations by securities analysts, if any, that cover our common stock or companies that are perceived to be similar to us; • whether our financial results meet the expectations of securities analysts or investors; • the effect of inflation on our business; • the announcement or expectation of additional financing efforts; • sales of our common stock by us or sales of our common stock or common stock by our insiders or other stockholders; • the expiration of market standoff or lock- up agreements; • **pandemics similar to** the COVID- 19 pandemic, natural disasters or major catastrophic events; and • general economic, industry and market conditions. The concentration of our stock ownership will likely limit your ability to influence corporate matters, including the ability to influence the outcome of director elections and other matters requiring stockholder approval. As of ~~December~~ **March** 31, ~~2022~~ **2023 , the record date of our prior annual meeting of stockholders** , our officers, directors and the holders of more than 5 % of our outstanding common stock collectively beneficially ~~own~~ **owned** approximately ~~44~~ **43** % of our common stock. As a result, these stockholders, acting together, will have significant influence over all matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. Corporate actions might be taken even if many other stockholders oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that many other stockholders may view as beneficial. If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operation could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock. The preparation of financial statements in conformity with U. S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. We base our estimates on historical experience and estimates and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. For example, in connection with the implementation of revenue accounting standards, management makes judgments and assumptions based on our interpretations of these standards. The revenue standards are principle- based and interpretation of those principles may vary from company to company based on their unique circumstances. It is possible that interpretation, industry practice and guidance may evolve as we apply revenue accounting standards. If our assumptions underlying our estimates and ~~judgements~~ **judgments** relating to our critical accounting policies change or if actual circumstances differ from our assumptions, estimates or ~~judgements~~ **judgments** , our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock. We are an " emerging growth company ~~,~~ **" and " smaller reporting company** " and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors. We are an " emerging growth company " as defined in the JOBS Act and we intend to take advantage of some of the exemptions

from reporting requirements that are applicable to other public companies that are not emerging growth companies, including: • the option to present only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced " Management' s Discussion and Analysis of Financial Condition and Results of Operations " disclosure; • not being required to comply with the auditor attestation requirements of Section 404 (b) of the Sarbanes Oxley Act; • not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor' s report providing additional information about the audit and the financial statements; • not being required to 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; and • not being required to submit certain executive compensation matters to stockholder advisory votes, such as " say- on- pay, " " say- on- frequency, " and " say- on- golden parachutes. " The JOBS Act permits an " emerging growth company " such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We have elected to avail ourselves of this exemption and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for private companies. We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of our IPO, (b) in which we have total annual gross revenue of at least $ 1. ~~07~~ **235** billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non- affiliates exceeds $ 700 million as of the prior September 30th and (2) the date on which we have issued more than $ 1. 0 billion in non- convertible debt during the prior three- year period. **We are also a smaller reporting company as defined in the Exchange Act. We may continue to be a smaller reporting company** ~~Even~~ **even** after we no longer qualify as an emerging growth company ~~, we~~ **. We** may ~~qualify as a "~~ **take advantage of certain of the scaled disclosures available to** smaller reporting ~~company~~ **companies and will be able** ~~," which would allow us~~ to take advantage of ~~many of the~~ **these scaled** ~~same exemptions from disclosure~~ **disclosures for so long as** ~~requirements including reduced disclosure obligations regarding executive compensation in~~ our **voting** ~~periodic reports~~ and **non- voting common** ~~proxy statements, if either (i) the market value of our~~ stock held by non- affiliates is less than $ 250 million **measured on the last business day of our second fiscal quarter,** or (ii) our annual revenue is less than $ 100 million during the most recently completed fiscal year and the market value of our **voting and non- voting common** stock held by non- affiliates is less than $ 700 million **as measured on the last business day of our second fiscal quarter** . We do not intend to pay dividends for the foreseeable future. We have never declared nor paid cash dividends on our capital stock. We currently intend to retain any future earnings to finance the operation and expansion of our business, and we do not expect to declare or pay any dividends in the foreseeable future. The SVB Loan also contains a negative covenant that prohibits us from paying dividends subject to limited exceptions. Consequently, stockholders must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of our common stock. Our status as a Delaware corporation and the anti- takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may make the acquisition of our company more difficult, including the following: • a classified board of directors with three- year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors; • the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer; • the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors; • a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders; • the requirement that a special meeting of stockholders may be called only by a majority vote of our entire board of directors, the chair of our board of directors or our chief executive officer, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; • the requirement for the affirmative vote of holders of at least 66 2 / 3 % of the voting power of all of the then- outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation or our amended and restated bylaws, which may inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt; and • advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer' s own slate of directors or otherwise attempting to obtain control of us. In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15 % or more of our outstanding voting stock, from merging or combining with us for a certain period of time. A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision. These and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and

Delaware law could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by our then- current board of directors, including delay or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for you to realize value in a corporate transaction. Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the U. S. federal district courts are the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees. Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws or any action asserting a claim against us that is governed by the internal affairs doctrine. This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Further, Section 22 of the Securities Act **of 1933, as amended (the " Securities Act "),** creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our certificate of incorporation further provides that the U. S. federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions. This choice of forum provision may limit a stockholder' s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees and may discourage these types of lawsuits. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions. Sales of a substantial number of shares of our common stock in the public market could cause the price of our common stock to fall. Sales of a substantial number of shares of our common stock in the public market could cause our stock price to decline. Sales of a substantial number of shares of our common stock could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. On July 19, 2022 we filed a shelf registration statement (the " Shelf Registration Statement ") on Form S- 3 with the Securities and Exchange Commission (" SEC ") (that was declared effective on July 27, 2022), which permits us to offer up to an aggregate of $ 250. 0 million of our common stock, preferred stock, debt securities and warrants in one or more offerings and in any combination, including units from time to time **, subject to certain limitations** . Our Shelf Registration Statement is intended to provide us with additional flexibility to raise capital in the future for general corporate purposes. As part of this Shelf Registration Statement, we also entered into a sales agreement with Cowen and Company, LLC (" Cowen and Company "), pursuant to which we may offer and sell common stock through Cowen and Company from time to time up to an aggregate offering price of $ 100. 0 million (~~The~~ **the** " Sales Agreement ") **. However, so long as our public float remains below $ 75 million, we are subject to limitations with respect to the use of our Shelf Registration Statement pursuant to General Instruction I. B. 6 of Form S- 3 (the " Baby Shelf Limitations "), which limits the amount we can offer to up to one- third of our public float during any trailing 12- month period. We would be no longer subject to Baby Shelf Limitations if our public float exceeds $ 75 million** . Through the date of this filing, we have not sold any shares of our common stock in " at the market " transactions pursuant to the Sales Agreement. Depending upon market liquidity at the time, sales of shares of our common stock under the Shelf Registration Statement or the Sales Agreement may cause the trading price of our common stock to decline and may result in substantial dilution to the interests of other holders of our common stock. Further, we have registered and intend to continue to register all shares of common stock that we may issue under our equity plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates. We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. However, future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of our outstanding options, or the perception that such sales may occur, could adversely affect the market price of our common stock. We expect that significant additional capital may be needed in the future to continue our planned operations. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time, including through our existing Shelf Registration Statement and Sales Agreement with Cowen and Company. To the extent that additional capital is raised through the sale and issuance of shares or other securities convertible into shares, our stockholders will be diluted. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market could cause our stock price to decline. Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common

stock. However, future sales of substantial amounts of our common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock. General Risk Factors If securities or industry analysts cease publishing research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline. The trading market for our common stock will depend in part on the research and reports published by securities or industry analysts about us or our business. Securities and industry analysts currently publish research on our company. If analysts cease coverage of us, the trading price for our common stock could be negatively affected. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, our common stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our common stock price and trading volume to decline. We could be subject to securities class action litigation. In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because our stock price has declined since our IPO, and life science technology companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management' s attention and resources, which could harm our business. Requirements associated with being a public company have increased and will increase our costs significantly, as well as divert significant company resources and management attention. We are subject to the reporting requirements of the Exchange Act, or the other rules and regulations of the SEC, or any securities exchange relating to public companies. Compliance with the various reporting and other requirements applicable to public companies requires considerable time and attention of management and we will incur significant legal, accounting and other expenses that we did not incur as a private company. We cannot assure you that we will satisfy our obligations as a public company on a timely basis. In addition, as a public company, it may be more difficult or more costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified personnel to serve on our board of directors, our board committees or as executive officers. If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could result in sanctions or other penalties that would harm our business. We are subject to the reporting requirements of the Exchange Act, the Sarbanes- Oxley Act and the rules and regulations of the Nasdaq **Capital** ~~Global Select~~ Market. The Sarbanes Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal controls over financial reporting. ~~Commencing in 2022~~ **We are subject to Section 404 of the Sarbanes- Oxley Act** , **which generally requires that** we ~~must~~ perform system and process design evaluation and testing of the effectiveness of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting ~~in our Form 10- K filing for the year ended December 31, 2022, as required by Section 404 of the Sarbanes- Oxley Act~~ . To achieve compliance with Section 404 ~~within the prescribed period~~ , we ~~will be engaged~~ - **engage** in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we ~~will~~ need to continue to dedicate internal resources, ~~including through hiring~~ **may require us to hire** additional financial and accounting personnel, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. This ~~will require~~ **requires** ~~that we~~ **us to** incur substantial additional professional fees and internal costs to expand our accounting and finance functions and that we expend significant management efforts. **While** ~~Prior to our IPO,~~ we ~~have never been required to test~~ **believe our internal control over financial reporting is currently effective, the effectiveness of** our internal controls **in future** ~~within a specified period~~ **periods is subject to** ~~and, as a result, we may experience difficulty in meeting these~~ -- **the** ~~reporting requirements~~ **risk that our controls may become inadequate because of changes** in **conditions** ~~a timely manner~~ . We may discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system' s objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected. If we are not able to comply with the requirements of Section 404 of the Sarbanes- Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls over financial reporting, we may not be able to produce timely and accurate financial statements. If that were to happen, our investors could lose confidence in our reported financial information, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities including equivalent foreign authorities.