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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2023

OR

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

For the transition period from _____ to _____

Commission File Number: 001-39035

10x Genomics, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**45-5614458**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
6230 Stoneridge Mall Road	
Pleasanton, California	**94588**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (925) 401-7300

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Class A common stock, par value $0.00001 per share	TXG	The Nasdaq Stock Market LLC

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

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

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

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

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

10x Genomics EX2034
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IPR2024-00526

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☒ No ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to § 240.10D-1(b). ☐

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

Aggregate market value of registrant's common stock held by non-affiliates of the registrant, based upon the closing price of a share of the registrant's common stock on June 30, 2023 (the last business day of the registrant's most recently completed second quarter) as reported by Nasdaq on that date was $5.7 billion.

As of January 31, 2024, the registrant had 105,109,711 shares of Class A common stock, $0.00001 par value per share, outstanding and 14,056,833 shares of Class B common stock, $0.00001 par value per share, outstanding.

Portions of the registrant's Definitive Proxy Statement relating to the registrant's 2024 Annual Meeting of Shareholders are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. Such Definitive Proxy Statement will be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's fiscal year ended December 31, 2023.

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10x Genomics, Inc.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "Annual Report") contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 as contained in Section 27A of the Securities Act of 1933, as amended , and Section 21E of the Securities Exchange Act of 1934, as amended , which are subject to those sections' "safe harbor." All statements, other than historical facts, may be forward-looking statements. Forward-looking terminology such as "may," "might," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "see," "estimate," "predict," "potential," "would," "likely," "seek" or "continue" or variations of these terms or similar terminology generally can identify forward-looking statements, but the absence of these words is not determinative. These forward-looking statements include statements regarding 10x Genomics, Inc.'s expectations regarding our plans, objectives, goals, beliefs, business strategies, results of operations, financial position, sufficiency of our capital resources, business outlook, future events, business conditions, key business metrics and key factors affecting our performance, gross margin trends, expected future investments including anticipated capital expenditures, anticipated size of market opportunities and our ability to capture them, expected uses, performance and benefits of our products and services, business trends and other information. These statements are based on management's expectations, forecasts, beliefs, opinions, assumptions and information available at the time of filing and should not be relied upon as 10x Genomics, Inc.'s views as of any subsequent date. Actual outcomes and results could differ materially from these statements due to several factors. 10x Genomics, Inc. disclaims any obligation to update any published forward-looking statements except as required by law.

The material risks, uncertainties and other factors that could affect 10x Genomics, Inc.'s financial and operating results and cause actual results to differ from those indicated by the forward-looking statements made include those described in the section titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report. Our periodic filings are accessible on the U.S. Securities and Exchange Commission's website at www.sec.gov. Although we believe the expectations reflected in the forward-looking statements are reasonable, new risks and uncertainties may emerge, and it is not possible for us to predict their impact on the forward-looking statements contained in this Annual Report. Moreover, the information the forward-looking statements are based upon may be limited or incomplete, and may not be based upon all potentially relevant information. We cannot guarantee future events, circumstances, results, performance or achievements. In light of the foregoing, investors are urged not to place undue reliance on any forward-looking statement or third-party data in reaching any conclusion or making any investment decision about any securities of the Company.

Unless otherwise stated or the context otherwise indicates, references to "we," "us," "our," "the Company," "10x" and similar references refer to 10x Genomics, Inc. and its subsidiaries.

Channels for Disclosure of Information

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

PART I

Item 1. Business.

Mission

Our mission is to accelerate the mastery of biology to advance human health.

Overview

We are a life sciences technology company focused on building innovative products and solutions to interrogate, understand and master biology. Our integrated solutions include instruments, consumables and software for analyzing biological systems at a resolution and scale that matches the complexity of biology. We have built deep expertise across diverse disciplines including chemistry, biology, hardware and software. Innovations in all of these areas have enabled our rapidly expanding suite of products, which allow our customers to interrogate biological systems at previously inaccessible resolution and scale. Our products have enabled researchers to make fundamental discoveries across multiple areas of biology, including oncology, immunology and neuroscience, and have helped empower the single cell revolution hailed by *Science* magazine as the 2018 "Breakthrough of the Year." Our products have won many awards, including among others the technological advancements in single cell multimodal omics hailed by *Nature Methods* journal as the 2019 "Method of the Year" and the technological advancements in spatially resolved transcriptomics hailed by *Nature Methods* journal as the 2020 "Method of the Year." Through our compatible partner program, we and our two long read sequencing company partners launched products and protocols providing the ability to obtain full-length isoforms at single cell resolution. This groundbreaking capability was highlighted as part of the *Nature Methods* 2022 "Method of the Year" Long-read sequencing. Since 2015, a total of seven 10x products have been recognized by *The Scientist* magazine on their annual Top 10 Innovations list, an annual list of newly released products that have the potential to generate the biggest impact on scientific research.

Since launching our first product in mid-2015 through December 31, 2023, we have sold 5,966 instruments to researchers around the world, including academic and translational researchers and biopharmaceutical companies. We believe that we remain in the very early stages of our penetration into multiple large markets. We expect that 10x will power a "Century of Biology" in which many of humanity's most pressing health challenges will be solved by precision diagnostics, targeted therapies and cures to currently intractable diseases.

The "10x" in our name refers to our focus on opportunities with the greatest potential for exponential advances and impact. We believe that the scientific and medical community currently understands only a tiny fraction of the full complexity of biology. The key to advancing human health lies in accelerating this understanding. The human body consists of over 40 trillion cells, each with a genome of 3 billion DNA base pairs and a unique epigenetic program regulating the transcription of tens of thousands of different RNAs, which are then translated into tens of thousands of different proteins. Progress in the life sciences will require the ability to measure biological systems in a much more comprehensive fashion and to experiment on biological systems at fundamental resolutions and on massive scale, which are inaccessible with previously existing technologies. We believe that our technologies overcome these limitations, unlocking fundamental biological insights essential for advancing human health.

Our product portfolio consists of multiple integrated platforms that include instruments, consumables and software. These integrated solutions guide customers through the workflow from sample preparation to analysis and visualization.

Each of our platforms is designed to interrogate a major class of biological information that is impactful to researchers at high resolution and scale:

- Our Chromium platform enables high-throughput analysis of individual biological components. It is a precisely engineered reagent delivery system that divides a sample into individual components in up to a million or more partitions, enabling large numbers of parallel micro-reactions. In this manner, for example, the individual single cells of a large population of cells can be segregated so that each cell resides in its own partition. Each partition then behaves as a micro-scale reaction vessel in which its contents are barcoded with a DNA sequence that specifically identifies those contents as being distinct from the contents of other partitions. Once biological material in each partition is barcoded, they can then be pooled and sequenced together. Finally, the barcode sequences can be used to easily tease apart information originating from different partitions. Our approach to partitioning and barcoding gives researchers the ability to measure many discrete biological materials and/or perform many different experiments in parallel, providing tremendous resolution and scale. Our Chromium platform offers comprehensive solutions to measure tissues at single cell resolution and scale. Chromium enables multiomic readouts including gene expression, protein, chromatin, V(D)J, CRISPR/guide RNAs (gRNAs) and antigens, has broad sample compatibility (formalin-fixed paraffin-embedded (FFPE), fresh, frozen and paraformaldehyde (PFA) fixed tissue and whole blood) and delivers high performance including high cell recovery rates (CRE), high sensitivity, robustness and reproducibility.
- Our Visium platform empowers researchers to identify where biological components are located and how they are arranged with respect to each other, otherwise referred to as “spatial analysis.” Our Visium platform uses high density DNA arrays which have DNA barcode sequences that encode the physical location of biological analytes within a sample, such as a tissue section, allowing the spatial location of the analytes to be “read out” using sequencing to create a visual map of the analytes across the sample. Similar to partitioning, spatial barcoding with large numbers of probes on an array can unlock tremendous insights, providing high resolution genomic information to visualize analytes across biological tissues.
- Our Xenium platform for in situ analysis is designed to give scientists the ability not only to locate and type cells in their tissue context, but also to address a variety of specific questions based on previous knowledge of their sample often discovered using our Chromium and Visium platforms. Xenium In Situ detects and preserves the cellular localization of hundreds of RNA targets directly in a fresh frozen or FFPE tissue section without the need for conventional sequencing, providing researchers with a detailed map of gene expression patterns without sacrificing resolution or target number.

Collectively, our platforms enable researchers to interrogate, understand and master biology at the appropriate resolution and scale. A summary of our solutions based on the platforms follows below.

10x Solution	Compatibility	Interrogates	Key example applications
Chromium Single Cell **Gene Expression** (with Feature Barcoding)	• Standard and High Throughput • Chromium Connect • Nuclei Isolation kit • CellPlex	• RNA • Cell surface protein • CRISPR screening	• Developmental Biology, Oncology, Immunology, Neuroscience, BioPharma
Chromium Single Cell **Gene Expression Flex** (with Feature Barcoding)	• Standard Throughput • Nuclei Isolation kit • Chromium Connect	• RNA • Cell surface protein • Intracellular protein	• Developmental Biology, Oncology, Immunology, Neuroscience, BioPharma
Chromium Single Cell **Immune Profiling** (with Feature Barcoding)	• Standard and High Throughput • Chromium Connect • Nuclei Isolation kit	• RNA • Immune cell paired receptor RNA • Immune cell surface protein and antigen specificity • CRISPR screening	• Immunology, Oncology, BioPharma
Chromium Single Cell **ATAC**	• Standard Throughput • Nuclei Isolation kit	• Epigenetics (chromatin accessibility)	• Developmental Biology, Oncology, Immunology
Chromium Single Cell **Multiome ATAC + Gene Expression**	• Standard Throughput • Nuclei Isolation kit	• RNA • Epigenetics (chromatin accessibility)	• Developmental Biology, Oncology, Immunology, Neuroscience
Visium Spatial **Gene Expression**	• Visium CytAssist • Fresh Frozen • FFPE	• RNA	• Developmental Biology, Pathology, Oncology, Immunology, Neuroscience
Visium Spatial **Proteogenomics**	• Visium CytAssist • Fresh Frozen • FFPE	• Proteins	• Developmental Biology, Pathology, Oncology, Immunology, Neuroscience
Xenium In Situ **Gene Expression**	• Xenium Analyzer • Multiple Gene Panels • Fresh Frozen • FFPE	• RNA	• Developmental Biology, Pathology, Oncology, Immunology, Neuroscience, Complex diseases

We believe our platforms, which enable a comprehensive view of biology, target numerous market opportunities across the more than $67 billion global life sciences research tools market. We view much of this total market opportunity as ultimately accessible to us due to our ability to answer a broad diversity of biological questions. Based on the capabilities of our current solutions and focusing solely on cases where our current solutions offer alternative or complementary approaches to existing tools, we believe, based on our internal estimates, we could access approximately $16 billion of the global life sciences research tools market. We believe we can further drive growth by improving or enabling new uses and applications of existing tools and technologies, as our solutions allow researchers to answer questions that may be impractical or impossible to address using existing tools. We also expect to pursue additional opportunities that will further expand our opportunity, including new potential applications of our single cell, spatial and in situ technologies in the future.

As of December 31, 2023, we employed a commercial team of 450 employees, many of whom hold PhD degrees, who help drive adoption of our products and support our vision. We prioritize creating a superior user experience from pre-sales to onboarding through the generation of novel publishable discoveries, which drive awareness and adoption of our products. We have a scalable, multi-channel commercial infrastructure including a direct sales force in North America and certain regions of Europe and distribution partners in Asia, certain regions of Europe, Oceania, Central America, South America, the Middle East and Africa that drives our customer growth. This is supplemented with an extensive and highly specialized customer service infrastructure with PhD-level specialists. We currently have customers in over 50 countries.

Our revenue was $618.7 million and $516.4 million for the years ended 2023 and 2022, respectively, representing a year-over-year growth rate of 20%. We generated net losses of $255.1 million and $166.0 million for the years ended 2023 and 2022, respectively.

The complexity of biology

Biology is staggeringly complex. The cell is the basic, fundamental organizational unit of all biological organisms. A human being starts from a single cell, which divides into over 40 trillion cells–such as blood cells, skin cells, muscle cells, bone cells, stem cells and neurons–to create the tissues that enable all necessary functions in the human body. These cells utilize the basic building blocks of DNA, RNA and protein, configured in cell-specific ways.

DNA, the hereditary material of living organisms, is the foundation for a series of biological processes that form the basis for biology and how cells function. DNA is transcribed into messenger RNA (mRNA) in a process referred to as transcription or, alternatively, gene expression. Information from the mRNA molecules is then translated into protein in a process called translation. Each gene has the ability to create multiple different mRNAs, resulting in the production of over 100,000 different

mRNAs from about 30,000 genes. The complete collection of all of the DNA, mRNA and proteins are called the genome, transcriptome or gene expression profile, and the proteome, respectively. The epigenome includes molecular configurations and chemical DNA modifications that affect how genes are regulated. The genome, epigenome, transcriptome and proteome can be distinct for each of the trillions of cells in the human body and collectively constitute a rich architecture of biology.

Industry direction

The 20th century discovery of DNA, RNA, protein and the basic molecular and cellular mechanisms of their function paved early foundations for humanity to understand our own biology. In the early 2000s, the study of biology shifted from focusing on individual genes and their products to a more global level of characterizing the full collection of DNA, RNA and proteins and how they interact, giving rise to the field of genomics. Genomics is a broad, highly interdisciplinary field that approaches the study of biology at a system-wide level. We believe that genomics-based approaches will encompass much of biology and medical applications in the coming decades.

The Human Genome Project, which was completed in 2003, determined a reference sequence of the three billion nucleotides of the human genome as a composite over several individuals. This reference sequence provided an initial "parts list" of genes, enabling researchers to begin understanding human biology at a global molecular level.

The subsequent two decades of genomic research in many ways have been defined by genome-wide association studies ("GWAS") and large-scale sequencing of individuals and populations. The goal was to compile all of the genetic variants in human populations and to link those variants to different conditions, traits and diseases. These associations would serve to generate clues and hypotheses that can be tested by subsequent experimentation to understand the detailed biology of each gene and variant.

Both of these efforts have provided substantial value and have been foundational in enabling multiple new research and clinical applications. However, much of the initial promise of the Human Genome Project and subsequent GWAS projects remains unfulfilled. We believe this is ultimately due to the tremendous underlying complexity of biology. The human genome project provided a list of parts and subsequent GWAS projects looked for statistical links between these parts and various diseases and traits. Going forward we need to understand the biological function of each gene and all the molecular and cellular networks they encode. Genomics needs to expand from its focus on the genome and statistical associations to the study of biology more broadly.

This presents an enormous challenge because of the limited capabilities of existing tools for accessing biology at the molecular and cellular level. Some of these limitations are:

- Average, or "bulk," measurements obscure underlying differences between different biological units, such as individual cells;
- Low throughput prevents requisite sampling of the underlying complexity—for example, when only a few hundred cells can be evaluated at a time;
- Limited number of biological analytes are interrogated, giving a myopic view of only a few biological processes;
- Limited ability for multiomic interrogation;
- Inefficient use of sample to generate a signal of sufficient strength to analyze the biological molecules of interest; and
- Inadequate bioinformatics and software tools.

We believe technologies that address these limitations will serve large and unmet market needs by providing a better understanding of molecular and cellular function, the origin of disease and how to improve treatment.

Measure the full complexity of biology. A major need is for an in-depth cataloging of biological complexity. This will involve going from a basic biological parts list to a detailed map of exactly how all of these parts are used and interact in both healthy and disease states. Researchers and clinicians need to characterize every cell in the human body to understand how cell-to-cell variations in genomes, epigenomes, transcriptomes and proteomes give rise to function or dysfunction. They also need to characterize every tissue at a full molecular and cellular level, including how cells are arranged together into spatial patterns that affect function, give rise to disease or impact treatment. For example, in the context of cancer biology, many tumors consist of a heterogeneous population of healthy and cancerous cells, the latter of which may consist of genetically distinct subpopulations that are susceptible to different therapeutics. Furthermore, different spatial patterns of cancer antigens may require different treatment approaches. Without being able to see cells and molecules in their spatial context it is difficult to fully understand tumor resistance and how cells interact with one another within the tumor microenvironment and enable targeted therapies.

Massively parallelize experimentation. Mastering biology will require moving beyond the cataloging of biological complexity and into performing experiments to understand the impact of active changes to biological systems. We believe technologies that enable measurement of massively parallel perturbation and the impact of these perturbations will be important for accelerating biological and medical discovery. For example, an unmet goal of researchers has been to compile all of the genetic variations in human populations and link those variations to different conditions, traits and diseases. Linking these variations to disease requires the analysis of the impact of these variations within different systems, alone and in various combinations. Technologies that enable these variations to be created in arbitrary combinations within various biological contexts and the impact of these combinations measured in a massively parallel fashion will highly accelerate this work. In another example, a longstanding need of researchers has been to predict the interactions between immune cells and the target molecules they can recognize. The human body can make over a trillion different immune cells that are collectively capable of recognizing and mounting a response to nearly any conceivable antigen. We believe that understanding, and ultimately harnessing, this targeting will require technologies that can enable the massively parallel screening of interactions between a set of recognizing immune cells and a set of synthetic antigen target molecules.

We believe technologies that address these needs will redefine biological discovery and power a "Century of Biology" in which many of humanity's most pressing health challenges will be solved by precision diagnostics, targeted therapies and cures to currently intractable diseases.

Our solutions

We have built and commercialized multiple platforms that allow researchers to interrogate, understand and master biological systems at a resolution and scale commensurate with the complexity of biology. We believe that our products overcome the limitations of existing tools. Our vision, discipline and multidisciplinary approach have allowed us to continuously innovate to develop the instruments, consumables and software that underlie our solutions.

Our technological imperatives: resolution and scale

Resolution and *Scale* are the imperatives that underlie our products and technology. First, our solutions enable understanding biology at the right level of biological resolution, such as at the level of the single cell or at high spatial resolution of tissues and organs. Second, we believe that high resolution tools only become truly powerful when they are built into technologies with tremendous scale. Measuring individual cells, spatial portions of tissues or molecular interactions in small numbers is insufficient. Our products enable measuring and manipulating up to millions of single cells or thousands of tissue sample positions. Thus, our products provide the appropriate levels of both resolution and scale in a manner that allows researchers to easily sift through the complexity to access the underlying biology.

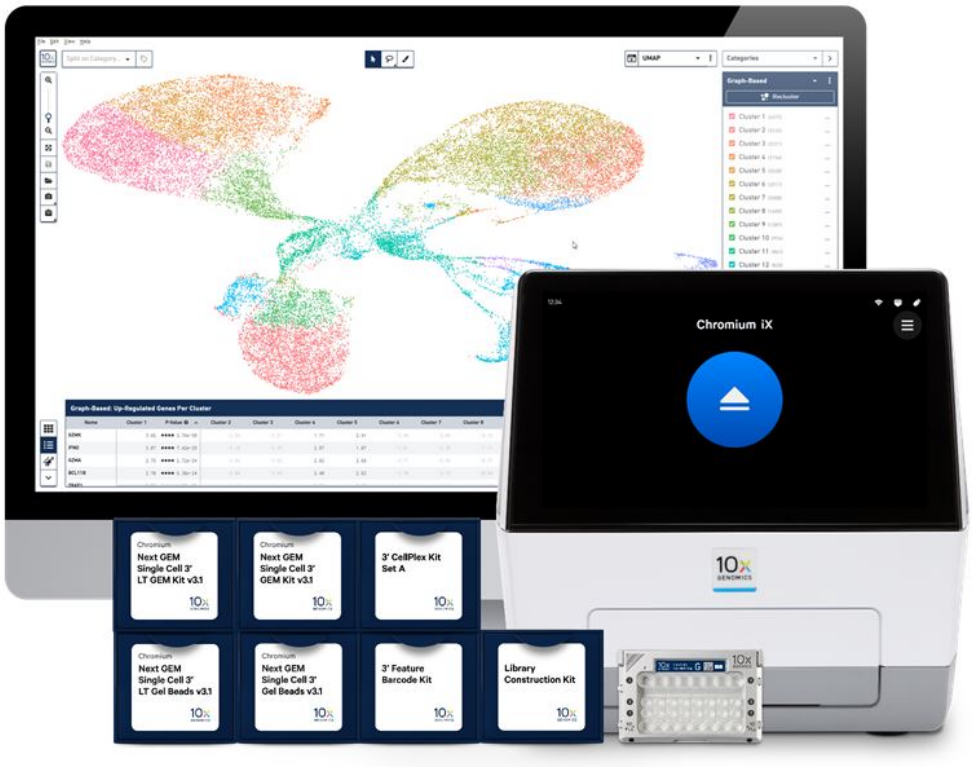
Our platforms

Our platforms are integrated solutions comprised of instruments, consumables and software. They are built with our expertise in chemistry, molecular biology, microfluidics, hardware, computational biology and software engineering. All of our products begin with a researcher's sample (such as a collection of thousands to millions of cells or a slice of fresh frozen or FFPE tissue). Our Chromium platform performs high-throughput barcoding to construct libraries that are compatible with standard third-party sequencers. Our Visium platform allows researchers to combine spatially resolved whole transcriptome measurements across tissue sections with a high-resolution image. Up to millions of unique, arrayed barcodes that represent a spatial location allow for analytes to be captured from tissue, spatially barcoded and then mapped back to their original tissue location after sequencing. Our Xenium platform includes the Xenium Analyzer, a fully automated instrument that integrates sample handling, liquid handling and imaging. In this workflow, targeted probes are hybridized to tissue sections on Xenium slides, which are then processed on our Xenium Analyzer. Sequencing is not required. Our proprietary software then provides turn-key analysis pipelines and intuitive visualization tools for all of our platforms that allows researchers to easily interpret the biological data from the samples.

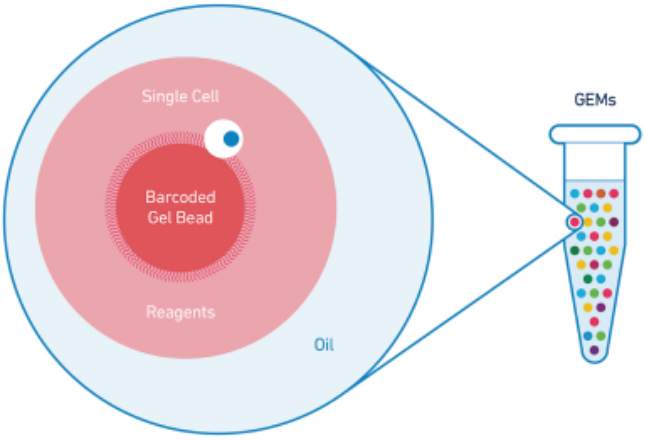
Our Chromium platform

Our Chromium platform, which includes our Chromium X Series, Chromium Connect and legacy Chromium Controller instruments, microfluidic chips and related consumables, enables high-throughput analysis of individual biological components. The Chromium instruments serve as precisely engineered reagent delivery systems that divide a sample into individual components in up to a million or more partitions, enabling large numbers of parallel micro-reactions. The Chromium platform can be used to partition not only single cells, but also other biological materials such as cell nuclei and DNA molecules. The large numbers of partitions generated using our Chromium products can be used for analyzing samples at high resolution and on

massive scale. We pair a partitioned sample with our proprietary gel beads bearing barcodes that allow researchers to uniquely identify the contents of each partition and distinguish them from contents of other partitions. We refer to the partitions that are generated on our Chromium platform as "GEMs," which stands for Gel beads in EMulsion. We collectively refer to our partitioning and barcoding technologies as our GemCode technology.



Our Chromium X and iX, Chromium Connect and microfluidic chips. Our Chromium consumables run on our Chromium instruments. Our Chromium iX instrument is capable of running our Standard Throughput consumables. Our Chromium X instrument is capable of running our Standard and High Throughput consumables. Customers are able to purchase a license that upgrades their Chromium iX to a Chromium X, unlocking the ability to run our High Throughput consumables. We have designed our instruments to be widely accessible to researchers and each of these instruments has a form factor that easily fits on a standard laboratory bench. Our Chromium instruments operate exclusively with our microfluidic chips, which are highly engineered single-use devices that process samples and reagents. During our Chromium workflows, the researcher loads a sample onto the microfluidic chip along with our proprietary gel beads and oils. The loaded chip is inserted into the Chromium instrument, which facilitates the generation of GEMs that contain sample and gel beads. Our Chromium Connect product is an automated Chromium instrument that incorporates liquid handling robotics to automate our workflow and can be utilized with our Single Cell Gene Expression, Single Cell Gene Expression Flex and Single Cell Immune Profiling solutions.



The following are key advantages of our Chromium platform:

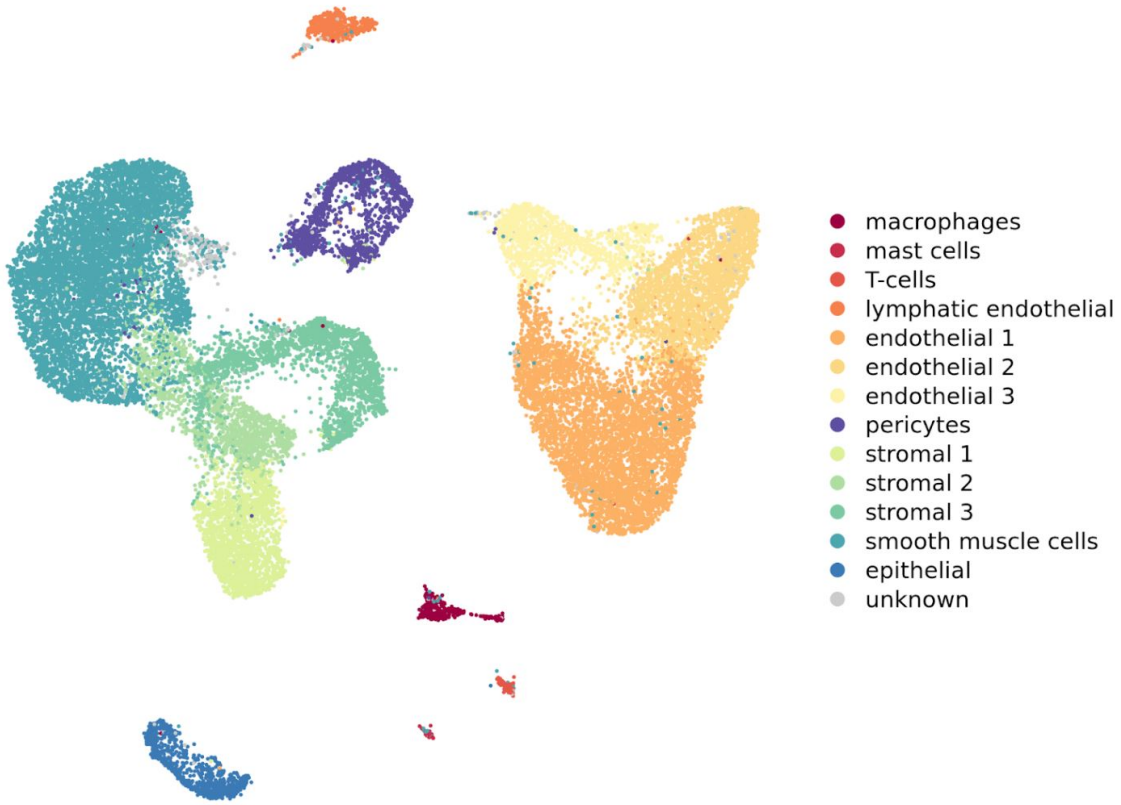
- *High cell throughput*: How many cells can be measured at once? Measuring more cells with resolution allows researchers to look for rare cells in a population. If a disease-causing cell occurs in only 1 in 10,000 cells in a sample, then measuring just 1,000 cells will be unlikely to find a single copy of the disease-causing cell. Our Standard Throughput Single Cell Gene Expression and Immune Profiling solutions, on the other hand, have cell throughputs of up to 80,000 cells per run using one microfluidic chip which increases the likelihood of finding a copy of the disease-causing cell. Our High Throughput Single Cell Gene Expression and Immune Profiling solutions enable analysis of up to 320,000 cells per microfluidic chip. With the launch of our Single Cell Gene Expression Flex solution, we have increased cell throughput and enable analysis of up to 1,000,000 cells per microfluidic chip.
- *High cell capture rate*: What fraction of the researcher's sample cells are measured rather than lost? A high cell capture rate is important in many cases where researchers start with only a limited number of rare cells, such as a tumor biopsy from a patient. Our single cell solutions have typical cell capture rates of about 65%, which is significantly higher than those achieved by many competing solutions.
- *Low doublet rate*: How often do researchers avoid doublets—artifacts where two or more cells are read as one? Doublets result in loss of cell information, inaccurate information and wasted sequencing. Researchers seek products with low doublet rates. Our single cell solutions have doublet rates of less than 1% per 1,000 cells.
- *Different biochemistries to enable single cell research*: The Chromium platform offers two technical approaches—he probe-based approach (Chromium Flex) and the Reverse Transcription (RT)-based approach (Chromium 3' and 5') to measure gene and protein expression. Both approaches cater to unique use cases, open the door for different applications and expand sample compatibility

Our Chromium platform currently provides researchers with the following solutions:

Single Cell Gene Expression

Our Chromium Single Cell Gene Expression solution provides customers with the ability to measure the transcriptome of single cells, revealing gene activity and networks on a cell-by-cell basis. This approach enables customers to identify and characterize rare cell types in a population of cells, characterize cell populations without prior knowledge of cell subtypes or cell markers, define novel cell types and cell states, discover new biomarkers for specific cell populations and analyze and understand cellular heterogeneity and its effects on biological systems.

For this solution, customers run their samples of interest on Chromium X Series or Chromium Connect instruments, or on legacy Chromium Controller instruments, to generate GEMs containing single cells and prepare single cell libraries using our reagents. Researchers can sequence these single cell libraries on standard third-party sequencers, analyze their data using our Cell Ranger analysis pipeline software and visualize their data using our Loupe Cell Browser software. The browser displays a visual representation of the data in which cells having similar gene expression profiles are colored and clustered together. Researchers can explore their data by cluster or gene(s) of interest to derive biological meaning from the visualizations. The following visualization is an example showing single cell profiling of approximately 26,000 human endometrium cells highlighting several subpopulations.



UMAP projection of approximately 26,000 human endometrium cells. Major subpopulations were identified based on gene markers.

Our Chromium Single Cell Gene Expression solution uses our proprietary biochemistry, GEM-RT, to capture mRNA molecules with high sensitivity. Sensitivity is the number of different mRNA transcripts that can be detected. Higher sensitivities are required to detect mRNA molecules that are present in low abundance in a cell.

Furthermore, our Chromium Single Cell Gene Expression solution can be used with our Feature Barcode technology to simultaneously measure multiple analytes in the same cells. Our Feature Barcode is highly customizable, allowing our customers to add a barcode to any biological feature they want to analyze in conjunction with gene expression and other biological data. Feature Barcode can currently be used to:

- Measure cell surface proteins simultaneously with gene expression, giving a far fuller picture of the states of single cells that includes the transcriptional profile inside the cells as well as the proteins on the outside of the cells; and
- Measure a set of CRISPR genetic perturbations that have been applied to a cell simultaneously with the resulting changes to gene expression and/or surface protein characterization, allowing users to interrogate the impact of actively perturbing many different aspects of a biological system in a massively parallel fashion.

Single Cell Gene Expression Flex

In 2022, we introduced our Chromium Single Cell Gene Expression Flex solution. Like our Chromium Single Cell Gene Expression solution, Flex provides customers with the ability to measure the transcriptome of single cells, revealing gene activity and networks on a cell-by-cell basis. Single cell RNA sequencing is increasingly being used to profile larger numbers of samples, corresponding to cohorts of patients or different perturbations, increasing the importance of an efficient and scalable workflow.

Chromium Single Cell Gene Expression Flex works on samples fixed with paraformaldehyde (PFA), which allows samples to be collected, shipped to a central location and analyzed without sacrificing integrity or data quality, creating new possibilities for sample accessibility, throughput and batched analysis. This advanced chemistry also brings single cell profiling to FFPE tissue, expanding the range of accessible sample types. A key advantage is that customers can fix whole fresh tissue pieces at the point of collection to lock in biological states and preserve fragile cells or use this solution to access archived samples, making it especially suited for translational and clinical labs where fragile samples or time constraints would otherwise preclude single cell analysis. In addition, its probe-based approach requires only a small region of the transcript (50 base pairs in length) to be present in the cell in order for it to be detected, making it compatible with comparably low quality samples such as biopsies or other clinical samples that are prone to have increased levels of fragmented transcripts compared to other sample types. Furthermore, our Chromium Single Cell Gene Expression Flex solution can be used with our Feature Barcode technology to simultaneously measure cell surface proteins and gene expression in the same cells.

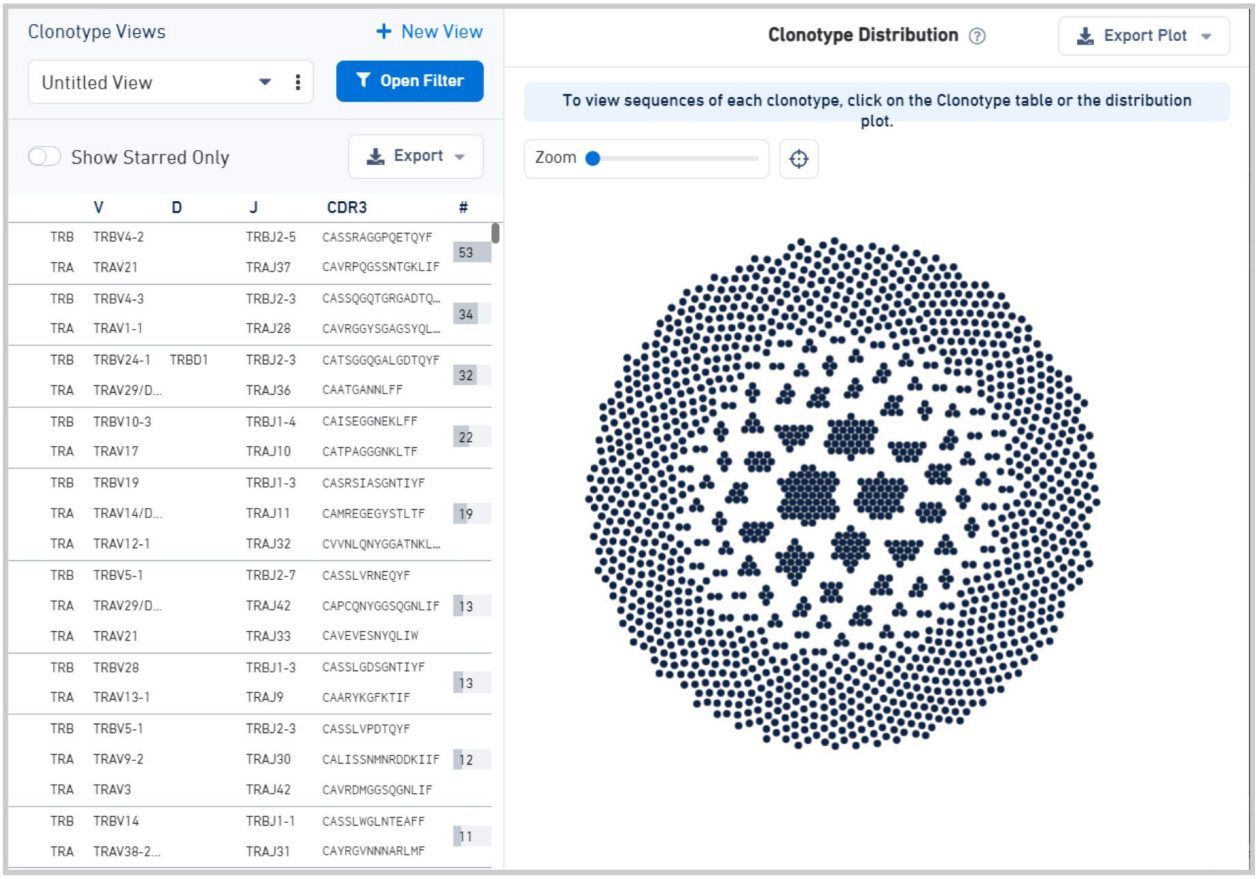
Chromium Single Cell Gene Expression Flex allows for profiling up to 1,000,000 fixed single cells at once with a scalable workflow.

Chromium Single Cell Gene Expression Flex can be used exclusively with our Chromium X Series instruments to generate GEMs. Prior to GEM generation, cells are fixed and permeabilized and can be safely stored or transported without compromising data quality. When commencing the experiment using Chromium Single Cell Gene Expression Flex, samples are hybridized to probe sets and may be processed individually (singleplex workflow) or pooled with up to 16 samples in a single lane of a 10x chip (multiplex workflow). During GEM generation the probe sets are ligated and extended to incorporate unique barcodes. Sequencing libraries are then prepared, sequenced and analyzed using our Cell Ranger and Loupe Browser software tools. The library preparation of the Chromium Single Cell Gene Expression Flex workflow is also compatible with the Chromium Connect.

Single Cell Immune Profiling

Our Chromium Single Cell Immune Profiling solution is used to study the immune system, which is the body's natural diagnostic and therapeutic system. The immune system has a vast network of T-cells and B-cells that recognize pathogens using receptor molecules that bind to foreign molecules, or antigens. T-cells and B-cells can generate an immense diversity of receptors that are each specific to a different potential antigen, making it possible for the human body to recognize nearly any conceivable antigen. Our Chromium Single Cell Immune Profiling solution enables researchers to study these receptor molecules at the single cell level in conjunction with the transcriptome of the immune cell. Through the use of our solutions, researchers can measure both the T-cell or B-cell receptors while also determining whether the cell has been activated to attack its target or is quiescent and waiting for a threat to emerge. Importantly, because our analysis is performed at the single cell level, we obtain information regarding the pairing of the sequences of the alpha and beta chains of T-cell receptors or the heavy and light chains of B-cell receptors. This paired receptor information is unavailable from traditional bulk approaches for analyzing immune cells and is critical as it is the pair of receptors that defines the targets of each immune cell. By enabling paired immune receptor and transcriptome analysis in massive numbers of immune cells, our Chromium Single Cell Immune Profiling solution sheds insight on the clonality, diversity and cellular context of the immune repertoire.

The workflow of this solution, which is similar to that of the Chromium Single Cell Gene Expression solution, utilizes our Chromium X Series, Chromium Connect or legacy Chromium Controller to generate GEMs, followed by single cell library preparation and sequencing. In contrast to Gene Expression, our Chromium Single Cell Immune Profiling solution uses a different biochemistry that obtains sequence information from the 5' end of mRNA molecules, rather than their 3' end. This biochemistry allows researchers to capture the more information-rich regions of immune receptor transcripts. Our Chromium Single Cell Immune Profiling solution also includes a step of enriching for immune receptor transcripts using specific primers to create an immune-specific library that can be sequenced separately from gene expression. We have also developed specialized pipelines within our Cell Ranger software and a specialized visualization software, Loupe V(D)J Browser, for visualizing the paired immune receptor information derived from this product. This software allows researchers to identify cell type clusters based on gene expression and then layer T-cell and/or B-cell receptor sequence diversity directly onto that visualization, enabling users to easily derive biological meaning from these two different data types. The following visualization is an example showing the diversity of immune receptors and groupings into specific genes and sequences.



With Loupe V(D)J Browser, you can explore the diversity of immune cell receptors and see how they are related. The software displays groups of similar receptors and explores specific genes and sequences.

Feature Barcode can be used in combination with our Single Cell Immune Profiling solution, adding significant multiomic functionality. Importantly, this functionality allows users to determine the antigen that is bound by immune cells simultaneously with their gene expression. This capability allows researchers to determine both the receptor sequences of individual immune cells as well as an antigen that the receptor targets and makes this analysis practical to perform for millions of immune cells. We believe that the capability to understand immune receptor-antigen interactions at a high-throughput single cell level is tremendously valuable for elucidating the rules of immune cell targeting and can be used to understand disease and identify leads for immunotherapies and to assist researchers in constructing an immune map of receptor-antigen targeting rules.

Single Cell ATAC

Our Chromium Single Cell ATAC solution enables customers to understand the epigenetic state—including how the genome and its surroundings are modified to “open” and “closed” states, affecting how genes are regulated—in up to millions of cells. While our Chromium Single Cell Gene Expression solution answers the “what” of what makes two cells different from each other, our Chromium Single Cell ATAC solution answers the “how.” These two products are highly complementary and can be used as a powerful combination to analyze both the cause and effect of gene regulation.

ATAC-seq stands for “Assay for Transposase Accessible Chromatin using sequencing.” This technique uses an engineered transposase enzyme to insert nucleic acids tags into the genome while also excising the tagged sequences from its surroundings. ATAC-seq is based on the fact that the transposase enzyme will preferentially tag and excise regions of the genome that have an “open” chromatin state that is unimpeded by proteins bound to genomic DNA. The tagged sequences can be sequenced to infer genomic regions of increased chromatin accessibility as well as map regions that are bound by transcription factor proteins responsible for regulating gene expression. ATAC–seq was pioneered by researchers at Stanford University and intellectual

property rights directed to ATAC-seq are exclusively licensed to us. ATAC-seq has now become an important tool in epigenetics and genome-regulation research.

Our Single Cell ATAC solution uses the ATAC-seq assay in conjunction with our Chromium platform to create a product for high-throughput epigenetic interrogation at single cell resolution. In the workflow, users treat cell nuclei with transposase enzyme and then use our Chromium instrument to encapsulate these nuclei in GEMs. The tagged sequences from the nuclei are barcoded inside GEMs and then processed to generate sequencing libraries. Sequencing reads are analyzed using our Cell Ranger ATAC software and visualized using our Loupe Cell Browser, which has been specially configured to display epigenetic data.

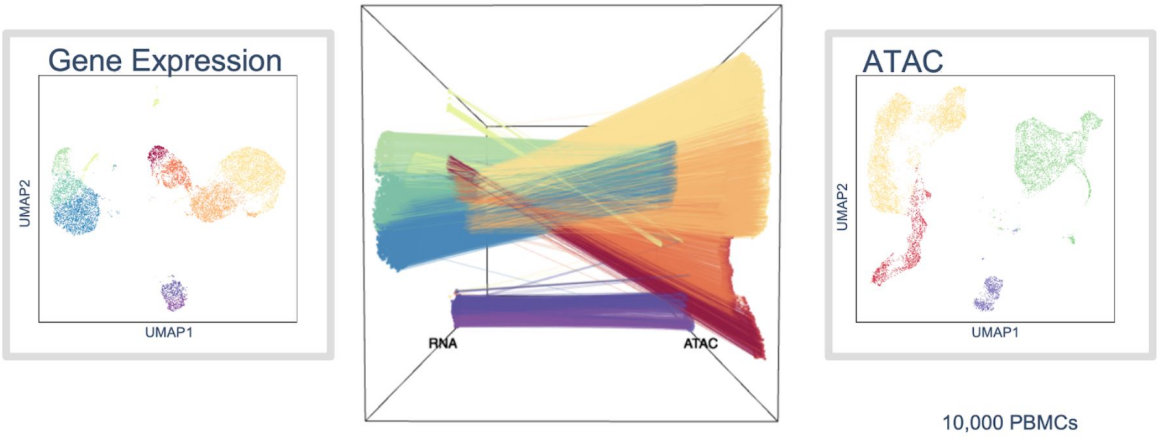
Our Chromium Single Cell ATAC solution has been adopted by a number of key opinion leaders. In one example, researchers used a combination of single cell transcriptome profiling and single cell ATAC-seq to identify enhancer elements that mark specific sub-classes of cells in the mouse brain. Once these elements are identified they can be targeted in order to generate mice with specific cell types labeled or perturbed at a level of specificity not usually achievable using gene expression alone. The ability to specifically target new cell types of interest allows in-depth investigations of the functions of those targeted cells.

Single Cell Multiome ATAC+Gene Expression

Our Chromium Single Cell Multiome ATAC+Gene Expression solution enables customers to link a cell's epigenetic state, which affects how genes are regulated, directly to its transcriptional output, in up to millions of cells simultaneously. This product is the first commercial solution to enable simultaneous interrogation of both the RNA and chromatin accessibility, using the Assay for Transposase Accessible Chromatin (ATAC) in a single cell. Previously, researchers would profile these two modalities separately using our Single Cell Gene Expression solution and Single Cell ATAC solution, and computationally infer related cell types between the two datasets. However, with our Single Cell Multiome ATAC+Gene Expression solution, it is now possible to directly measure both modalities in the same single cell, providing valuable insights into how the epigenetic landscape in a cell (the "input") directly impacts downstream gene expression (the "output").

Our Single Cell Multiome ATAC+Gene Expression solution is similar in workflow to our Single Cell Gene Expression and Single Cell ATAC products on the Chromium platform. In the workflow, users treat cell nuclei with transposase enzyme and then use a 10x Chromium instrument to encapsulate these nuclei in GEMs. The tagged DNA sequences and the mRNA from the nuclei are barcoded inside GEMs and then processed to generate gene expression and ATAC sequencing libraries. Sequencing reads are analyzed using our Cell Ranger ARC software, which has been specifically designed to leverage data from both RNA and ATAC data, and visualized using our Loupe Cell Browser.

The following visualization is an example of how chromatin accessibility from ATAC data can be linked with gene expression data in cells:



Sample preparation solutions. In 2022, we launched our Nuclei Isolation kit, our first offering to help ease the sample preparation process. This solution provides a simple, scalable workflow to make frozen tissues and previously challenging sample types more accessible for routine single cell analysis.

Many samples which may be biobanked or are not amenable to fresh processing require nuclei isolation for use in single cell sequencing. Nuclei isolation is also necessary to obtain additional layers of cellular information, such as chromatin accessibility. Previously available methods for nuclei isolation from frozen tissue include complex, low-throughput and time-consuming protocols, expensive instruments for sorting and debris removal and the need to optimize workflows for each tissue. Our Chromium Nuclei Isolation kit, specifically designed for use with our single cell assays, streamlines nuclei isolation workflows, ensuring reliable assay performance for gene expression or epigenetic studies with little to no optimization for most tissues.

Our Visium platform

Our Visium platform enables researchers to understand the spatial positions of biological analytes within tissues at high resolution. Such spatial analysis can be critically important in understanding tissue function in both healthy and disease states. For example, in the context of neurobiology, neuronal degeneration in the *substantia nigra*, an area of the brain associated with movement, results in Parkinson's disease, while degeneration of upper and lower motor neurons results in amyotrophic lateral sclerosis, or Lou Gehrig's disease. In the context of cancer treatment, the knowledge of whether T-cells have infiltrated inside of a tumor, rather than merely surrounding the tumor, is an important prognostic indicator. Understanding the spatial relationship of the biological analytes in tissues may hold the key to unlocking the underlying causes and identifying cures for such diseases.

Our Visium products are based in part on technology that we acquired from Spatial Transcriptomics in 2018. Spatial Transcriptomics utilized arrays having specialized probes on their surfaces that are encoded with the spatial position of the probe. In this workflow, a tissue sample is placed onto the array and reagents are added by the user to create barcoded molecules from the array probes and the biological material in the tissues. This barcoded material encodes the spatial information that was contained in the probes. Users then pool the material from the array and follow a protocol to create libraries of molecules that can be sequenced using a standard third-party sequencer. After sequencing, analysis software assigns each sequencing read to its spatial position of origin, aligning with a morphological stain of the tissue section. Collectively, the spatially defined reads provide a visual depiction of the locations and patterns of large numbers of biological analytes simultaneously in the tissue sample.

The Spatial Transcriptomics product performed spatial analysis of mRNAs using arrays that had 1,000 probes with distances of approximately 200 microns between probes. This product was used to identify heterogeneity in metastatic melanoma and to demonstrate that there was significantly more heterogeneity than could be predicted by manual pathology annotation. In an

independent study of mouse and human amyotrophic lateral sclerosis samples, researchers were able to observe changes in RNA expression over the disease course, while preserving the understanding of those changes in the spatial context. This allowed them to visualize the key changes that occur in brain regions before and during neuronal degeneration.

Our Visium solution for spatial gene expression analysis was launched in late 2019. Our Visium Spatial Gene Expression product has significant improvements over the Spatial Transcriptomics product, including increased spatial resolution, increased gene sensitivity, a simpler workflow, compatibility with both hematoxylin and eosin (H&E) and immunofluorescence stains, and fully developed analysis and visualization software. We launched the Visium Spatial Proteogenomics solution providing the capability of combining whole transcriptome analysis and immunofluorescence protein detection within the same tissue section in 2020. In 2021, we launched Visium Spatial Gene Expression for FFPE which featured an entirely new probe-based chemistry enabling Visium to be applied to FFPE tissues with similarly high sensitivity and the same spatial resolution as fresh frozen samples.

In 2022, we launched the Visium CytAssist, an instrument designed to simplify the Visium solution workflow by facilitating the transfer of transcriptomic probes from standard glass slides to Visium slides. The Visium CytAssist is a compact, benchtop instrument that enables spatial profiling insights with broad sample access and streamlined workflow logistics allowing the use of pre-sectioned tissues and pre-stained samples with the Visium workflow in both FFPE and fresh frozen samples.

Regardless of the sample type, sectioning, sample preparation, staining by either hematoxylin and eosin (H&E) or immunofluorescence (IF), and imaging take place on a standard glass slide in the Visium CytAssist workflow. After probe hybridization, two standard glass slides and a two capture area Visium Spatial Gene Expression slide are placed in the CytAssist instrument so that the tissue sections on the standard slides can be aligned on top of the two Visium capture areas. Within the instrument, a brightfield image is captured to provide spatial orientation for data analysis, followed by permeabilization of the tissue and transfer of transcriptomic probes to the Visium Spatial Gene Expression slide. The remaining steps, starting with probe extension, follow the standard Visium for FFPE workflow outside of the instrument. Data is visualized using our software tools.

In 2023, we launched the Visium CytAssist Spatial Gene and Protein Expression assay, introducing the capability to combine whole transcriptome analysis, protein detection and high resolution imaging from the same slide using the Visium CytAssist. The core of this assay is the Human Immune Cell Profiling Panel, an optimized set of probe-conjugated antibodies designed to enable the sequencing read-out of protein expression, designed to overcome the challenges of traditional multiplexed protein detection such as spectral overlap and limitations of antibody host species. This assay also supports customization of protein readout via the addition of user-conjugated antibodies, providing researchers with expanding opportunities to gain multiomic readouts from human FFPE tissues.

We intend to continuously innovate to provide enhanced resolution, performance, throughput and efficiency for our existing Visium Spatial Gene Expression products. Analogous to the Chromium platform, we also aim to develop additional Visium-based applications to allow spatial interrogation of a broader range of biological analytes such as DNA, immune molecules, epigenetics and proteins.

Our Xenium platform

Our Xenium platform for in situ analysis is designed to give scientists the ability to not only locate and type cells in their tissue context, but also to address a variety of specific questions based on previous knowledge of their sample often discovered using our Chromium and Visium platforms.

In situ is a Latin expression that means “in the original place." In situ analysis is used to describe a method to detect and analyze RNA and protein molecules right where they are within the tissue, without the need to extract or capture them.

Based on our internal research and development and the acquisitions of ReadCoor and CartaNA, our Xenium platform is a complete end-to-end solution including a robust instrument, consumables and software.

The Xenium Analyzer instrument, which we began shipping in 2022, is designed for fully automated high-throughput analysis of cells in their tissue environment. The end-to-end solution includes pre-designed, validated panels and analysis tools for visualizing and studying spatial patterns of expression.

Xenium In Situ detects and preserves the cellular localization of RNA targets directly in a fresh frozen or FFPE tissue section without the need for conventional sequencing. This provides researchers with a detailed map of gene expression patterns without sacrificing resolution or target number. Xenium uses circularizable probes specific to target transcripts followed by enzymatic amplification to create a target for fluorescent probe hybridization. On the Xenium Analyzer, microscope images of the tissue detect the location of each fluorescent probe, which is then removed. Successive rounds of fluorescent probe hybridization, imaging and removal creates a unique optical signature that reveals the identity of the RNA at a location within each cell of a tissue. In the future, we expect that Xenium will allow the detection of both RNA and protein in the same tissue section, revealing complex and nuanced expression patterns.

Our Xenium consumables consist of a menu of curated, validated and fit-for-purpose gene panels along with the ability to design custom gene sets. Our current panels include Human Breast, Human Brain, Human Lung, Human Multi-tissue, Human Colon, Human Skin, Mouse Brain and Mouse Tissue Atlassing Gene Expression Panels. The panels were designed using single cell datasets with direct customer input and the genes were chosen to target cell types and cell states for each respective tissue type. Each curated panel can also be customized with up to 100 genes. In addition, customers can purchase a fully custom panel for up to 500 genes.

The Xenium Analyzer instrument comes with onboard analysis capabilities to process image data, localize RNA signals and perform secondary analysis. Customers are able to easily transfer data from the instrument and perform visualization and further analysis with 10x-provided software or other tools of their choice.

With the launch of our Xenium platform in 2022, we introduced Xenium Explorer, an easy-to-use desktop software tool for interactive exploration and data analysis. Xenium Explorer leverages the platform's exploration-ready output to enable researchers to immediately see results at subcellular and tissue scale.

Our software

Our software is essential to our mission of accelerating the mastery of biology. Since our platforms and molecular assays enable new levels of resolution and scale, they produce entirely new types of data and at much larger scales than previously achievable. We have developed sophisticated and scalable software that completes our solutions which we provide to researchers generally free of charge. Our analysis software transforms large amounts of raw data into usable results, giving researchers user friendly tools to dynamically explore these results. As larger and larger amounts of biological data are generated with greater ease, we believe that software tools will become increasingly critical for progress in biology.

Our 10x Genomics Cloud Analysis platform makes it easy for new 10x users to get started and for our advanced users to scale to larger and more complex experiments. With Cloud Analysis, we took the technology that powered our own internal product development for years and brought it to our customers. Optimized for our software products, Cloud Analysis aims to be the easiest-to-use and fastest way to run 10x analysis available. And because we believe analysis is an integral part of our products, we provide ample cloud analysis at no additional cost for every sample our customers run.

Since our founding, we have committed to making software engineering and computational biology world-class, core internal competencies. We believe this deep investment distinguishes us from our competition and is worthwhile because it:

- *Removes barriers to adoption.* With our software, our customers can immediately begin making sense of their experimental data. Without it, they would be forced to develop their own software or wait for the community to do so, slowing down adoption of our products by months or even years;
- *Accelerates utilization.* Easy-to-use, efficient software helps our customers analyze their data and complete their experiments and studies faster, enabling them to move on to their next experimental questions sooner;
- *Increases scale.* Reliable, scalable software helps to remove analysis as a bottleneck as our customers plan larger and more ambitious experimental designs;
- *Expands the user base.* While early adopters are more likely to have access to bioinformatics expertise, our software enables a broader range of customers to take advantage of our solutions;
- *Enables better understanding of our customers' needs.* By supplying analysis software for our customers, we gain much greater insight into their use cases, helping us to design future products that best meet their needs; and
- *Enhances and accelerates product development.* The software we ship to customers is the same software we use to develop and optimize our platforms and chemistry. This aligns us closely with the needs of our customers and reduces our time-to-market.

Our product development approach

The success of our products is founded on how we approach product development. Our employees are deeply scientifically oriented, having the relevant scientific expertise embedded not only within research and development, but also within the management team and throughout the company. We are ambitious and focus on fundamentals. We strive to solve big challenges to enable new fundamental biology and to build technological capabilities with potential for exponential impact. We work closely with our customers, many of whom are thought leaders in genomics and medicine, to identify future frontiers and unmet needs. Once we identify the correct opportunities, which we create through both organic development by our in-house teams and targeted acquisitions of technologies that will accelerate our ability to bring new products to researchers, we have the discipline to focus on execution and have a track record of bringing successful products across multiple platforms to market.

Multidisciplinary collaboration and technological innovation are central to our product development process. We have built teams with deep expertise across diverse disciplines including chemistry, molecular biology, microfluidics, hardware, computational biology and software engineering. This multidisciplinary expertise forms the basis of our innovation engine, which allows us to introduce new products at a rapid pace as well as continuously launch improved versions of our existing products.

Our market opportunity

According to industry sources, the annual worldwide life sciences research tools market totals more than $67 billion. Our diverse products and solutions allow biologists to interrogate and understand biological systems at exceptional resolution and scale. Our focus on enabling a comprehensive view of biology, and not narrowly focusing on a particular analyte such as DNA alone, has produced products which we believe have broad applications and target numerous opportunities across different areas of life sciences research. Because we provide solutions to answer a broad diversity of biological questions, we view much of this total market as ultimately accessible to us.

Areas in which our current solutions offer alternative or complementary approaches to existing tools represented a total opportunity of approximately $16 billion of the more than $67 billion annual global life sciences research tools market. This $16 billion opportunity includes flow cytometry, sequencing, microscopy, high content imaging and sample preparation, among other tools. In many cases, our current solutions offer alternative approaches to existing tools, where the advantages of our solutions can provide more precise answers to existing biological questions than existing tools and technologies. Our tools may also complement, enhance and enable new applications of these technologies. We believe we will compete for research spending within the life science research tools market and capture an increasing share of research budgets as our solutions deliver new capabilities, enable new applications and lead to new discoveries. We also expect to pursue additional opportunities that will further expand our opportunity, including new potential applications of our single cell, spatial and in situ technologies in the future.

We believe the opportunity can also be assessed through the application areas of our tools and the types of questions that researchers are looking to answer. We estimate that there are four categories of research areas:

1. Cell Atlassing. This refers to research that is looking to identify the cellular and molecular building blocks of tissues and work that allows for a baseline characterization of the cells in a system. We estimate this opportunity is $2 billion;
2. Genetic Mechanisms. This refers to research to determine the role of genetics in biological processes and understand genes and their function. We estimate this opportunity is $2 billion;
3. Cellular and Molecular Biology. This refers to research to understand the functions of specific gene, protein or cellular pathways. We estimate this opportunity is $5 billion; and
4. Translational. This refers to research that applies biological learnings to improve human health. Whether for clinical research, within research hospitals or within biopharmaceutical companies, translational research is typically completed by researchers who are looking to understand human tissues and to discover biomarkers or test and develop therapeutics with the goal of impacting human health and disease. We estimate this opportunity is $7 billion.

Growth of our opportunity is also driven by a broad and increasing range of applications for our solutions. Our solutions can be used in many different applications, including basic biology, oncology and immuno-oncology, genetic disease, neurological disease, autoimmunity, infectious disease, the human microbiome and many others. In the “Century of Biology,” we believe that the mastery of biology will create advances and benefits for a broad and growing range of industries including broader segments of the healthcare industry and beyond.

Our competitive strengths

We believe our continued growth will be driven by the following competitive strengths:

Our position as a leader in a large and growing industry. Since launching our first product in mid-2015 through December 31, 2023, cumulatively we have sold 5,966 instruments and we serve thousands of researchers globally. We have fostered deep relationships with many key opinion leaders and our customers include leading academic and translational researchers and biopharmaceutical companies around the world. Our products are an important part of our customers’ workflow and a significant portion of them utilize more than one of our solutions. Our technologies have become a vital tool for biological research. To date, we estimate that more than 7,200 peer-reviewed articles have been published based on data generated using our products. Our position as a leader allows us to form deep partnerships with our customers who help us stay on the frontiers of biology, giving us insight on industry needs that inform our product strategy and providing us with a strong competitive advantage.

Our proprietary technologies. Through multiple years of development, acquisition and in-licensing, we have amassed a core set of technologies and intellectual property rights that form the foundation of our growing suite of products and solutions. These technologies, including instruments, assays and software, combine a diverse set of disciplines, including chemistry, molecular biology, microfluidics, hardware, computational biology and software engineering. Our technologies underlie features and performance that differentiate our products from the competition. Further, many of these technological elements can be utilized

across multiple products, enabling us to leverage our existing infrastructure and investment when building future products, increasing the speed of product development and product performance. Worldwide we own or exclusively in-license over 970 issued or allowed patents and 1,220 pending patent applications as of December 31, 2023. In addition to these owned and exclusively licensed patents and pending patent applications, we also license patents on a non-exclusive and/or territory restricted basis. Our intellectual property portfolio includes important patents and patent applications directed to single cell analysis, epigenomics, spatial analysis, in situ analysis and multiomics.

Our rigorous product development processes and scalable infrastructure. We have implemented a rigorous and systematic product development process by which our vision can be efficiently translated into commercial products. We develop our products over a set of defined phases delineated by validating multifunctional reviews, which ensure our teams remain focused on quality, efficiency and profitability. This process allows many highly focused teams to execute on separate product development efforts in parallel while drawing effectively on the resources and capabilities of the company. We have also built extensive technological and operational infrastructure to support the efficient execution of these teams. This infrastructure includes multiple technological investments across a range of areas, including custom barcoded gel bead production, microfluidic chip manufacturing, scalable high-performance computation and automated software productization and testing tools. This infrastructure can be drawn on to develop new products and improved versions of our existing products with high quality at a rapid pace.

Our customer experience and broad commercial reach. We believe in providing our customers with a high-quality experience from start to finish: starting with a collection of validated methods for preparation of samples to be run on our systems and ending with extensive software to aid in analysis and visualization of the data generated. We have also built comprehensive product testing and quality control into our culture and processes to help guarantee the performance of our products in customer hands. As of December 31, 2023, we employed a commercial team of 450 full time employees. This includes an extensive and highly specialized customer service infrastructure with technical specialists covering multiple areas of expertise, including experimental biology, tissue analysis and handling and software. Many members of our sales and customer service teams have a PhD degree and have significant industry experience. Both our sales and customer service teams help ensure our customers are successful in designing and executing their experiments and have a positive experience with our products.

Our experienced multidisciplinary team. At 10x, we have built a multidisciplinary team with talent and expertise across a diverse set of areas such as chemistry, molecular biology, microfluidics, hardware, computational biology and software engineering who are committed to identifying and addressing problems at the forefront of biology. We have supplemented our diverse technical experience by assembling an operational team with expertise in manufacturing, legal, sales, marketing, customer service, human resources and finance. We believe this confluence of talent from multiple disciplines at 10x allows us to stay ahead of our competitors by identifying highly impactful opportunities and building products and solutions that address these opportunities.

Our growth strategy

Our growth strategy includes the following key elements:

Develop critical enabling technologies. Just as our past success is attributable to our innovative technologies, we believe that our future growth will be driven in large part by our significant continued investment in research and development. We aim to build platforms, consumables and software that further our goals of interrogating, understanding and mastering biological systems at the needed resolution and scale and drive adoption by delivering better insights, workflows and cost structure. We prioritize innovations that meet large unmet market needs, such as measuring novel biological analytes with key functional impact at the single cell level or with spatial context, and our aim to enable superior performance at larger scale and lower cost. We design our products to facilitate the expansion of single cell approaches into more areas of academic research, to increase adoption of single cell approaches in translational and biopharmaceutical applications including by identifying means to drive prices lower to support researchers and expand the opportunity for single cell analysis, and to harness the emergence of spatial biology as a bridge between genomics and pathology. We expect that our investments in research and development will allow us to increase our penetration of our accessible markets.

Expand sales of our instruments. Since our commercial launch in mid-2015 through December 31, 2023, cumulatively we have sold 5,966 instruments and serve thousands of researchers globally. We will target new customers in addition to expanding the number of 10x instruments within institutions that have already recognized the significant value of our technology. A portion of our current laboratory customers do not own a 10x instrument, but rather gain access to one of our instruments through an adjacent lab or core facility within the institution. These customers are substantial and easily accessible and therefore represent an

opportunity for future instrument sales. We also intend to expand our existing geographic reach, both directly and through distributors.

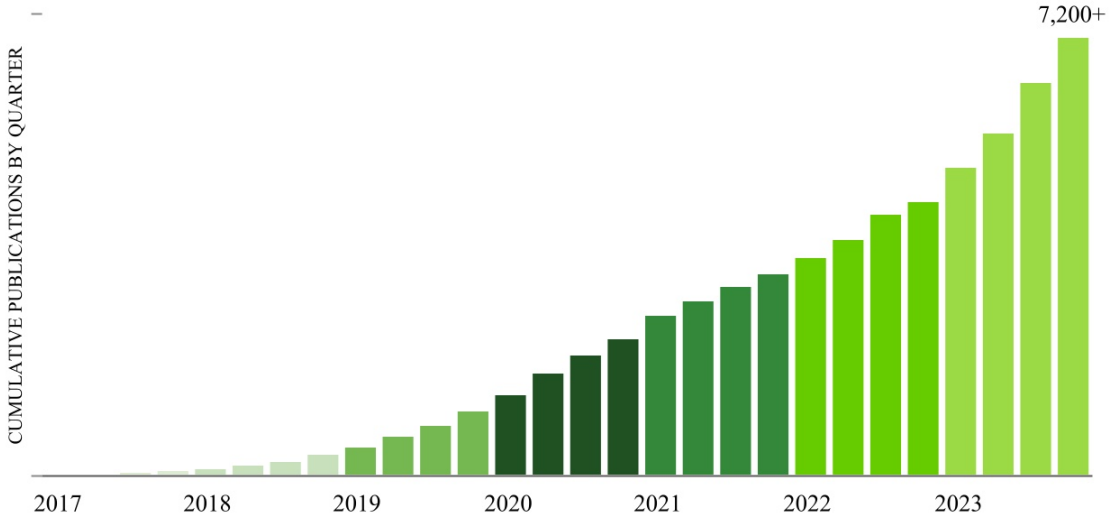
Strengthen use and adoption of our consumables. Our instruments are designed to be used exclusively with our consumables. This closed system generates recurring revenue from consumables tied to each instrument we sell. We plan to drive wider adoption of our products within the workflows of our existing customers. For example, although many biopharmaceutical companies use our products in early drug discovery phases from target identification to validation and across multiple sites, we believe that as our applications are increasingly incorporated into later stages in the drug development process, the amount of our consumables used will grow. We have a dedicated pharmaceutical sales, marketing and business development team to support the adoption cycle by biopharmaceutical companies. We have also added new instruments to our instrument lineup which are aimed at addressing new customer use cases and driving higher consumable revenue growth including our Chromium Connect instrument in 2020, Chromium X Series in 2021 and Visium CytAssist instrument and Xenium Analyzer in 2022. We also plan to demonstrate new applications using our solutions, including applications that synergistically use multiple 10x solutions, to investigate the potential clinical utility of single cell and spatial approaches enabled by our solutions.

Identify the most relevant technologies, create or acquire such technologies and develop them into new products. Over the years, we have developed, acquired or in-licensed technologies and associated intellectual property rights across a broad range of emerging areas within biology and life sciences. The ability to identify these core technologies and capabilities has complemented our internal product development process and enhanced our growing suite of products and solutions. We will continue to identify and acquire or in-license technologies and intellectual property rights that accelerate the development of new features and products or complement our existing features, products and technologies.

Peer-reviewed scientific publications using our products

To date, we estimate that more than 7,200 peer-reviewed articles have been published based on data generated using our products. More than 690 of these articles were published in three of the most highly regarded journals: *Cell*, *Nature* and *Science*. Underscoring the reach of our products, these publications cover a wide range of research and applied areas from cell biology to genetic health to neuroscience with the top three areas of publication, according to our estimates, being oncology, immunology and developmental biology.

CUMULATIVE PUBLICATIONS BY QUARTER



Research and development

Our research and development teams have designed and developed our proprietary products using an interdisciplinary approach that combines expertise across the fields of chemistry, molecular biology, microfluidics, hardware, computational biology and software engineering. Our research and development groups work together in cross-functional project teams, an approach that has been key to our success to date.

The overarching goals of our research and development programs are to continue to bring new technologies to market that address the most pressing questions in biology and to provide exponential advances in human health. To this end, we plan to focus our research and development efforts on the following areas:

Improve the performance of our existing solutions. We plan to improve our existing assays and software. These improvements may provide increased sensitivity to capture greater amounts of signal from biological analytes, allow broader types of biological samples to be interrogated with our solutions and increase the amount of biological information that can be obtained using our software.

Develop new solutions for our platforms. We plan to expand the range of solutions that are available on our Chromium, Visium and Xenium platforms to allow researchers access to new types of starting sample types and biological information.

Improve and develop new capabilities for our instruments. We plan to develop new capabilities that would improve the usability and increase the performance of our instruments.

Develop combined software and workflows across multiple solutions. Our platforms are highly synergistic and leverage shared technologies, workflows and software. We plan to develop workflows that enable users to run multiple assays on the same biological samples and software that simultaneously analyzes the data generated from these multiple assays. We plan to do this for key solution combinations where the information obtained from multiple solutions is highly complementary.

Investigate and develop new technologies. We will seek to both develop and acquire new technologies that could be additive to or complementary with our current portfolio.

Our research and development costs were $270.3 million and $265.7 million for the years ended December 31, 2023 and 2022, respectively. As of December 31, 2023, we employed 451 employees in research and development. Looking forward, we will continue to invest in efforts to support the ongoing development of our instruments, consumables and software across all three of our platforms, as well as enhance the overall performance of our solutions.

Commercial

Commercial team

Since launching our first product in mid-2015, we have expanded our commercial operations and now sell our products in over 50 countries. Our customers primarily include academic, government, biopharmaceutical, biotechnology and other institutions focused on life sciences research. We sell our products primarily through our own direct sales force in North America and certain regions of Europe. As of December 31, 2023, our commercial organization consisted of 450 full time employees, many with PhD degrees and many with significant industry experience. We sell our products through third-party distributors in Asia, certain regions of Europe, Oceania, Central America, South America, the Middle East and Africa.

For the years ended December 31, 2023 and 2022, no single customer, including distributors, represented greater than 10% of our business. For the years ended December 31, 2023 and 2022, sales to academic institutions represented approximately 65% and 61% of our direct sales revenue, respectively. We expect that sales to biopharmaceutical companies will represent a growing proportion of our revenue in the future.

Commercial strategy

Our products are integrated solutions comprised of instruments, consumables and software. We aim to drive customer adoption and sales of our instruments which then forms a base of users who drive revenue by purchasing our consumables. Our products are designed to be easy to install and use without the need for extensive training.

Our customers primarily include academic, government, biopharmaceutical, biotechnology and other institutions. Our strategy typically involves targeting key opinion leaders during the initial phase of our product launches, after which we aim to expand adoption of our products across a broader base of customers. As our customer base has grown, we have been able to sell more instruments to accelerate the adoption of new solutions. Over half of our customers purchased our consumables relating to more than one of our solutions in both the years ended December 31, 2023 and 2022.

Our commercial strategy focuses on ensuring our customers are successful with our products. These successes often result in publications which can drive increased public awareness and further market adoption. Since our first product launch in 2015, we estimate that there have been more than 7,200 publications by researchers using data generated by our products.

Our sales and marketing efforts are targeted at the principal investigators, research scientists, department heads, research laboratory directors and core facility directors at leading academic institutions, biopharmaceutical companies and publicly and privately funded research institutions who control buying decisions. Due to the pricing of our instruments and consumables, the buying decision is often made by the principal investigator rather than by committee or department chair, which we believe simplifies the purchasing decision and has helped accelerate adoption of our products.

We also target researchers who do not own their own 10x instrument, but who have access to one, which we refer to as “halo users.” By sharing one instrument across groups within an institution, multiple halo users are able to utilize the instrument for their own research and experiments. Halo users help drive consumable revenue and utilization of our consumable products and may become future purchasers of a 10x instrument.

The use of our Chromium and Visium products requires the access to, but not necessarily the ownership of, a third-party sequencer. Since third-party sequencers are often accessible as a shared resource and because our Xenium platform does not require the use of a third-party sequencer, our target customer base is broader than those who own a third-party sequencer.

We increase awareness of our products among our target customers through direct sales calls, trade shows, seminars, academic conferences, web presence, social media and other forms of marketing. We supplement these traditional marketing efforts by fostering an active online community of users of our products consisting of communities, forums and blogs with internally generated and user-generated content. We also provide education and training resources, both online and in person.

Suppliers and manufacturing

Our Pleasanton, California and Singapore manufacturing operations are ISO 9001:2015 certified, which covers design, development, manufacturing, distribution, service and sales, and we intend to seek similar certification for our newly acquired operations in Taiwan. We obtain some components of our instruments and consumables from third-party suppliers. While some of these components are sourced from a single supplier, we have qualified second sources for some, but not all, of our components including critical reagents, enzymes and oligonucleotides. We believe that having dual sources for our components helps reduce the risk of a production delay caused by a disruption in the supply of a critical component. For further discussion of the risks relating to our third-party suppliers, see the section titled “*Risk Factors—Risks related to our business and industry—We and our customers are dependent on single source and sole source suppliers for some of the equipment, components and materials used in our products and in conjunction with our products and the loss of any of these suppliers could harm our business.*"

Consumables

The majority of our consumable products are manufactured at our facilities. These manufacturing operations include, among other operations, gel bead generation, surfactant synthesis and emulsion oil formulation, reagent formulation and tube filling, certain of our microfluidic chips, kit assembly and packaging as well as analytical and functional quality control testing.

Instruments

We outsource manufacturing for our Chromium, Visium CytAssist and Xenium instruments to qualified contract manufacturers who have represented to us that they maintain ISO 13485 certification. Our Chromium Connect includes an automated workflow liquid handling robot which is manufactured by our partner. We perform optical and final assembly, instrument integration and testing of our Xenium instrument in-house.

Human Capital

At 10x, our success begins with our people. We are led by a talented, global and diverse team of scientists, software developers and subject matter experts who help drive adoption of our products and support our vision. We have built a multidisciplinary team with talent and expertise across a diverse set of areas such as chemistry, molecular biology, microfluidics, hardware, computational biology and software engineering, and have supplemented this diverse technical experience with our operational team with expertise in manufacturing, legal, sales, marketing, customer service, human resources and finance. As of December 31, 2023, we employed a total of 1,259 individuals, 924 of whom were employed in the United States and 335 of whom were employed outside the United States.

As of December 31, 2023, our employees included 451 in research and development, 450 in sales, marketing and support, 196 in general and administrative and 162 in manufacturing, many of whom hold PhDs in their respective disciplines. Additionally, most of our senior management team and the members of our board of directors hold PhDs and/or other advanced degrees. Our

Company's scientific expertise is therefore embedded within the management team and throughout the organization. We are very proud to say that some of the world-leading experts in chemistry, molecular biology, microfluidics, hardware, computational biology and software engineering work and thrive at 10x. Our employees are highly motivated by our mission.

We continue to emphasize employee development and training. We believe that our future success largely depends upon our continued ability to attract and retain highly skilled employees. We provide our employees with competitive salaries and bonuses, opportunities for equity ownership and development programs that enable continued learning and growth. In addition, we regularly conduct an employee survey to gauge employee engagement and identify areas of focus.

We have never experienced a work stoppage. In addition, none of our U.S. employees are represented by a labor union or covered under a collective bargaining agreement. In our international territories, apart from standard industry-wide labor unions and compulsory collective bargaining agreements, none of our employees are represented by a labor union or subject to a collective bargaining agreement. We consider our relationship with our employees to be positive.

Competition

The life sciences industry is highly competitive. Companies, both established and early stage, have introduced products for, among other things, genomics analysis, single cell analysis, spatial analysis and in situ analysis. We also compete with companies that offer existing tools and technologies for life science research, such as bulk sequencing, flow cytometry, PCR, immunofluorescence, immunohistochemistry and other imaging and cell-based assays, that are replaced by our products. Additional companies, including both early stage and established, have indicated that they are designing, manufacturing and marketing products to compete with us or that they intend to do so in the future. Some of these companies may have substantially greater financial and other resources than we do, including larger research and development staff or larger, more established marketing, distribution, service and sales organizations. In addition, they may have greater name recognition than we do. Other competitors are in the process of developing novel technologies for the life sciences market which may lead to products that rival or replace our products. We expect new competitors to continue to emerge and the intensity of competition to continue to increase.

We believe we are differentiated from our competitors for many reasons, including the capabilities and performance of our products, our advanced proprietary technologies protected by substantial intellectual property, our rigorous product development processes and scalable infrastructure and our superior customer experience and multidisciplinary teams.

For further discussion of the risks we face relating to competition, see the section titled "*Risk Factors—Risks related to our business and industry—Our industry is highly competitive. If we fail to compete effectively, our business and operating results will suffer*."

Government regulation

The development, research, testing, manufacturing, marketing, post-market surveillance, distribution, packaging, import, export, sales, advertising, promotion and labeling of medical devices are subject to regulation in the United States by the U.S. Food and Drug Administration ("FDA") under the Federal Food, Drug, and Cosmetic Act ("FDC Act") and outside the United States by comparable state and international agencies such as the national competent authorities of the European Union ("EU") member states and the Medicines and Healthcare products Regulatory Agency in the United Kingdom. The FDC Act defines a medical device to include, among other things, any instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar or related article, including any component part or accessory, which is (1) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment or prevention of disease, in man or other animals, or (2) intended to affect the structure or any function of the body of man or other animals and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes. Pursuant to its authority under the FDC Act, the FDA has jurisdiction over medical devices, which are defined to include, among other things, in vitro diagnostic devices ("IVDs"). In the EU, until May 25, 2022, IVDs were regulated by Directive 98/79/EC ("EU IVDD"), which has been repealed and replaced by Regulation (EU) No 2017/746 ("EU IVDR"). The EU IVDR establishes a modernized and more robust EU legislative framework, with the aim of ensuring better protection of public health and patient safety. Unlike the EU IVDD, the EU IVDR is directly applicable in all EU member states without the need for member states to implement into national law. This aims at reducing the risk of discrepancies in interpretation across the different European markets. The EU IVDR became applicable on May 26, 2022. The EU IVDR defines an IVD as "any medical device which is a reagent, reagent product, calibrator, control material, kit, instrument, apparatus, piece of equipment, software or system, whether used alone or in combination, intended by the manufacturer to be used in vitro for the examination of specimens, including blood and tissue donations, derived from the human

body, solely or principally for the purpose of providing information on one or more of the following: (a) concerning a physiological or pathological process or state; (b) concerning congenital physical or mental impairments; (c) concerning the predisposition to a medical condition or a disease; (d) to determine the safety and compatibility with potential recipients; (e) to predict treatment response or reactions; (f) to define or monitor therapeutic measures." National competent authorities of the EU member states enforce compliance with medical devices (including IVDs) requirements. The EU rules are generally applicable in the European Economic Area ("EEA") (which consists of the 27 EU member states plus Norway, Liechtenstein and Iceland).

We believe that our current products are not medical devices within the meaning of the FDC Act and foreign regulations applicable in countries where we market our products, such as the EU IVDR in the EU, but we nevertheless market our products for research use only ("RUO"). IVDs that are marketed for RUO are not intended for use in a clinical investigation or for clinical diagnostic use outside an investigation and must be labeled "For Research Use Only. Not for use in diagnostic procedures." Products that are intended for RUO and are properly labeled as RUO are exempt from compliance with the FDA's requirements applicable to medical devices more generally, including the requirements for clearance or approval and compliance with manufacturing requirements known as the Quality System Regulation. In the EU, the EU IVDR clearly indicates that it does not apply to "products or general laboratory use or research-use only products, unless such products, in view of their characteristics, are specifically intended by their manufacturer to be used for in vitro diagnostic examination," and that "a device intended to be used for research purposes, without any medical objective, shall not be deemed to be a device for performance study." To be categorized as an RUO product, the product must have no intended medical purpose or objective. Consequently, products labeled as RUO are essentially not subject to compliance with the EU IVDR requirements such as conformity with general, safety and performance requirements laid down in the EU IVDR. Depending on the products in question, other regulations may be applicable to the RUO products. A product labeled RUO but intended to be used diagnostically may be viewed by the FDA or foreign authorities as adulterated and misbranded under the FDC Act or foreign regulations and subject to FDA or foreign authorities enforcement action. The FDA or foreign authorities may consider the totality of the circumstances surrounding distribution and use of an RUO product, including how the product is marketed, when determining its intended use.

Although we currently market our products as RUO, we may in the future develop products intended to be used for clinical or diagnostic purposes, which would result in the application of a more onerous set of FDA and foreign regulatory requirements. Generally, unless an exemption applies, each new or significantly modified medical device we may seek to commercially distribute in the United States will require either a premarket notification to the FDA requesting permission for commercial distribution under Section 510(k) of the FDC Act, also referred to as a 510(k) clearance, or approval from the FDA of an application for premarket approval ("PMA"). In the EU, there is currently no premarket government review of medical devices (including IVDs). However, all IVDs placed on the EU market must meet general, safety and performance requirements laid down in Annex I to the EU IVDR including the requirement that an IVD must be designed and manufactured in such a way that, during normal conditions of use, it is suitable for its intended purpose. IVDs must be safe and effective and must not compromise the clinical condition or safety of patients, or the safety and health of users and, where applicable, other persons, provided that any risks which may be associated with their use constitute acceptable risks when weighed against the benefits to the patient and are compatible with a high level of protection of health and safety, taking into account the generally acknowledged state of the art. Compliance with general, safety and performance requirements of the EU IVDR is a prerequisite for European conformity marking ("CE mark") without which IVDs cannot be marketed or sold in the EU. The 510(k) clearance, PMA and CE mark processes can be resource intensive, expensive and lengthy, and require payment of significant (user) fees. Medical devices are also subject to post-market requirements. Failure to comply with applicable regulations can result in enforcement actions such as warning letters, fines, injunctions, civil or criminal penalties, termination of distribution, recalls or seizures of products, delays in the introduction of products into the market, total or partial suspension of production, refusal to grant future clearances, approvals or certifications or withdrawals or suspensions of existing clearances, approvals or certifications.

Intellectual property

Our success depends in part on our ability to obtain, maintain, enforce and defend intellectual property rights owned or licensed to us that are directed to our products and technology. We utilize a variety of intellectual property protection strategies, including patents, trademarks, trade secrets, copyright and other methods of protecting proprietary information. Worldwide we own or exclusively in-license over 970 issued or allowed patents and 1,220 pending patent applications as of December 31, 2023. We also license additional patents on a non-exclusive and/or territory restricted basis.

We seek trademark registration to protect key trademarks such as our 10X, 10X GENOMICS, CHROMIUM, VISIUM and XENIUM marks, however, we have not yet registered all of our trademarks in all of our current and potential markets. We own registered trademarks on 10X GENOMICS and product related brand names in the United States and worldwide.

Pursuant to certain license agreements, we in-license rights under certain U.S. and foreign patents and patent applications from third parties directed to our products and technology. Some of these agreements grant us an exclusive right to practice the licensed intellectual property rights in a specific field and/or territory, and are subject to customary restrictions. We may also be obligated to pay our licensors certain milestones, royalties and/or other contingent payments. Subject to customary termination rights, such exclusive license agreements typically will expire upon the last valid claim included in the licensed patents expires or, in some cases, upon our failure to achieve specified sales volume thresholds. Certain of these agreements also require that any products that are covered by the licensed patents be substantially manufactured in the United States.

In September 2013, we entered into an exclusive license agreement with the President and Fellows of Harvard University ("Harvard"), pursuant to which we in-license exclusive, worldwide rights under certain of Harvard's patents and patents applications in the field of sequencing sample preparation and single cell analysis ("Harvard Agreement"). Subject to the terms of the Harvard Agreement, we are required to pay Harvard a low single-digit royalty percentage, based on the net revenue of certain products that are covered by the patents and patent applications licensed under the Harvard Agreement, payable until the last to expire of the valid claims included in such licensed patents and patent applications. The Harvard Agreement is projected to expire in 2034.

In connection with our acquisition of Spatial Transcriptomics Holdings AB ("Spatial Transcriptomics"), we were required to make contingent payments to the sellers based on revenue from sales of Spatial Transcriptomics products and Visium products, for the years ended December 31, 2019 through December 31, 2022. These contingent payments were equal to a percentage in the teens multiplied by such revenue.

In September 2020, we entered into an exclusive license agreement with The Board of Trustees of the Leland Stanford Junior University ("Stanford"), pursuant to which we in-license exclusive, worldwide rights under certain of Stanford's patents and patents applications directed to ATAC-seq technology in all field of use ("Stanford Agreement"). Subject to the terms of the Stanford Agreement, we are required to pay Stanford a low single-digit royalty percentage based on the net revenue of certain ATAC-seq products that are covered by the patents and patent applications licensed under the Stanford Agreement, payable until the last to expire of the valid claims included in such licensed patents and patent applications. The initial exclusivity period of the Stanford Agreement terminates in 2025, provided, we have the option to extend the exclusivity period for additional one-year terms if we meet certain minimum sales thresholds beginning in 2025. If the exclusivity period ends or we fail to extend the exclusivity period, we retain a non-exclusive license under the licensed patents and patent applications. The Stanford Agreement is projected to expire in 2038.

For the years ended December 31, 2023 and 2022, we made aggregate contingent and royalty payments under the Spatial Transcriptomics acquisition agreement, Stanford license agreement and Harvard license agreement, collectively, of approximately $15.4 million and $12.8 million, respectively. Other than payments under the Spatial Transcriptomics acquisition agreement, we expect the size of these payments to grow as our business grows.

The patents we own expire beginning in 2030 and the patents we exclusively in-license expire beginning in 2028.

We intend to pursue additional intellectual property protection to the extent we believe it would be beneficial and cost-effective. We cannot provide any assurance that any of our current or future patent applications will result in the issuance of patents, or that any of our current or future issued patents will effectively protect any of our products or technology from infringement or prevent others from developing, manufacturing or commercializing products or technology that infringe, breach or violate our intellectual property rights.

For further discussion of the risks relating to intellectual property, see the sections titled "*Risk Factors—Risks related to our intellectual property, information technology and data security*" and "*Risk Factors—Risks related to litigation and our intellectual property*."

Data Privacy and Security

Numerous state, federal and foreign laws, regulations and standards govern the collection, use, access to, confidentiality and security of health-related and other personal information, and could apply now or in the future to our operations or the operations of our partners. In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy and security laws and consumer protection laws and regulations govern the collection, use, disclosure, and protection of health-related and other personal information. In addition, certain foreign laws govern the privacy and security of personal data, including health-related data. Privacy and security laws, regulations and other obligations are constantly

evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

Corporate information

We were incorporated in the State of Delaware on July 2, 2012 under the name Avante Biosystems, Inc. We changed our name to 10X Technologies, Inc. in September 2012 and to 10x Genomics, Inc. in November 2014. Our principal executive offices are located at 6230 Stoneridge Mall Road, Pleasanton, California 94588, and our telephone number is (925) 401-7300. We completed our initial public offering in September 2019, and our Class A common stock is listed on the Nasdaq Global Select Market under the symbol "TXG."

Available information

Our website is located at https://www.10xgenomics.com, and our investor relations website is located at https://investors.10xgenomics.com. We have used, and intend to continue to use, our investor relations website as a means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. The following filings are available through our investor relations website as soon as reasonably practicable after we file them with, or furnish them to, the Securities and Exchange Commission ("SEC"): Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and our Proxy Statement for our annual meeting of stockholders. These filings are also available for download free of charge through a link on our investor relations website. The SEC also maintains an internet website at www.sec.gov that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The contents of these websites are not incorporated into this filing. Further, our references to the URLs for these websites are intended to be inactive textual references only.

Item 1A. Risk Factors.

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

Summary Risk Factors

Our business is subject to a number of risks, including risks that may prevent us from achieving our business objectives or may adversely affect our business, financial condition, results of operations, cash flows and prospects. These risks are discussed more fully below and include, but are not limited to, risks related to:

Risks related to our business and industry:

- Fluctuations in our operating results due to a variety of factors;
- Our ability to generate sufficient revenue, to attain cash flows from operating activities in excess of our capital investment requirements and to achieve and maintain profitability;
- Our ability to compete effectively;
- Our ability to increase penetration into our existing customer segments and to maintain and increase the effectiveness of our commercial organization;
- The size of the market for our solutions;
- Our ability to generate revenue from recently introduced or recently announced products;
- The timing of our introduction of new products or new product capabilities, including any delays related to such introductions;
- Our dependency on research and development spending by research institutions;
- Our dependency on revenue generated from the sale of our Chromium solutions;
- Doing business internationally, including in China and elsewhere in the Asia-Pacific region;

- Our ability and the ability of our partners to ship and manufacture products to the necessary specifications and quantities, and within necessary timeframes, to meet demand;
- The ability of suppliers to meet our needs and the needs of our customers;
- Our products are specialized, complex and difficult to manufacture and we could experience production problems, including in sourcing raw materials and undetected errors and defects in our solutions;
- Our ability to develop new products and enhance the capabilities of our existing products;
- Our ability to effectively manage product transitions and forecast customer demand, including for both existing and newly introduced products; and
- The success of our products in achieving and sustaining scientific acceptances.

Risks related to our regulatory environment and taxation:

- Our products could become subject to more onerous government regulation;
- Compliance with existing or enhanced trade tariffs, import restrictions, export restrictions, Chinese regulations or other trade barriers;
- Changes in tax laws or regulations that are applied adversely to us or our customers; and
- Ethical, legal, privacy and social concerns or governmental restrictions surrounding the use of the genomic and multiomic information and gene editing.

Risks related to our intellectual property, information technology and data security:

- Our success will depend on our ability to obtain, maintain and protect our intellectual property rights; and
- Our dependence on certain intellectual property rights that are licensed to us.

Risks related to litigation and our intellectual property:

- Our potential involvement in lawsuits in connection with intellectual property rights; and
- Our ability to effectively protect and enforce our intellectual property rights.

Risks related to ownership of our Class A common stock:

- The multi-class structure of our common stock; and
- The requirement of our bylaws that the State of Delaware is the exclusive forum for substantially all disputes between us and our shareholders.

General risks:

- Our ability to meet our publicly announced guidance or other expectations about our business; and
- The volatility of the market price of our Class A common stock.

The summary risk factors described above should be read together with the text of the full risk factors below in this section entitled "*Risk Factors*" and the other information set forth in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes, as well as in other documents that we file with the SEC. The risks summarized above or described in full below are not the only risks that we face. Additional risks and uncertainties not precisely known to us or that we currently deem to be immaterial may also materially adversely affect our business, financial condition, results of operations and future growth prospects.

Risks related to our business and industry

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

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

- fluctuations in demand for our products, which may vary significantly, our ability to accurately forecast demand, and our ability to increase penetration with our existing customers and to expand to new customers;
- changes in general market conditions and other factors, including factors unrelated to our operating performance or the performance of our competitors;
- the success of our recently introduced and recently announced products and new versions of existing products, and our ability to generate revenue for such products, and the introduction of new products or product enhancements by us or others in our industry including the timing of such introductions;
- risks related to our business and demand for our products in China and elsewhere in the Asia-Pacific region, including competition or other factors;
- the timing and magnitude of our price changes;
- changes in volume and product mix, particularly from products with lower gross margins than other products that we sell, or changes in costs related to our instruments and consumables, including products which incur royalty payment obligations at higher rates than other products we sell;
- changes in governmental funding of life sciences research and development or other changes that impact budgets, budget cycles or seasonal or other spending patterns of our customers;
- changes in the competitive environment, including new product introductions, new versions of existing products with additional capabilities and features or pricing changes;
- investment decisions we make with respect to the allocation of our resources, including regarding product development or to support our commercial organization;
- differences in purchasing patterns across our customer base or across our three platforms and variances in consumables spending for each of our platforms;
- our ability and the ability of our partners to successfully manufacture our instruments and consumables in necessary quantities at necessary quality, including due to the impacts of supply chain disruptions, logistics, shipping and other distribution disruptions and labor shortages;
- the timing and amount of expenditures that we may incur to acquire, develop or commercialize additional products and technologies or for other purposes;
- shortages, delays, production problems, distribution and quality issues with the materials we purchase for manufacturing, which could impact our ability to manufacture and ship our instruments, consumables and related components;
- our inability or the inability of our customers to source our products or necessary equipment, components and materials used in our products or in conjunction with our products because of issues with suppliers, including supply chain disruptions, logistics, shipping and other distribution disruptions and labor shortages;
- excess capacity expenses and higher inventory write-downs;
- our dependence and the dependence of our customers on single source and sole source suppliers for some of the equipment, components and materials used in our products or in conjunction with our products;
- the effects of inflation on us or our customers, manufacturers and suppliers, including increases in the cost of labor and materials;
- higher than anticipated warranty costs;
- the timing and amount of expenditures (including success fees) related to litigation, as well as the outcomes of and related rulings in the litigation and administrative proceedings which may vary substantially from quarter to quarter;
- the outcome of any current or future litigation or governmental investigations involving us or other third parties;
- changes in customer payment timing trends including potential increases in the days sales outstanding (DSO);
- expenses related to our facilities and real estate;
- our ability to successfully integrate personnel, technology and other assets that we acquire into our company;

- difficulties encountered by our commercial carriers in delivering our instruments or consumables, whether as a result of external factors such as weather, customs or import processes, transportation bottlenecks, port lockdowns or slowdowns or fuel shortages or internal issues such as labor disputes or difficulties hiring and retaining adequate staffing;
- disruptions in customers' on-going experiments or interruptions in the ability of our customers to complete research projects;
- reductions in or other difficulties relating to staffing, capacity, shutdowns or slowdowns of laboratories and other institutions, such as reduced or delayed spending on instruments or consumables due to reductions in or other difficulties relating to staffing, capacity, shutdowns or slowdowns of laboratories and other institutions in which our instruments and solutions are used;
- our reputation or public perception of us;
- the impacts of geopolitical issues, infectious disease, epidemics or pandemics on our business operations and on the business operations of our customers, manufacturers and suppliers; 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 at any time. If our revenue or operating results fall below the expectations of analysts or investors or below any guidance we may provide, or if the guidance we provide is below the expectations of analysts or investors, the price of our Class A common stock could decline substantially. Such a stock price decline could occur even when we have met or exceeded any previously publicly stated guidance we may provide.

Our industry is highly competitive. If we fail to compete effectively, our business and operating results will suffer.

We face significant competition. We currently compete with both established and early-stage companies that have introduced products for, among other things, genomics analysis, single cell analysis, spatial analysis and in situ analysis. We also compete with companies that offer existing tools and technologies for life science research, such as bulk sequencing, flow cytometry, PCR, immunofluorescence, immunohistochemistry and other imaging and cell-based assays, that are replaced by our products. There are additional companies, including both early stage and established, that have indicated that they are designing, manufacturing and marketing products to compete with us or that they intend to do so in the future. Some of these companies may have substantially greater financial and other resources than we do, including larger research and development staff or larger, more established marketing, distribution, service and sales organizations. In addition, they may have greater name recognition than we do. Other competitors are in the process of developing novel technologies which may lead to products that rival or replace our products. We expect new competitors to continue to emerge and the intensity of competition with both new and existing competitors to continue to increase.

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

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

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

The demand for genomics products is new and evolving, making it difficult to predict with any accuracy the total potential demand for our current and future solutions. Our estimates of the annual total addressable market for our current and future solutions are based on a number of internal and third-party estimates and assumptions. In particular, our estimates are based on our expectations that researchers seeking life sciences research tools and technologies will view our solutions as competitive alternatives to, or better options than, existing tools and technologies, researchers who already own such existing tools and technologies will recognize the ability of our solutions to complement, enhance and enable new applications of their current tools and technologies and find the value proposition offered by our solutions convincing enough to purchase our solutions in addition to the tools and technologies they already own and the trends we have seen among our customers with respect to placements of our instruments are representative of the broader demand. Underlying each of these expectations are a number of estimates and assumptions, including the assumption that government or other sources of funding will continue to be available to life sciences researchers at times and in amounts necessary to allow them to purchase our solutions.

In addition, our growth strategy involves launching new solutions and expanding sales of existing solutions into new areas in which we have limited or no experience. We also expect to pursue additional opportunities that will further expand our opportunity, including new potential applications of our single cell, spatial and in situ technologies in the future. Sales of new or existing solutions into new opportunities may take several years to develop and mature and we cannot be certain that these opportunities will develop as we expect. For example, new life sciences technology is often not adopted until a sufficient amount of research conducted using such technology has been published in peer-reviewed publications. Because there can be a considerable delay between the launch of a new life sciences product or a new application of an existing life science product and publication of research using such product, new life sciences products or applications do not generally contribute a meaningful amount of revenue in the year they are introduced. In certain situations, new life sciences products or applications, even if sufficiently covered in peer-reviewed publications, may not be adopted until the consistency and accuracy of such technology, method or device has been proven. As a result, the sizes of the annual total addressable market for new products and applications are even more difficult to predict.

While we believe our assumptions and the data underlying our estimates of the total annual addressable market for our solutions are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates, or those underlying the third-party data we have used, may change at any time, thereby reducing the accuracy of our estimates. As a result, our estimates of the annual total addressable market for our solutions may be incorrect.

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

Our future success is dependent upon our ability to increase penetration in our existing customer segments and to maintain and increase the effectiveness of our commercial organization.

Our customer base includes academic, government, biopharmaceutical, biotechnology and other institutions. Our success will depend upon our ability to increase our penetration among these customers, to expand to new customers and to expand our opportunities by developing and marketing new products as well as new applications for existing products. We regularly introduce new versions of existing products, and our future success will partially depend on our ability to commercialize these products. We may not be able to further penetrate our existing customers or expand to new customers. Any failure to increase penetration with existing customers and expand to new customers could adversely impact our operating results.

Certain of our products, certain customers or certain segments, including biopharmaceutical or translational segments, may require commercial team or other personnel with different skills or experience than those we currently employ in our commercial organization. We may also need to identify, adopt and adhere to new or modified commercial processes to maintain and increase the effectiveness of our commercial organization. If we are unsuccessful in adopting and adhering to such commercial processes, or in identifying, recruiting, training and retaining qualified personnel to staff and manage our commercial organization including personnel holding organizational, regional or other leadership positions, our business, results of operations and growth prospects may be harmed.

We may not be able to develop new products, enhance the capabilities of our existing products to keep pace with rapidly changing technology and customer requirements or successfully manage the transition to new product offerings, any of which could have a material adverse effect on our business and operating results.

Our success depends on our ability to develop new products and applications for our technology while improving the performance and cost-effectiveness of our existing products, in each case in ways that address current and anticipated customer requirements. Such success is dependent upon several factors, including feasibility, competition among our products for Company resources and in customer purchasing decisions, functionality, competitive pricing and integration with existing and emerging technologies. The development timelines of certain potential new products may be delayed or precluded due to prioritization of other new products. New technologies, techniques or products offered by others could emerge that might offer better combinations of price and performance or better address customer requirements as compared to our current or future products or in some cases our own new products or new versions of existing products could erode sales or supplant the demand for other products we sell. In addition, while we have invested, and expect to continue to invest, significantly in research and development and the commercialization of both new products and improved versions of existing products, investment decisions we make or have made with respect to the allocation of our substantial but finite resources, including regarding product development or to support our commercial organization, may not be successful or realize their anticipated benefits.

The timing of our price changes or introduction of new products or new product capabilities could negatively impact our business. Our customers may pull in purchasing decisions in advance of announced future price increases or push out purchases to future periods in anticipation of future price reductions, which could cause fluctuations in our operating results. Current and potential customers for our current and future products, including customers interested in genomics, single cell analysis, spatial analysis or in situ solutions, are accustomed to rapid technological change and innovation. Competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. Due to the significant lead time involved in bringing a new product to market, we are required to make a number of assumptions and estimates regarding the technical or commercial feasibility of a new product, including assumptions and estimates regarding our or our partners' ability to design and manufacture potential solutions, the biological analytes that researchers will want to measure, the appropriate method of measuring such analytes, how researchers intend to use the resulting data and the scope and type of data that will be most useful to researchers. As a result, it is possible that we may fail to introduce certain products which we intended (and in some cases may have publicly announced our intention) to bring to market or we may introduce a new product or a new version of an existing product that fails to meet the performance or price expectations of our customers, uses technologies or methods of analysis that have been displaced by the time of launch, competes with one or more of our other products in a way which harms our business, addresses an opportunity that no longer exists or is smaller than anticipated, targets biological analytes or produces data that provides less utility to researchers than anticipated or otherwise is not competitive at the time of launch. Additionally, even if we are successful in introducing new products or new versions of existing products which are embraced by our customers and the research community, such introductions may result in decreased demand for our existing products which are not offset by increases in demand for our new products or versions, at least temporarily. Our revenues may suffer while customers transition their research to utilize our new products or new versions of existing products, as such transitions can be lengthy and require significant time to reach purchasing levels equivalent to those of our existing products.

We face significant competition from both established and early-stage companies, including on price, and the timing and magnitude of our price changes could adversely affect our business, financial condition or results of operations. Our ability to mitigate downward pressure on our selling prices will be dependent upon our ability to maintain or increase the value we offer to researchers. If we decrease prices, we may not see corresponding increases in demand. By contrast, if we increase prices, such increases in our prices could result in volume losses as customers purchase fewer units. If such losses are greater than expected, if we lose existing or potential customers due to price increases, if we decrease prices and demand does not increase in line with our expectations, if we incur substantial expenses or losses associated with unsuccessful product development or launch activities, if the costs to develop, manufacture or sell a new product or new version of an existing product compare unfavorably to other products we sell (including due to incurring royalty payment obligations at higher rates than other products we sell) or if we experience a lack of market acceptance of our new products or new versions of existing products, such events could adversely affect our business, financial condition or results of operations.

Because our solutions are used with other products, including third-party sequencers in the case of our Chromium and Visium solutions, to conduct an experiment, we also expect to face competition from these complementary products, either directly or indirectly, as researchers and labs look to reduce the total cost of any given experiment. For example, if a third-party sequencer manufacturer were successful in vertically integrating their product to provide functionality equivalent to our instruments, they potentially could be able to deliver a solution that is capable of running comparable experiments with a total experiment cost that would be less than the cost of running such experiments using our products together with third-party sequencers. Conversely, if genome sequencing falls out of favor as a preferred approach for genomic research, whether through the development of alternative solutions or real or perceived problems with sequencing itself or if our products are not compatible with third-party sequencers used by our customers or potential customers, the utility of our products which are used in conjunction with third-

party sequencers could be significantly impacted. It is critical to our success that we anticipate changes such as these in technology and customer requirements and successfully introduce new, enhanced and competitive technologies to meet our customers' and prospective customers' needs on a timely and cost-effective basis. If we do not successfully innovate and introduce new technology into our product lines, our business and operating results will be adversely impacted.

Our ability to attract new customers and increase revenue from existing customers depends in large part on our ability to enhance and improve our existing solutions and to introduce compelling new solutions. The success of any enhancement to our solutions depends on several factors, including technical specifications, timely completion and delivery, competitive pricing and features, adequate quality testing, integration with existing technologies and overall market acceptance. Any new solution that we develop may not be introduced in a timely or cost-effective manner, may contain errors, vulnerabilities or bugs, or may not achieve the market acceptance necessary to generate significant revenue. If we are unable to successfully develop new solutions, enhance our existing solutions to meet customer requirements or expectations, or otherwise gain market acceptance, our business, results of operations and financial condition could be harmed.

Our ability to attract new customers and increase revenue from existing customers also depends on our ability to deliver any enhanced or new solutions to our customers in a format where they can be easily and consistently deployed by most or all users without significant customer service or training. If our customers believe that deploying our enhanced or new solutions would be overly time-consuming, confusing or technically challenging, or require significant training or retraining, then our ability to grow our business would be substantially harmed. We aim to create and deliver repeatable, user-friendly, prescriptive approaches to deployment that allow users of all kinds to effectively and easily deploy our solutions, and if we fail to do so, our business and results of operations could be harmed.

The typical development cycle of new life sciences products can be lengthy and complicated and may require new scientific discoveries or advancements and complex technology and engineering. Such developments may involve external suppliers and service providers, making the management of development projects complex and subject to risks and uncertainties regarding timing, timely delivery of required components or services and satisfactory technical performance of such components or assembled products.

Our business currently depends significantly on research and development spending by research institutions, a reduction in which could limit demand for our products and materially and adversely affect our business and operating results.

In the near term, we expect that a large portion of our revenue will continue to be derived from sales of Chromium, Visium and Xenium products, including our instruments and consumables, to research institutions. As a result, the demand for our products will depend upon research priorities and purchasing patterns of these customers, the ability of such customers to adequately staff, access and utilize labs and conduct research, the research and development budgets of these customers and the ability of such customers to receive funding for research, all of which are impacted by factors beyond our control, such as:

- changes in our customers' research priorities;
- decreases in funding of research and development;
- macroeconomic conditions;
- risks related to our business in China and elsewhere in the Asia-Pacific region, including macroeconomic conditions, local competition or other factors:
- scientists' and customers' opinions of the utility of our products or services;
- competitor product offerings or pricing;
- changes in, availability of or interruptions to funding or other incentives for our customers, including VAT and import tax exemptions available or potentially available to certain of our customers in China, including administrative or other delays in funding or incentive award processes, changes in the amount of funds or other incentives allocated to different areas of research, changes that have the effect of increasing the length of the funding or incentive award process;
- our inability or the inability of our customers to source products or necessary equipment, components and materials used in our products or in conjunction with our products because of issues with suppliers or distribution networks, including supply chain disruptions, logistics, shipping and other distribution disruptions and labor shortages;
- citation of new products or services in published research;
- changes in the regulatory environment;
- differences in budgetary cycles;

- market-driven pressures to consolidate operations and reduce costs;
- reductions in or other difficulties relating to staffing, capacity, slowdowns or shutdowns of laboratories or other institutions in which our solutions are used, including reduced or delayed spending on instruments or consumables due to reductions in or other difficulties relating to staffing, capacity, slowdowns or shutdowns of laboratories or other institutions in which our solutions are used; and
- market acceptance of relatively new technologies, such as ours.

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 in recent years, but the NIH also experiences occasional year-over-year decreases in appropriations. 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, operating results and financial condition.

Our customers may encounter problems in hiring and retaining the personnel needed to utilize our products or train others to use our products, which could result in decreased demand for our products and could materially and adversely affect our business, operating results and financial condition. Additionally, the research of our customers often requires long uninterrupted studies performed on a consistent basis over time. Reductions in or other difficulties relating to staffing, capacity, lab slowdowns or shutdowns or interruptions in the ability of our customers to complete research projects could be particularly damaging to these studies, our customers and our business.

We are significantly dependent upon revenue generated from the sale of our Chromium solutions, and in particular our Single Cell Gene Expression solutions.

We currently generate the majority of our revenue from the sale of our instruments and consumables for our Chromium platform. There can be no assurance that we will be able to sustain or increase the success we have achieved with our Chromium solutions. In addition, we may not be able to design future Chromium products that will meet the needs of our customers or become and remain commercially successful. Our expectations are based on the continued success of our existing solutions and the future success of new products and new versions of existing products that we launch. If our Chromium solutions decrease or do not increase in line with our expectations, our revenue and financial results could be materially and adversely impacted.

Doing business internationally creates operational and financial risks for our business.

We currently serve thousands of researchers in many countries and plan to continue to expand to new international jurisdictions as part of our growth strategy. For the years ended December 31, 2023 and 2022, approximately 40% and 45%, respectively, of our revenue was generated from sales to customers located outside of North America. We believe that a significant portion of our future revenue will come from international sources. We sell directly in North America and certain regions of Europe and have a significant portion of our sales and customer service personnel in the United States. We sell our products through third-party distributors in Asia, certain regions of Europe, Oceania, Central America, South America, the Middle East and Africa. As a result, we or our distribution partners may be subject to additional regulations. Conducting operations on an international scale requires close coordination of activities across multiple jurisdictions and time zones. If we fail to coordinate and manage these activities effectively, our business, financial condition or results of operations could be materially and adversely affected and failure to comply with laws and regulations applicable to business operations in foreign jurisdictions may also subject us to significant liabilities and other penalties. International operations entail a variety of other risks, including, without limitation:

- variances in demand for our products across regions, including in China and elsewhere in the Asia-Pacific region;
- challenges in staffing and managing foreign operations, including executing our commercial goals and our dependence on our distributors in certain regions;
- currency fluctuations;

- potentially longer sales cycles and more time required to engage and educate customers on the benefits of our products outside of the United States;
- complexities associated with managing third-party contract manufacturers and suppliers located outside of the United States;
- United States and foreign government trade restrictions, including those which may impose restrictions on the importation, exportation, re-exportation, sale, shipment or other transfer of programming, technology, components and/or services to foreign persons or entities;
- reduced protection for intellectual property rights in some countries and practical difficulties of enforcing intellectual property or other legal rights abroad;
- changes in diplomatic and trade relationships, including new tariffs, trade protection measures, import or export licensing requirements, trade embargoes and other trade barriers;
- tariffs or other restrictions imposed by the United States on goods from other countries and tariffs or other restrictions imposed by other countries on United States goods, or increases in existing tariffs;
- deterioration of political relations between the United States and China, the United States and Russia or other nations or political organizations, which could have a material adverse effect on our sales and operations in these countries;
- the potential need for localized software, documentation and post-sales support;
- changes in social, political and economic conditions or in laws, regulations and policies governing foreign trade, manufacturing, development and investment both domestically as well as in the other countries and jurisdictions into which we sell our products, including as a result of the United Kingdom's exit from the European Union;
- difficulties in obtaining export licenses or in overcoming other trade barriers and restrictions resulting in delivery delays or our inability to manufacture or sell our products in certain countries;
- natural disasters, infectious diseases, conflict, geopolitical turmoil, war, civil unrest, epidemics, pandemics or major catastrophic events;
- increased financial accounting and reporting burdens and complexities;
- higher levels of credit risk and payment fraud and longer payment cycles associated with, and increased difficulty of payment collections from certain international customers; and
- significant taxes or other burdens of complying with a variety of foreign laws, including laws relating to privacy and data protection such as the European Union General Data Protection Regulation ("GDPR").

In conducting our international operations, we are subject to United States laws relating to our international activities, such as the Foreign Corrupt Practices Act of 1977, as well as foreign laws relating to our activities in other countries, such as the United Kingdom Bribery Act of 2010. Additionally, our business must be conducted in compliance with applicable economic and trade sanctions laws and regulations, such as those administered and enforced by the U.S. Department of Treasury's Office of Foreign Assets Control, the U.S. Department of State, the U.S. Department of Commerce, the United Nations Security Council and other relevant sanctions authorities. These laws generally prohibit, unless authorized by the relevant authority or otherwise exempt from the regulations, the conduct of business with persons, countries, regions, and governments that are targeted by "sanctions," including but not limited to persons listed on the United States Department of Commerce's List of Denied Persons and the United States Department of Treasury's Specially Designated Nationals and Blocked Persons List, and the areas subject to trade embargoes by the United States (currently, Cuba, Iran, Syria, North Korea, and the Crimea region of Ukraine). Our global operations expose us to the risk of violating, or being accused of violating, these laws and regulations. Failure to comply may subject us to reputational harm, claims or significant financial and/or other penalties in the United States and/or foreign countries that could materially and adversely impact our operations or financial condition, including criminal fines, imprisonment, civil fines, disgorgement of profits, injunctions and debarment from government contracts, as well as other remedial measures. Investigations of alleged violations can be expensive and disruptive.

These risks have become increasingly prevalent as we have expanded our sales into countries that are generally recognized as having a higher risk of corruption and sanctions risks. As a result of the crisis in Ukraine both the United States and the European Union have implemented sanctions against certain Russian individuals and entities. While at this time we no longer do business in Russia, our previous business there could expose us to risks that could adversely affect our business, financial condition, results of operations, cash flows or the market price of our securities, including tariffs, economic sanctions and import-export restrictions.

Violations of complex foreign and United States laws and regulations could result in fines and penalties, criminal sanctions against us, our officers or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in one or more countries, and could also materially affect our brand, our international growth efforts, our ability to attract and retain employees, our business and our operating results. Even if we implement policies or procedures designed to ensure compliance with these laws and regulations, there can be no assurance that our distribution partners, our employees, contractors or agents will not violate our policies and subject us to potential claims or penalties.

Our business in China subjects us to unique commercial, operational, competitive and regulatory risks.

Weakening economic conditions in China, our dependence on local distributors and other third parties to commercialize our products in China, local competition and trade tensions between the United States and China, among other factors, have in the past resulted, and may again result, in difficulty generating revenue for sales of our products in China. For example, we believe that in the past certain of our distributors in China held excess inventory of certain of our products, in part due to fluctuations in customer purchasing patterns in China due to COVID-19, which we believe resulted in lower than anticipated sales of our products to our distributors in China in 2023 as such distributors sold off such excess inventory. Excess inventory held by our distributors, in China or elsewhere, may negatively impact our revenues in the future.

Our ability to sell our products in China may be negatively impacted by evolving laws and regulations in the U.S. and China. Certain risks and uncertainties of doing business in China are solely within the control of the Chinese government, and Chinese law regulates the scope of our investments and business conducted within China. The Chinese government may adopt new regulations that may impact entities operating in China, potentially with little advance notice. In order to maintain access to the Chinese market, we may be required to comply with significant technical and other regulatory requirements, at times with short notice. These actions may increase the cost of doing business in China or limit how we may do business in China, which could materially and adversely affect our business.

In addition, we have suppliers and manufacturing in Taiwan. As a result, our business could be materially and negatively impacted by adverse changes in China-Taiwan relations. Accordingly, further deterioration in military, political and economic relations between China and Taiwan, as well as the ongoing geopolitical and economic uncertainty between the U.S. and China and other geopolitical risks with respect to China and Taiwan, may cause disruptions in our ability to source products from China Taiwan, including which may, directly or indirectly, harm our business.

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

Our products are integrated solutions with many different components that work together. As such, a quality defect in a single component can compromise the performance of the entire solution. Certain of our consumables are manufactured at our Pleasanton, California, Singapore, Taiwan and other facilities using complex processes, sophisticated equipment and strict adherence to specifications and quality systems procedures. Our Chromium and Visium CytAssist instruments are manufactured by our third-party manufacturers at their facilities. In order to successfully generate revenue from our products, we need to manufacture products that meet our specifications before we allow them to be shipped and to supply our customers with products that meet their expectations for quality and functionality in accordance with established specifications. In order to ensure we are able to meet these expectations, our Pleasanton, California and Singapore manufacturing facilities, as well as the facilities of our third-party manufacturers, have obtained International Organization for Standardization (“ISO”) quality management certifications and employ other quality control measures. On occasion, our customers have experienced quality control and manufacturing defects and may again in the future.

Additionally, as we continue to grow and introduce new products, and as our products incorporate increasingly sophisticated technology, it will be increasingly difficult to ensure our products are produced in the necessary quantities without sacrificing quality and in the necessary timeframes. There is no assurance that we or our third-party manufacturers will be able to continue to manufacture our products so that they consistently achieve the product specifications, quality and volumes that meet our requirements or our customers' expectations. Certain of the raw materials we use and certain of our consumables have a shelf life, after which their performance is not ensured. Expiring raw materials could increase our operational costs and cause delays in manufacturing adequate volumes of our products within the timeframes required. Shipments of defective instruments or consumables to customers may result in recalls and warranty replacements, which would increase our costs, and depending upon current inventory levels and the availability and lead time for additional inventory, could lead to availability issues. Any future design issues, unforeseen manufacturing problems, such as contamination of our third-party manufacturer's facilities, equipment malfunctions, aging components, quality issues with components and materials sourced from third-party suppliers, or failures to strictly follow procedures or meet specifications, may have a material adverse effect on our brand, business, financial condition and operating results and could result in us or our third-party manufacturers losing ISO quality management certifications. If we

or our third-party manufacturers fail to manufacture products without defects that meet our specifications or maintain ISO quality management certifications, our customers might choose not to purchase products from us. Furthermore, we or our third-party manufacturers may not be able to increase manufacturing to meet anticipated demand or may experience downtime.

In addition, as we have increased, and expect in the future we will increase, manufacturing capacity, we have needed, and in the future may need, also to make corresponding improvements to other operational functions, such as our customer service and billing systems, compliance programs and our internal quality assurance programs. We have needed and expect in the future also to need additional equipment, manufacturing and warehouse space and trained personnel to process higher volumes of products. We cannot assure you that such increases in scale, related improvements and quality assurance will be successfully implemented or that equipment, manufacturing and warehouse space and appropriate personnel will be available or that they will realize their intended benefits. As we develop additional products, we may need to bring new equipment online, implement new systems, technology, controls and procedures and hire personnel with different qualifications. Our ability to increase our manufacturing capacity at our Pleasanton, California, Singapore, Taiwan and other locations is complicated by the use of our proprietary equipment that is not readily available from third-party manufacturers.

The risk of manufacturing defects or quality control issues is generally higher for new products, whether produced by us or a third-party manufacturer, products that are transitioned from one manufacturer to another, particularly if manufacturing is transitioned or initiated with a manufacturer we have not worked with in the past, and products that are transferred from one manufacturing facility to another. Our current product roadmap calls for the introduction of new products and new versions of existing products, which may require that we utilize manufacturers with which we have little or no prior manufacturing experience and the risk of manufacturing defects or quality control issues could increase as a result. The expansion of our manufacturing capabilities has increased and in the future could increase the risk of manufacturing defects or quality control issues in the consumables we manufacture. We and our third-party manufacturers may not be able to launch new products or new versions of existing products on time, transition manufacturing of existing products to new manufacturers, transition our manufacturing capabilities to a new location or transition manufacturing of any additional consumables in-house without manufacturing defects or other issues.

An inability to manufacture products and components that consistently meet specifications, in necessary quantities and at commercially acceptable costs will have a negative impact and may have a material adverse effect on our business, financial condition and results of operations.

We and our customers are dependent on single source and sole source suppliers for some of the equipment, components and materials used in our products and in conjunction with our products and the loss of any of these suppliers could harm our business.

We do not have long-term contracts with our suppliers for many of the services, equipment, materials and components we use for the manufacture and delivery of our products. We also rely on single suppliers for certain equipment, materials and components. In many cases we do not have long term contracts with these suppliers, and even in the cases where we do, some such contracts include significant qualifications that would make it extremely difficult for us to force the supplier to provide us with their services, equipment, materials or components should they choose not to do so. We are therefore subject to the risk that these third-party suppliers will not be able or willing to continue to provide us with equipment, materials and components that meet our needs, specifications, quality standards and delivery schedules. Factors that could impact our suppliers' willingness and ability to continue to provide us with the required equipment, materials and components include shortages, alternative priorities, logistics, shipping or other distribution difficulties, disruption at or affecting our suppliers' facilities, such as difficulties hiring and retaining adequate staffing, work stoppages or natural disasters, infectious disease, epidemics or pandemics, adverse weather or other conditions that affect their supply, the financial condition of our suppliers, disagreements, disputes or deterioration in our relationships with these suppliers or the decision by such suppliers to introduce products that compete directly with our solutions. If we are not able to obtain equipment, materials and components that meet our needs, specifications, quality standards and delivery schedule on satisfactory terms, our business will be harmed. Any increase in equipment, material and component costs or decrease in availability could reduce our sales, harm our gross margins or prevent us from timely delivering our products to our customers.

For example, we depend on a limited number of suppliers for enzymes and amplification mixes used in our consumables. In some cases, these manufacturers are the sole source of certain necessary enzymes and reagents. We do not have long-term contracts with many of these sole source suppliers. Lead times for some of these components can be several months or more and in the past have been, and in the future could be again, extended due to supply chain disruptions, labor shortages or other factors. In the event that demand increases, a manufacturing 'lot' does not meet our specifications, we fail to forecast and place purchase orders sufficiently in advance or other issues surface in our supply chain this could result in a material shortage. Some of the components

and formulations are proprietary to our vendors, thereby making second sourcing and development of a replacement difficult. Furthermore, such vendors may have intellectual property rights that could prevent us from sourcing such reagents from other vendors. Some vendors could choose to use their enzymes, amplification mixes or other components to create products that directly compete with our consumables and end our current supplier-customer relationship. If enzymes and reagents become unavailable from our current suppliers and we are unable to find acceptable substitutes for these suppliers, we may be required to produce them internally or change our product designs.

While we make the majority of our equipment in-house, We have not qualified secondary sources for all equipment, materials or components that we source through a single supplier and qualification of a secondary supplier may not prevent future supply issues. Labor shortages, logistics, shipping or other distribution operations difficulties or disruption in the supply of equipment, materials or components could 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 equipment, materials or 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 equipment or materials.

While we have taken steps to mitigate potential supply chain and transportation infrastructure system issues, the impact of supply chain disruptions, logistics, shipping and other distribution disruptions, labor shortages or other factors may exacerbate the risks described in this risk factor and could cause certain of our suppliers to reduce their ability to meet our or our customers' needs, be unable to operate temporarily or even go out of business permanently. The realization of any of these risks could prevent us from producing, selling or delivering our products, reduce our sales and harm our gross margins or permanently cause a change in one or more of our products that may not be accepted by our customers or cause us to eliminate that product altogether. In addition, our suppliers or customers may face difficulties in procuring or delivering, or in some cases may be unable to procure or deliver, the equipment, materials or components from their own suppliers necessary to supply us with products, equipment, components or materials or conduct experiments using our solutions. For example:

- competition for shipping and air transport in the past impacted, and in the future may impact, our ability to timely deliver products to our customers;
- energy shortages and other issues in the past impacted, and in the future may impact, factory production of upstream components utilized by us or our suppliers;
- shortages of non-10x sequencing consumables in the past impacted, and in the future may impact, the workflows of our customers and their ability to complete their experiments;
- plastic component shortages, including of pipette tips utilized by our customers to complete their experiments, in the past impacted, and in the future may impact, the availability of plastic components used by us and our customers in connection with our products;
- shortages of certain chemicals, oils and beads utilized in our microfluidic chips in the past impacted, and in the future may impact, our ability to carry a buffer of inventory to safeguard against continuous significant shortages of such materials;
- semiconductor chip shortages in the past impacted, and in the future may impact, the availability of semiconductor chips utilized in our instruments and in the manufacture of certain of our products; and
- the storage and distribution of vaccines in the past impacted, and in the future may impact, the availability of cold storage for components and materials used by us and our customers in connection with our products.

Our instruments, consumables and related components are specialized, complex and difficult to manufacture. We could experience production problems that impact our ability to manufacture and ship our instruments, consumables and related components, which would materially and adversely affect our business, financial condition and results of operations.

The manufacturing processes we and our third-party manufacturers use to produce our instruments, consumables and related components are specialized and highly complex and require high-quality components. We may have quality variations, supply issues, backorders, delays, shortages or production difficulties of needed components and may require components that are difficult to obtain or manufacture in necessary quantities and at necessary quality, in a timely manner or in accordance with regulatory requirements.

Such issues, issues with our manufacturing processes or the manufacturing processes of our third-party manufacturers, shipping issues, inaccurate demand forecasts or other production issues could result in our inability to produce our products in sufficient volumes and at sufficient quality to meet demand, supply our products to our customers and for our research and development

needs, backorders, insufficient inventory, excess inventory, shipping delays, product deficiencies or other operational failures. For example, in the past the COVID-19 pandemic disrupted air, sea and other travel in the United States and globally. Similar disruptions in the future could reduce or eliminate our ability to receive components or supply our customers. Many other factors could cause production or shipping delays or interruptions, including difficulties in transporting materials, equipment, raw material or other shortages, raw material failures, spoilage, equipment malfunctions, facility contamination, labor problems, natural disasters, infectious disease, conflict, war, civil unrest, epidemics or pandemics, disruption in utility services, terrorist activities or circumstances beyond our control. Additionally, we and our third-party manufacturers may encounter problems in hiring and retaining the experienced specialized personnel needed to develop and operate our manufacturing processes or the manufacturing processes of our third-party manufacturers, which could result in backorders, shortages, delays in our production or difficulties in maintaining compliance with applicable regulatory requirements.

These issues, or any other problems with the production or timely manufacture and shipment of our instruments, consumables and related components, could materially harm our business, financial condition and results of operations.

Certain disruptions in supply of, and changes in the competitive environment for, raw materials integral to the manufacturing of our products may adversely affect our profitability.

We use a broad range of materials and supplies, including metals, chemicals and electronic components, in our products. A significant disruption in the supply of materials could decrease production and shipping levels, materially increase our operating costs and materially adversely affect our profit margins. Shortages of materials or interruptions in production and transportation systems, labor strikes, work stoppages, infectious disease, epidemics or pandemics, geopolitical issues, conflict, war, civil unrest, acts of terrorism or other interruptions to or difficulties in the employment of labor or transportation that adversely impact equipment, materials and components we require for the production of our products, may adversely affect our ability to maintain production of our products and generate revenue. In addition, a significant prolonged increase in inflation could negatively impact the cost of materials and components. Even if in some cases we are able to pass some or all such cost increases to customers by increasing the selling prices of our products, higher product prices may also result in a reduction in sales volumes.

Unforeseen end-of-life or unavailability of certain components, such as enzymes, could force us to purchase materials on the spot market at higher cost or require us to modify our product specifications to accommodate replacement components which could be costly or delay product shipments. If we were to experience a significant disruption in the supply of, or prolonged shortage of, critical components from any of our suppliers and could not procure the components from other sources, we would be unable to manufacture our products and to ship such products to our customers in a timely fashion, which would adversely affect our sales, margins and customer relations.

Undetected errors or defects in our solutions could harm our reputation and decrease market acceptance of our solutions.

Our instruments and consumables, as well as the software that accompanies them, may contain undetected errors or defects due to design, manufacturing, delivery or other issues. Disruptions or other performance problems with our products or software may adversely impact our customers' research or business, harm our reputation and result in reduced revenue or increased costs associated with product repairs or replacements. If that occurs, we may also incur significant costs, the attention of our key personnel could be diverted or other significant customer relations problems may arise. We may also be subject to warranty claims or breach of contract for damages related to errors or defects in our solutions.

Our failure to effectively manage product transitions or accurately forecast customer demand could result in excess or obsolete inventory and resulting charges.

Because the market for our products is characterized by rapid technological advances, we frequently introduce new products with improved ease-of-use, improved performance or additional features and functionality. At times, we preannounce products and services, in some cases before such products and services have been fully developed or tested, and risk failing to meet expectations when and if such products and services become available. The risks associated with the introduction of new products include the difficulties of predicting customer demand and effectively managing inventory levels to ensure adequate supply of the new product and avoiding excess supply of the legacy product, including legacy versions of our instruments which are supplanted by new versions. In addition, in the past supply chain disruptions, logistics, shipping and other distribution disruptions and labor shortages have made it more difficult to predict customer demand and effectively manage inventory levels for our instruments and consumables and at times the risk that we will not be able to source the necessary equipment, components and materials to manufacture our products led us, and may again lead us, to carry higher inventory. Further, differences in purchasing patterns across our customer base could negatively impact our ability to accurately forecast demand.

We may strategically enter into non-cancelable commitments with vendors to purchase materials for our products in advance of demand to take advantage of favorable pricing, address concerns about the availability of future supplies or build safety stock to help ensure customer shipments are not delayed should we experience higher than anticipated demand for materials with long lead times. During periods of decreased demand, which in the past have occurred and which may occur again, these non-cancelable commitments could result in additional inventory-related charges which may adversely impact our financial results and condition.

If our existing and new products fail to achieve and sustain sufficient scientific acceptance, we will not generate expected revenue and our prospects may be harmed.

The life sciences scientific community is comprised in part of a small number of early adopters and key opinion leaders who significantly influence the rest of the community. The success of life sciences products is due, in large part, to acceptance by the scientific community and their adoption of certain products as best practice in the applicable field of research. The 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 is a good barometer for the general acceptance of our products as best practices. Ensuring that early adopters and key opinion leaders publish research involving the use of our products is important to ensuring our products gain widespread acceptance and market growth. Continuing to maintain good relationships with such key opinion leaders is vital to growing our market. The number of times our products were mentioned in peer-reviewed publications has increased significantly since launching our first product in 2015. During this time, our revenue has also increased significantly. Our products may not continue to be mentioned in peer-reviewed articles with frequency. Any new products or new versions of existing products that we introduce in the future may not be mentioned in peer-reviewed articles. If too few researchers describe the use of our products, too many researchers shift to a competing product and publish research outlining their use of that product or too many researchers negatively describe the use or usability of our products in publications, it may drive existing and potential customers away from our products, which could harm our operating results.

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

We have historically experienced rapid growth and we expect that future growth will place significant strains on our management, operational and manufacturing systems and processes, financial systems and internal controls and other aspects of our business. For example, we consummated two acquisitions in each of 2018 and 2020, one in 2021 and another in 2023, and we intend to continue to make investments that meet management's criteria to expand or add key technologies that we believe will facilitate the commercialization of new products or new versions of existing products in the future. We intend to launch additional new products and new versions of existing products in the near future. Further development and commercialization of our current and future products are key elements of our growth strategy. Developing and launching new products and innovating and improving our existing products have required us to hire and retain additional scientific, sales and marketing, software, manufacturing, distribution and quality assurance personnel. As a result, we have experienced rapid headcount growth from 110 employees as of December 31, 2015 to 1,259 employees as of December 31, 2023. As we have grown, our employees have become more geographically dispersed. We may face challenges integrating, developing and motivating our rapidly growing and increasingly dispersed employee base, including as a result of certain of our employees working remotely. In addition, certain members of our management have not previously worked together for an extended period of time, do not have experience managing a public company or do not have experience managing a global business, which may affect how they manage our growth. To effectively manage our growth, we must continue to improve our systems and processes and other aspects of our business and continue to effectively expand, train and manage our personnel. As our organization continues to grow, and we are required to implement more complex organizational management structures, we may find it increasingly difficult to maintain the benefits of our corporate culture, including our ability to quickly develop and launch new and innovative products. If we do not successfully manage our anticipated growth, our business, results of operations and growth prospects will be harmed.

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

We launched our first product in mid-2015 and have historically experienced rapid revenue growth. In addition, we operate in highly competitive markets characterized by rapid technological advances and our business has, and we expect it to continue, to evolve over time to remain competitive. Our limited operating history, evolving business and rapid growth make it difficult to evaluate our future prospects and the risks and challenges we may encounter and may increase the risk that we will not continue to grow at or near historical rates.

If we fail to address the risks and difficulties that we face, including those described elsewhere in this "*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 growing companies with limited operating histories in rapidly changing industries. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations and our business, financial condition and results of operations could be materially and adversely affected.

We have incurred significant losses since inception, we expect to incur losses in the future and we may not be able to generate sufficient revenue to achieve and maintain cash flows from operating activities in excess of our capital investment requirements or profitability.

We have incurred significant losses since we were formed in 2012 and expect to incur losses in the future. We incurred net losses of $255.1 million and $166.0 million for the years ended December 31, 2023 and 2022, respectively. As of December 31, 2023, we had an accumulated deficit of $1.3 billion. We expect that our losses will continue in the near term as we continue to invest significantly in research and development and the commercialization of both new products and improved versions of existing products. We also expect that our operating expenses will continue to increase as we grow our business. To date, we have financed our operations principally from the sale of convertible preferred stock, stock option exercises and purchases under our 2019 Employee Stock Purchase Plan, the sale of Class A common stock in our initial public offering ("IPO") and our September 2020 follow-on offering, revenue from sales of our products and the incurrence of indebtedness. There can be no assurance that our revenue and gross profit will increase sufficiently such that our net losses decline, or we attain cash flows from operating activities in excess of our capital investment requirements on a sustained basis or attain profitability, in the future. Further, our limited operating history and rapid revenue growth over the last several years make it difficult to effectively plan for and model future growth and operating expenses. Our ability to achieve or sustain profitability is based on numerous factors, many of which are beyond our control, including general economic, industry and market conditions, customer purchasing decisions, the impact of market acceptance of our products, future product development, our market penetration and margins and current and future litigation. Additionally, inflationary pressures could adversely impact our financial results. Our operating costs have increased, and may continue to increase, due to the recent growth in inflation. We may not fully offset these cost increases by raising prices for our instruments and consumables, which could result in downward pressure on our margins. Further, our customers may choose to reduce their business with us if we increase our pricing. Additionally, changes in our product mix may negatively affect our gross margins. We may never be able to generate sufficient revenue to achieve or sustain cash flows from operating activities in excess of our capital investment requirements or profitability and our recent and historical growth should not be considered indicative of our future performance. Our failure to achieve or maintain growth, cash flows from operating activities in excess of our capital investment requirements or profitability could negatively impact the value of our Class A common stock.

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

Our future success depends on our ability to recruit, train, retain and motivate key personnel, including our senior management, research and development, manufacturing and sales, customer service and marketing personnel. In particular, Dr. Saxonov, our Chief Executive Officer and one of our co-founders, and Dr. Hindson, our Chief Scientific Officer, President and one of our co-founders, are critical to our vision, strategic direction, culture and products. Competition for qualified personnel is intense, particularly in the San Francisco Bay Area. As we grow, we may continue to make changes to our management team, which could make it difficult to execute on our business plans and strategies. New hires, including executive hires such as a future new Chief Commercial Officer, often require significant training and, in most cases, take significant time before they achieve full productivity. Our failure to successfully integrate our personnel into our business could adversely affect our business. Additionally, some of our employees work remotely and because of the challenges of working remotely, including collaborating with and managing employees, it may take significant time before our teams can achieve full productivity, if at all, and it may take significantly longer for new hires to achieve full productivity, if at all.

We do not maintain key person life insurance for any of our employees. Additionally, we have not entered into fixed term contracts with almost any of our employees and as a result, almost any of our employees could leave our company with little or no prior notice which could harm our business.

Many of our scientific personnel in the United States are qualified foreign nationals whose ability to live and work in the United States is contingent upon the continued availability of appropriate visas. We expect to continue to rely on 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. Additionally, our current or future employees may be negatively affected by delays, disruptions or changes in United States immigration policies. Past United States administrations have made restricting immigration and reforming the work visa process a priority and these efforts may adversely affect our ability to find qualified personnel.

Our continued growth depends, in part, on attracting, retaining and motivating highly trained sales personnel, including individuals with the necessary scientific background and ability to understand our systems at a technical level to effectively identify and sell to potential new customers. In addition, the continued development of complementary software tools, such as our analysis tools and visualization software, requires us to compete for highly trained software engineers in the San Francisco Bay Area and elsewhere and for highly trained customer service personnel globally. We also compete for computational biologists and qualified scientific personnel with other life sciences companies, academic institutions and research institutions. This competition affects both our ability to retain key employees and hire new ones. In August 2022 we conducted a reduction in force in order to decrease costs and maintain a streamlined organization to support the business and in December 2023, we committed to a restructuring plan related to the closure of one of our research and development facilities. In order to be successful and build our framework for future growth, we must continue to execute and deliver on our initiatives with fewer employees and losses of intellectual capital. We must also attract, retain, train and motivate key employees including highly qualified management, scientific, manufacturing, sales, marketing and other personnel who are critical to our business. Additionally, we compete with both companies that may have greater financial resources than we do and early stage companies that promise short-term growth opportunities. We may not be able to attract, retain, train or motivate qualified employees in the future and our inability to do so could materially harm our operating results and growth prospects.

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

Much, and in some cases all, of the manufacturing process for our instruments takes place at our third-party manufacturers' facilities. Many of our consumables are manufactured at our facilities in Pleasanton, California, Singapore, Taiwan or other of our facilities using proprietary equipment. Certain raw materials, such as oligonucleotides and enzymes, are custom manufactured by outside partners. We periodically review the manufacturing capacity of our consumables and we expect to continue to manufacture an increasing amount of consumables in-house. Our Pleasanton facilities also house the majority of our research and development and quality assurance teams. Our Chromium, Visium CytAssist and Xenium instruments are manufactured by our partners at their facilities, while we perform optical and final assembly, instrument integration and testing of our Xenium instrument in-house. The facilities and the equipment we and our third-party manufacturers use to manufacture our instruments and consumables and that we use in our research and development programs would be costly to replace and could require substantial lead times to repair or replace.

Our facilities are vulnerable to natural disasters and catastrophic events. For example, our Pleasanton facilities are located near earthquake fault zones and are vulnerable to damage from earthquakes. Our facilities are vulnerable to other types of disasters, including fires, floods, infectious disease, epidemics or pandemics, power loss, conflict, war, civil unrest, communications failures and similar events. If any disaster or catastrophic event were to occur, our ability to operate our business would be seriously, or potentially completely, impaired. If our facilities or any of our third-party manufacturers' facilities become unavailable or understaffed for any reason, we cannot provide assurances that we will be able to secure alternative manufacturing facilities with the necessary capabilities and equipment on acceptable terms, if at all. Additionally, potential issues with our ability to hire staff or the health and safety of our manufacturing staff could decrease the effectiveness of our manufacturing operations and adversely affect our business and operating results. The inability to manufacture our instruments and/or consumables, combined with potential limited inventory of manufactured instruments and consumables, may result in the loss of customers or harm our reputation, and we may be unable to reestablish relationships with those customers in the future. Because certain of our consumables and the raw materials we use to manufacture 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 consumables and raw materials and we may not be able to replace them without disruption to our customers or at all.

A substantial percentage of our revenue comes from sales to academic institutions, whose research often requires long uninterrupted studies performed on a consistent basis over time; thus interruptions in our ability to supply consumables could be particularly damaging to these studies and our reputation. In addition, the budgetary planning and approval process for academic research programs can be lengthy and begin well in advance of the planned purchase of our instrument and/or consumables. If our products become unavailable during the planning process, researchers may use alternative products.

If our research and development programs were disrupted by a disaster or catastrophe or for other reasons, the launch of new products and the timing of improvements to existing 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 manufacturers' 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, may not cover every potential type of loss event (including earthquakes as we do not carry earthquake insurance coverage) and may not continue to be available to us on acceptable terms, or at all.

We rely exclusively on commercial carriers to transport our products, including perishable consumables, to our customers in a timely and cost-efficient manner and if delivery of our products is disrupted, our business will be harmed.

Our business depends on our ability to quickly and reliably deliver our products and in particular, our consumables, to our customers. The majority of our consumables are perishable and must be kept below certain temperatures. As such, we ship our refrigerated consumables on dry ice and only ship such consumables on certain days of the week to reach customers on a timely basis. Disruptions in the delivery of our products, whether due to hiring difficulties or labor disruptions, fuel shortages, dry ice shortages, bad weather, natural disasters, infectious disease, conflict, war, civil unrest, epidemics or pandemics, terrorist acts or threats or for other reasons could result in delivery delays or our customers receiving consumables that are not fit for usage, and if used, could result in inaccurate results or ruined experiments. For example, certain of our customers were negatively impacted by a process breakdown in our logistics cold-chain that resulted in product spoilage which delayed purchases by affected customers, negatively impacting our revenue in 2022. While we work with customers to replace any consumables impacted by delivery disruptions, our reputation and our business may be adversely impacted if customers receive consumables that are not fit for usage. In addition, if we are unable to continue to obtain delivery services on commercially reasonable terms, our operating results may be adversely affected.

In addition, in the past both shipping and air transport have been negatively impacted in terms of speed and capacity. If we cannot supply our products to our customers in a timely manner, our customers may delay or cancel their orders. Furthermore, even if we have inventory, if we do not have adequate inventory of products in the geographic regions in which they are ordered, we may not be able to deliver products to our customers in a timely manner and customers may delay or cancel their orders. Should we or our commercial carriers encounter difficulties in delivering our instruments or consumables to customers, it could adversely impact our ability to recognize revenue for those products and accordingly adversely affect our financial results for that period and such impact could be particularly acute at the end of any financial quarter.

Costs or other factors related to our facilities and real estate could adversely impact our business.

We may decide to reduce our real estate commitments but be unable to do so. For example, in 2023 we vacated some of our leased office space located in Pleasanton, California comprising of approximately 43,000 square feet for the remaining lease term through 2026 and entered into agreements to sublease some of the vacated office space. Our real estate leases, which generally obligate us for long periods, subject us to potential financial risk. Our real estate strategy may have committed, and may in the future commit, us to leases or other agreements or arrangements requiring us to incur costs for facilities we later determine are unnecessary for our business. While we have the right to terminate or sublease some of our leases under specified conditions, we may not be able to terminate or sublease certain of our leases if or when we would like to do so or we may incur substantial costs to terminate or sublease such leases. In some cases, we have been unsuccessful, and in the future again may be unsuccessful, in terminating or subleasing certain of our leases even if we have determined the facilities subject to these leases are unnecessary for our business and we have incurred, and may in the future incur, costs for such facilities despite not fully utilizing them. If we decide or are required to permanently vacate facilities we lease, we are typically required to continue to perform obligations under the applicable leases, which generally include, among other obligations, paying rent and certain expenses for the balance of the lease term, and the performance of any of these obligations may be significant. When we assign leases or sublease to third parties, or if we vacate facilities we lease, we can remain liable on the lease obligations for the balance of the term and we could be contingently liable if the assignee does not perform their obligations to us or third parties. Additionally, if we may decide to sublease certain of our facilities to third parties, we may be unable to find suitable sublease arrangements for leased facilities that we do not wish to occupy ourselves.

In the past we have expanded, and in the future we may expand, our facilities in the locations where we operate or may operate in the future. For example, in 2023 we completed construction of a new facility on land we own located in Pleasanton, California. We believe that maintaining our existing facilities is necessary to maintain our operations and that, in the future, new facilities may be necessary to support our business. Our ability to maintain our existing facilities, build out new or existing facilities and open new operating facilities depends on our ability to identify attractive locations, negotiate leases, subleases, real estate purchase agreements or other agreements on acceptable terms, identify and obtain adequate utility and water sources and comply with environmental regulations, zoning laws and other similar factors. We may not maintain the level of cash flow or access financing opportunities necessary to support our real estate strategy. Our facilities projects may increase demands on our operational, financial, managerial and administrative resources.

Costs or other factors related to our facilities and real estate ensuing from these and other risks related to our facilities and real estate may adversely impact our business results and financial condition.

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

We differentiate ourselves from our competition in part through our commitment to an exceptional customer experience. Accordingly, high-quality customer service is important for the growth of our business and any failure to maintain such standards of customer service, or a related market perception, could affect our ability to sell products to existing and prospective customers. Additionally, we believe our customer service team has a positive influence on recurring consumables revenue. Providing an exceptional customer experience requires significant time and resources from our customer service team, and failure to manage our customer service organization adequately or impacts on our ability to provide an exceptional customer experience may adversely impact our business results and financial condition.

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

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

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

Our management uses certain key business metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions and such metrics may not accurately reflect all of the aspects of our business needed to make such evaluations and decisions, in particular as our business continues to grow.

In addition to our consolidated financial results, our management regularly reviews a number of operating and financial metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. We believe that these metrics are representative of our current business; however, these metrics may not accurately reflect all aspects of our business and we anticipate that these metrics may change or may be substituted for additional or different metrics as our business grows and as we introduce new products. If our management fails to review other relevant information or change or substitute the key business metrics they review as our business grows and we introduce new products, their ability to accurately formulate financial projections and make strategic decisions may be compromised and our business, financial results and future growth prospects may be adversely impacted.

Investments and acquisitions could disrupt our business, cause dilution to our stockholders and otherwise harm our business.

Over the years, we have acquired technologies and associated intellectual property rights across a broad range of emerging areas within biology and life sciences. We believe we are successfully integrating the technologies we have acquired into our business, but the long-term success of these acquisitions is not guaranteed. We regularly review investment, acquisition and technology licensing opportunities, and we may invest in or acquire additional real estate or additional businesses and legal entities to add specialized employees, products or technologies as well as pursue technology licenses or investments in complementary businesses. Our previous acquisitions and any future transactions could be material to our financial condition and operating results and expose us to many risks, including:

- increases in our expenses and reductions in our cash available for operations and other uses;
- difficulties integrating acquired personnel, technologies and operations into our existing business;
- failure to realize anticipated benefits or synergies from such a transaction;
- unanticipated costs of or legal exposure related to complying with existing and future laws and regulations, including land use, environmental or antitrust-related laws and regulations;
- disruption in our relationships with customers, distributors, manufacturers, suppliers or other third parties as a result of such a transaction;
- unanticipated liabilities related to acquired real estate or companies, including liabilities related to acquired intellectual property or litigation relating thereto;
- diversion of management time and focus from operating our business;
- possible write-offs or impairment charges relating to acquired businesses; and
- potential higher taxes if our tax positions relating to certain acquisitions were challenged.

Foreign acquisitions, such as our acquisitions of Spatial Transcriptomics Holdings AB, CartaNA AB and Tetramer Shop involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries. Even if we identify a strategic transaction that we wish to pursue, we may be prohibited from consummating such transaction due to the terms of future indebtedness we may incur or due to circumstances outside our control including regulatory approval considerations.

Future investments, acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We cannot predict the number, timing or size of future investments, acquisitions or dispositions or the effect that any such transactions might have on our operating results.

Seasonality may cause fluctuations in our revenue and results of operations.

We operate on a December 31st year end and believe that there are significant seasonal factors which may cause sales of our products to vary on a quarterly or yearly basis and increase the magnitude of quarterly or annual fluctuations in our operating results. We believe that this seasonality results from a number of factors, including the procurement and budgeting cycles of many of our customers, especially government- or grant-funded customers, whose cycles often coincide with government fiscal year ends. Furthermore, the academic budgetary cycle similarly requires grantees to ‘use or lose’ their grant funding, which seems to be tied disproportionately to the end of the calendar year, driving sales higher during the fourth quarter. Similarly, our biopharmaceutical customers typically have calendar year fiscal years which also result in a disproportionate amount of their purchasing activity occurring during our fourth quarter. Our international customers also have different purchasing patterns due to procurement or budgeting cycles, holidays or other factors which may result in a disproportionate amount of their purchasing activity occurring in specific periods. These factors have contributed, and may contribute in the future, to substantial fluctuations in our quarterly operating results. Because of these fluctuations, it is possible that in some quarters our operating results will fall below the expectations of securities analysts or investors. If that happens, the market price of our Class A common stock would likely decrease. These fluctuations, among other factors, also mean that our operating results in any particular period may not be relied upon as an indication of future performance. Seasonal or cyclical variations in our sales have in the past, and may in the future, become more or less pronounced over time, and have in the past materially affected, and may in the future materially affect, our business, financial condition, results of operations and prospects. Other fluctuations, including spikes in customer demand for our products in demand for our products, may make it harder for us to distribute our products in a timely manner.

Our reliance on distributors for sales of our products in certain geographies outside of the United States could limit or prevent us from selling our products and impact our revenue.

We sell our products through third-party distributors in Asia, certain regions of Europe, Oceania, Central America, South America, the Middle East and Africa. We intend to continue to grow our business internationally and to do so we must attract additional distributors and retain existing distributors to maximize the commercial opportunity for our products. There is no guarantee that we will be successful in attracting or retaining desirable sales and distribution partners, that such partners will agree to our terms and conditions of sale or that we will be able to enter into such arrangements on favorable terms. Additionally, excess inventory held by our distributors may reduce or delay purchases by such distributors. For example, we believe that in the past certain of our distributors in China held excess inventory of certain of our products, in part due to fluctuations in customer

purchasing patterns in China due to COVID-19, which we believe resulted in lower than anticipated sales of our products to our distributors in China in 2023 as such distributors sold off such excess inventory.

Our distribution relationships are non-exclusive. As such, our distributors may not commit the necessary resources to market our products to the level of our expectations or may choose to favor marketing the products of our competitors. If current or future distributors do not or are unable to perform adequately or if we are unable to enter into effective arrangements with distributors in particular geographic areas, our revenues could be significantly impacted. Additionally, our business, financial condition and results of operations could be materially and adversely affected if we are unsuccessful in selling directly to customers who previously purchased our products from third-party distributors or if our efforts in certain regions to sell directly to certain customers previously served by our distributors negatively impacts our relationships with and the performance of our distributors in such regions or elsewhere.

Uncertain economic or social conditions may adversely impact demand for our products or cause our customers, vendors and suppliers to suffer financial hardship, which could adversely impact our business.

Our business could be negatively impacted by reduced demand for our products related to one or more significant local, regional or global economic or social disruptions. These disruptions have included and may in the future include a slow-down, recession or inflationary pressures in the general economy, reduced market growth rates, tighter credit markets for us, our suppliers, vendors or customers, a significant shift in government policies, significant social unrest, or the deterioration of economic relations between countries or regions. Additionally, these and other economic conditions may cause our suppliers, distributors, contractors or other third-party suppliers or manufacturers to suffer financial or operational difficulties that they cannot overcome, resulting in their inability to provide us with the materials and services we need, in which case our business and results of operations could be adversely affected.

Inflationary pressures, and changes in foreign currency exchange rates, interest rates and market value of our investments, including marketable securities, could have a significant effect on results.

We, our suppliers and our customers are exposed to inflationary pressure and a variety of market risks, including the effects of increases in energy and raw material prices, foreign currency exchange rates and interest rates. Such risks are inherently unpredictable and difficult to mitigate. As a result, significant increases in energy and raw material prices, foreign currency exchange rates or interest rates as well as increased material, freight, logistics, and similar costs could have an adverse effect on our financial condition or results of operations. For example, interest rates have increased significantly as central banks in developed countries attempt to subdue inflation while government deficits and debt remain at high levels in many global markets. Higher government deficits and debt, tighter monetary policy and potentially higher interest rates may drive a higher cost of capital for our business.

Our results of operations could be materially adversely affected by fluctuations in foreign currency exchange rates.

Historically, most of our revenue has been denominated in U.S. dollars, although we have sold our products and services in local currency outside of the United States, principally the euro. For the years ended December 31, 2023 and 2022, approximately 23% and 18%, respectively, of our sales were denominated in currencies other than U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located. As our operations in countries outside of the United States grow, our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future. During periods of economic crises, foreign currencies may be devalued significantly against the U.S. dollar, reducing our margins. In addition, because we conduct business in currencies other than U.S. dollars, but report our results of operations in U.S. dollars, we also face remeasurement exposure to fluctuations in currency exchange rates, which could hinder our ability to predict our future results and earnings and could materially impact revenue and our results of operations. We do not currently maintain a program to hedge foreign currency exposures and even if in the future we do implement a program to hedge such exposures, we may not be successful in mitigating the effects of fluctuations in foreign currency exchange rates.

Due to our exposure to currencies other than U.S. dollars, an increase in the value of certain currencies against the U.S. dollar could increase our costs by increasing labor and other costs that are denominated in local currency. There can be no assurance that any future hedging activities which are designed to partially offset this impact, will be successful. In addition, our currency hedging activities, if any, in the future, could themselves be subject to risk. These could include risks related to counterparty performance under future hedging contracts and risks related to currency fluctuations.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002, as amended ("SOX"), and the rules and regulations of the applicable listing standards of the Nasdaq Global Select Market ("Nasdaq"). We expect that the requirements of these rules and regulations will continue to increase our legal, accounting and financial compliance costs, make some activities more difficult, time-consuming and costly, and place significant strain on our personnel, systems and resources.

SOX requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is accurately recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers. We are also continuing to improve our internal control over financial reporting. In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended, and anticipate that we will continue to expend, significant resources including accounting-related costs and significant management oversight.

Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. Further, weaknesses in our disclosure controls and internal control over financial reporting may be discovered in the future. Any failure to develop or maintain effective controls or any difficulties encountered in their implementation or improvement could harm our results of operations or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting also could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we are required to include in our periodic reports. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our Class A common stock. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on Nasdaq.

We cannot provide any assurance that significant deficiencies or material weaknesses in our internal controls over financial reporting will not be identified in the future. If we fail to remediate any significant deficiencies or material weaknesses that may be identified in the future or encounter problems or delays in the implementation of internal controls over financial reporting, we may be unable to conclude that our internal controls over financial reporting are effective. Any failure to develop or maintain effective controls or any difficulties encountered in our implementation of our internal controls over financial reporting could result in material misstatements that are not prevented or detected on a timely basis, which could potentially subject us to sanctions or investigations by the SEC or other regulatory authorities.

We are required to have an audit of the effectiveness of our internal control over financial reporting. Even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our internal control over financial reporting is documented, designed or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could materially and adversely affect our business, results of operations and financial condition and could cause a decline in the trading price of our Class A common stock.

The continuing impact of "Brexit" may have a negative effect on our business.

Following a national referendum and subsequent legislation, the United Kingdom formally withdrew from the European Union, commonly referred to as "Brexit" and ratified a trade and cooperation agreement governing its future relationship with the European Union ("EU"). Among other things, the agreement, which became effective in 2021, addresses trade, economic arrangements, law enforcement, judicial cooperation and governance. Because the agreement merely sets forth a framework in many respects that requires complex additional bilateral negotiations between the United Kingdom and the European Union, and does not for example provide for the wholesale mutual recognition of product certification, significant uncertainty remains about the practical impacts of the new relationship. Brexit has had, and may continue to have, a significant adverse effect on global economic conditions and the stability of global financial markets, and could significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets.

The illegal distribution and sale by third parties of counterfeit or unfit versions of our products or stolen products could have a negative impact on our reputation and business.

Third parties might illegally distribute and sell counterfeit or unfit versions of our products, which do not meet our rigorous manufacturing, distribution and quality standards. As we expand our business internationally, we expect to encounter counterfeit versions of our products, including our consumables. A researcher who receives and uses counterfeit consumables could obtain erroneous results, experience failed experiments or potentially damage his or her instrument. Our reputation and business could suffer harm as a result of counterfeit products sold under our brand name. Inventory that is stolen from warehouses, plants or while in-transit, and that is subsequently improperly stored and sold through unauthorized channels, could adversely impact our customers' experiments, our reputation and our business.

The investment of marketable securities is subject to risks which may cause losses and affect the liquidity of these investments.

From time to time, we have and may invest portions of excess cash and cash equivalents in marketable securities. We have and may invest in liquid, investment-grade marketable securities such as corporate bonds, commercial paper, asset-backed securities, U.S. treasury securities, money market funds, and other cash equivalents. We currently, and expect to continue, to follow an established investment policy and set of guidelines to monitor and help mitigate our exposure to liquidity and credit risks which set forth credit quality standards and limit our exposure to any one issuer as well as our maximum exposure to various asset classes. However, these investments are subject to general credit, liquidity, market and interest rate risks. We may realize losses in the fair value of these investments, which could include a complete loss of these investments, which would have a negative effect on our consolidated financial statements. In addition, should our investments cease paying or reduce the amount of interest paid to us, our interest income would decrease.

Indebtedness may impair our financial and operating flexibility.

We may incur indebtedness in the future. The debt instruments governing such indebtedness could contain restrictive provisions. If we incur debt, a portion of our cash flows would likely be needed to satisfy our debt service obligations. In the event that additional financing is required, we may not be able to raise it on terms acceptable to us or at all. As a result, we would be more vulnerable to general adverse economic, industry and capital markets conditions in addition to the risks associated with indebtedness described in this risk factor.

Risks related to our regulatory environment and taxation

Our products could become subject to more onerous regulation by the U.S. Food and Drug Administration ("FDA") or other regulatory agencies in the future, which could increase our costs and delay or prevent commercialization of our products, thereby materially and adversely affecting our business, financial condition, results of operations and prospects.

We make certain of our products available to customers as research-use-only ("RUO") products. RUO products are regulated by the FDA as medical devices, and include in vitro diagnostic products in the laboratory research phase of development that are being shipped or delivered for an investigation that is not subject to the FDA's investigational device exemption requirements. Although medical devices are subject to stringent FDA oversight, products that are intended for RUO and are labeled as RUO are exempt from compliance with most FDA requirements, including premarket clearance or approval, manufacturing requirements, and others. A product labeled RUO but which is actually intended for clinical diagnostic use may be viewed by the FDA as adulterated and misbranded under the Federal Food, Drug, and Cosmetic Act ("FDC Act"), and subject to FDA enforcement action. In the EU, under Regulation (EU) No 2017/746 ("EU IVDR"), RUO products which are intended to be used for research purposes, without any medical objective, are not regarded as devices for performance evaluation used in diagnostic procedures. More importantly, the EU IVDR expressly provides that products intended for RUO are excluded from the scope of the Regulation. A material intended for RUO, without any medical purpose or objective, is therefore not considered as an in vitro diagnostic medical device ("IVD") and is not subject to compliance with IVD requirements. However, depending on the type of RUO products in question, requirements to market some products may be tighter under the EU IVDR such as for laboratory developed tests. Depending on the product in question, other regulations may be applicable to the RUO products. The FDA has indicated that when determining the intended use of a product labeled RUO, the FDA will consider the totality of the circumstances surrounding distribution and use of the product, including how the product is marketed and to whom. The FDA and foreign authorities could disagree with our assessment that our products are properly marketed as RUOs, or could conclude that products labeled as RUO are actually intended for clinical diagnostic use, and could take enforcement action against us, including requiring us to stop distribution of our products until we are in compliance with applicable regulations, which would reduce our revenue, increase our costs and adversely affect our business, prospects, results of operations and financial condition. In the event that the FDA or foreign authorities requires us to obtain marketing authorization or certification of our RUO products in the

future, there can be no assurance that these authorities will grant any clearance, approval or certification requested by us in a timely manner, or at all.

We may also in the future decide to develop products that are intended for clinical or diagnostic uses. In the United States, before we can market a new medical device, or a new use of, new claim for or significant modification to an existing product, we must first receive either clearance under Section 510(k) of the FDC Act, or approval of a premarket approval application from the FDA, unless an exemption applies. In the EU, there is currently no premarket government review of medical devices (including IVDs). However, the EU requires that all IVDs placed on the market in the EU must meet general, safety and performance requirements of the EU IVDR including the requirement that an IVD must be designed and manufactured in such a way that, during normal conditions of use, it is suitable for its intended purpose. IVDs must be safe and effective and must not compromise the clinical condition or safety of patients, or the safety and health of users and – where applicable – other persons, provided that any risks which may be associated with their use constitute acceptable risks when weighed against the benefits to the patient and are compatible with a high level of protection of health and safety, taking into account the generally acknowledged state of the art. Compliance with general, safety and performance requirements laid down in Annex I to the EU IVDR is a prerequisite for European conformity marking ("CE mark") without which IVDs cannot be marketed or sold in the EU. The EU regulatory landscape concerning IVDs recently evolved. On May 26, 2022, the EU IVDR became applicable, and repealed and replaced the EU IVDD. Unlike the EU IVDD, the EU IVDR is directly applicable in all EU member states without the need for member states to implement into national law. This aims at reducing the risk of discrepancies in interpretation across the different European markets. The EU IVDR may impose increased compliance obligations for us if we decide to market products for clinical or diagnostic uses and impact our development plans. The EU IVDR does not apply in Great Britain (England, Scotland and Wales) since it came into effect after the United Kingdom's departure from the EU, and consequently, the regulatory framework for IVDs in Great Britain continues to be largely based on the requirements of the EU IVDD as implemented by national law. However under the terms of the Northern Ireland Protocol the EU IVDR does apply in Northern Ireland. The Medicines and Healthcare products Regulatory Agency ("MHRA") has confirmed that it will introduce changes to the legislation applicable in Great Britain, and has stated that it expects the core elements of the new regime to apply from July 2025. Until the final legislation and accompanying guidance has been published there will remain uncertainty as to the future IVD regulatory requirements in Great Britain. In addition, the process of obtaining approval or clearance from the FDA or certification from notified bodies in the EU or approved bodies in the United Kingdom for new products, or with respect to enhancements or modifications to existing products, could take a significant period of time, require the expenditure of substantial resources, involve rigorous pre-clinical and clinical testing, require changes to products or result in limitations on the indicated uses of products. There can be no assurance that we will receive the required approvals, clearances or certifications for any new products or for modifications to our existing products on a timely basis or that any approval, clearance or certification will not be subsequently withdrawn or conditioned upon extensive post-market study requirements. Moreover, even if we receive FDA clearance or approval or certification from foreign bodies of new products or modifications to existing products, we will be required to comply with extensive regulations relating to the development, research, clearance, approval, certification, distribution, marketing, advertising and promotion, manufacture, adverse event reporting, recordkeeping, import and export of such products, which may substantially increase our operating costs and have a material impact on our business, profits and results of operations. Failure to comply with applicable regulations could jeopardize our ability to sell our products and result in enforcement actions such as: warning letters, fines, injunctions, civil penalties, termination of distribution, recalls or seizures of products, delays in the introduction of products into the market, total or partial suspension of production, refusal to grant future clearances, approvals or certifications, withdrawals or suspensions of existing clearances, approvals or certifications, resulting in prohibitions on sales of our products, and in the most serious cases, criminal penalties. Occurrence of any of the foregoing could harm our reputation, business, financial condition, results of operations and prospects.

Enhanced trade tariffs, import restrictions, export restrictions, Chinese regulations or other trade barriers may materially harm our business.

We are continuing to expand our international operations as part of our growth strategy and have experienced an increasing concentration of sales in certain regions outside the United States, including in the Asia-Pacific region. For the years ended December 31, 2023 and 2022, sales outside of North America constituted approximately 40% and 45%, respectively, of our sales revenue and our largest markets outside of North America were China and Germany. There is currently significant uncertainty about the future relationship between the United States and various other countries, most significantly China, with respect to trade policies, treaties, government regulations and tariffs.

Additionally, our business may be adversely impacted by retaliatory trade measures taken by China or other countries. Such measures could include restrictions on our ability to sell or import our instruments and/or consumables into certain countries or have the effect of increasing the prices of our instruments and/or consumables. Although the United States and China signed an interim trade agreement in January 2020 (the "Phase One deal"), the parties are continuing to negotiate a trade agreement. At this

time, it is unknown whether the Phase One deal will last, whether there will be sufficient progress on Phases Two and Three to lead to a further reduction in U.S.-China trade tensions and what effect the ultimate trade agreement will have on our business. There are also pressures on the U.S. Administration to retaliate against China over China's inability to prevent COVID-19 from spreading outside of the country's borders and China's actions in Hong Kong, which could lead to additional U.S., Chinese and other tariffs, or a resumption of trade hostilities, exposing us to increased tariffs in the U.S. and Chinese markets. Therefore, it is possible further tariffs may be imposed that could cover imports of the export or sale of our instruments and/or consumables, or our business may be adversely impacted by retaliatory trade measures taken by China or other countries, which could materially harm our business, financial condition and results of operations. The nature of the dispute between the United States and China is evolving and additional products such as ours could become subject to tariffs, which could adversely affect the marketability of our products and our results of operations. Further, the continued threats of tariffs, trade restrictions and trade barriers could have a generally disruptive impact on the global economy and, therefore, negatively impact our sales. Given the relatively fluid regulatory environment in China and the United States and uncertainty how the United States or foreign governments will act with respect to tariffs, international trade agreements and policies, there could be additional tax or other regulatory changes in the future. Any such changes could directly and adversely impact our financial results and results of operations.

In recent years, the United States government has a renewed focus on export control matters. For example, the Export Control Reform Act of 2018 and regulatory guidance thereunder have imposed additional controls and may result in the imposition of further additional controls, on the export of certain "emerging and foundational technologies." Our current and future products may be subject to these heightened regulations, which could increase our compliance costs.

The imposition of new, or changes in existing, tariffs, trade restrictions, trade barriers, export controls or retaliatory trade measures taken by other countries could adversely impact our business, financial condition and results of operations.

We are subject to risks related to taxation in multiple jurisdictions and changes in tax laws or regulations that are applied adversely to us or our customers may have a material adverse effect on our business, cash flow, financial condition or results of operations.

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

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could adversely affect our domestic and international business operations and our business and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, beginning in 2022, the Tax Cuts and Jobs Act of 2017 (the "TCJA") requires U.S. research and experimental expenditures to be capitalized and amortized ratably over a five-year period. Any such expenditures attributable to research conducted outside the United States must be capitalized and amortized over a 15-year period. In addition, the Inflation Reduction Act of 2022 recently became law and imposes a minimum tax on certain corporations with book income of at least $1 billion, subject to certain adjustments, and a 1% excise tax on certain stock buybacks and similar corporate actions. While certain other draft legislation has been proposed in the U.S., the likelihood of any proposed changes to the tax law being enacted or implemented is unclear, and we are currently unable to predict whether such changes will occur. If any such changes are implemented, we are currently unable to predict the ultimate impact on our business and therefore there can be no assurance our business will not be adversely affected.

In addition, the Organization for Economic Co-Operation and Development has released guidance and blueprints covering various topics, including a global minimum effective tax rate of 15% on certain corporate groups known as "Pillar Two," and rules governing transfer pricing, country-by-country reporting and definitional changes to permanent establishment that could ultimately impact our tax liabilities as those guidance and blueprints are potentially implemented in various jurisdictions. For example, on December 12, 2022, the European Union member states agreed to implement the "Pillar Two" global corporate minimum tax rate as of January 1, 2024. In addition, various other countries where we do business have implemented or plan to implement the "Pillar Two" global corporate minimum tax rate in 2024 and are also actively considering changes to their tax laws

to adopt certain parts of the OECD's proposals. The enactment of this and similar legislation could significantly increase our tax obligations in many countries where we do business.

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

Our ability to utilize our net operating loss carryforwards and research and development credit carryforwards for income tax savings is subject to certain conditions and may be subject to certain limitations in the future due to ownership changes as described below. As such, there can be no assurance that we will be able to utilize such carryforwards. We have experienced a history of losses and a lack of future taxable income would adversely affect our ability to utilize our net operating loss carryforwards and research and development credit carryforwards.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research tax credits, to offset its post-change income may be limited. In general, an "ownership change" will occur if there is a cumulative change in our ownership by certain significant shareholders that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. A portion of our net operating loss carryforwards and other tax attributes may be subject to limitation under Section 382 of the Code as a result of previous ownership changes and such limitations may result in expiration of a portion of our net operating loss carryforwards or other tax attributes before utilization. Our ability to use net operating loss carryforwards, research and development credit carryforwards and other tax attributes to reduce future taxable income and liabilities may be further limited as a result of future changes in stock ownership. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards or other pre-change tax attributes to offset United States federal and state taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

Ethical, legal, privacy and social concerns or governmental restrictions surrounding the use of the genomic and multiomic information and gene editing could reduce demand for our products.

While we do not make gene sequencing or gene editing products, our products are used to better understand genomic information that could further gene editing endeavors. For example, our Chromium Single Cell Gene Expression solution allows users to examine cells that have been genetically perturbed using clustered regularly interspaced short palindromic repeats ("CRISPR") gene editing technology. Advances in genome editing or gene therapy, such as CRISPR Cas9 technology have been subject to negative publicity and increased regulatory scrutiny, in part due to the underlying ethical, legal, privacy and social concerns regarding the use or potential misuse of such technology. Governmental authorities could, for safety, social or other purposes, call for limits on or regulation of technologies and products used in the genome editing or gene therapy fields. Such concerns or governmental restrictions could limit the use of our products. Because the science and technology of genome editing or gene therapy is incredibly complex, any regulations or restrictions placed on such technology or aimed at curtailing its usage could, intentionally or inadvertently, limit or restrict the usage of our products. Any such restrictions or any reduction in usage of our products as a result of concerns regarding the usage of genome editing technology could have a material adverse effect on our business, financial condition and results of operations.

Risks related to our intellectual property, information technology and data security

Our success will depend on our ability to obtain, maintain and protect our intellectual property rights.

Our success and ability to compete depends in part on our ability to obtain, maintain and enforce issued patents, trademarks and other intellectual property rights and proprietary technology in the United States and elsewhere. If we cannot adequately obtain, maintain and enforce our intellectual property rights and proprietary technology, competitors may be able to use our technologies or the goodwill we have acquired in the marketplace and erode or negate any competitive advantage we may have and our ability to compete, which could harm our business and ability to achieve profitability and/or cause us to incur significant expenses.

We rely on a combination of contractual provisions, confidentiality procedures and patent, trademark, copyright, trade secret and other intellectual property laws to protect the proprietary aspects of our products, brands, technologies, trade secrets, know-how and data. These legal measures afford only limited protection, and competitors or others may gain access to or use our intellectual property rights and proprietary information. In addition, patents have a limited lifespan. In the United States, for example, the natural expiration of a utility patent is generally 20 years from the earliest effective non-provisional filing date. Our success will depend, in part, on preserving our trade secrets, maintaining the security of our data and know-how and obtaining, maintaining and enforcing other intellectual property rights. We may not be able to obtain, maintain and/or enforce our intellectual property or other proprietary rights necessary to our business or in a form that provides us with a competitive advantage.

Failure to obtain, maintain and/or enforce intellectual property rights necessary to our business and failure to protect, monitor and control the use of our intellectual property rights could negatively impact our ability to compete and cause us to incur significant expenses. The intellectual property laws and other statutory and contractual arrangements in the United States and other jurisdictions we depend upon may not provide sufficient protection in the future to prevent the infringement, use, violation or misappropriation of our patents, trademarks, data, technology and other intellectual property rights by others, and may not provide an adequate remedy if our intellectual property rights are infringed, misappropriated or otherwise violated by others.

We rely in part on our portfolio of issued patents and pending patent applications in the United States and other countries to protect our intellectual property and competitive position. However, it is also possible that we may fail to identify patentable aspects of inventions made in the course of the development, manufacture and commercialization activities conducted by or on behalf of us before it is too late to obtain patent protection on such inventions. If we fail to timely file for patent protection in any jurisdiction, we may be precluded from doing so at a later date. Although we enter into non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, suppliers, consultants, advisors and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. Furthermore, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in any of our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. Moreover, should we become a licensee of a third party's patents or patent applications, depending on the terms of any future in-licenses to which we may become a party, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain or enforce the patents, covering technology in-licensed from third parties. Therefore, these patents and patent applications may not be prosecuted, maintained and/or enforced in a manner consistent with the best interests of our business. While we generally apply for patents in those countries where we intend to make, have made, use, import, offer for sale or sell our products, we may not accurately predict all of the countries where patent protection will ultimately be desirable. Furthermore, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that could prevent us from importing, manufacturing and/or commercializing our own products or services, or otherwise practicing our own technology. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

The patent positions of companies, including our patent position, may involve complex legal and factual questions that have been the subject of much litigation in recent years, and, therefore, the scope of any patent claims that we have or may obtain cannot be predicted with certainty. Accordingly, we cannot provide any assurances about which of our patent applications will issue, the breadth of any resulting patent, whether any of the issued patents will be found to be infringed, invalid or unenforceable or will be threatened or challenged by third parties, that any of our issued patents have, or that any of our currently pending or future patent applications that mature into issued patents will include, claims with a scope sufficient to protect our products, services or technology. Our pending and future patent applications may not result in the issuance of patents or, if issued, may not issue in a form that will be advantageous to us. The coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. We cannot offer any assurances that the breadth of our issued patents will be sufficient to stop a competitor from developing, manufacturing and commercializing a product or technologies in a non-infringing manner that would be competitive with one or more of our products or technologies, or otherwise provide us with any competitive advantage. Furthermore, any successful challenge to these patents or any other patents owned by or licensed to us after patent issuance could deprive us of rights necessary for our commercial success. Further, there can be no assurance that we will have adequate resources to enforce our patents.

Though an issued patent is presumed valid and enforceable, its issuance is not conclusive as to its validity or its enforceability and it may not provide us with adequate proprietary protection or competitive advantages against competitors with similar products or services. Patents, if issued, may be challenged, deemed unenforceable, invalidated, narrowed or circumvented. Proceedings challenging our patents or patent applications could result in either loss of the patent, or denial of the patent application or loss or reduction in the scope of one or more of the claims of the patent or patent application. Any successful challenge to our patents and patent applications could deprive us of exclusive rights necessary for our commercial success. In addition, defending such challenges in such proceedings may be costly. Thus, any patents that we may own may not provide the anticipated level of, or any, protection against competitors. Furthermore, an adverse decision may result in a third party receiving a patent right sought by us, which in turn could affect our ability to develop, manufacture or commercialize our products or technologies.

Some of our patents and patent applications may in the future be co-owned with third parties. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other third parties, including our competitors, and our competitors could market competing products,

services and technology. In addition, we may need the cooperation of any such co-owners of our patents in order to enforce such patents against third parties, and such cooperation may not be provided to us.

The degree of future protection for our proprietary rights is uncertain, and we cannot ensure that:

- others will not develop, manufacture and/or commercialize similar or alternative products or technologies that do not infringe our patents;
- any patents issued to us will provide a basis for an exclusive market for our commercially viable products or technologies, will provide us with any competitive advantages or will not be challenged by third parties;
- any of our challenged patents will be found to ultimately be valid and enforceable;
- any of our patents, or any of our pending patent applications, if issued, will include claims having a scope sufficient to protect our products or services;
- any of our pending patent applications will issue as patents;
- we will be able to successfully manufacture and commercialize our products on a substantial scale before relevant patents we may have expire;
- we were the first to make the inventions covered by each of our patents and pending patent applications;
- we were the first to file patent applications for these inventions;
- we will develop additional proprietary technologies or products that are separately patentable; or
- our commercial activities or products will not infringe upon the patents of others.

If we cannot successfully enforce our intellectual property rights, the commercial value of our products and technologies will be adversely affected and our competitive position may be harmed.

Third parties, including our competitors, may currently, or in the future, infringe, misappropriate or otherwise violate our issued patents or other intellectual property rights, and we may file lawsuits or initiate other proceedings to protect or enforce our patents or other intellectual property rights, which could be expensive, time-consuming and unsuccessful. We regularly monitor for unauthorized use of our intellectual property rights and, from time to time, analyze whether to seek to enforce our rights against potential infringement, misappropriation or violation of our intellectual property rights. However, the steps we have taken, and are taking, to protect our proprietary rights may not be adequate to enforce our rights as against such infringement, misappropriation or violation of our intellectual property rights. In certain circumstances it may not be practicable or cost-effective for us to enforce our intellectual property rights fully, particularly in certain developing countries or where the initiation of a claim might harm our business relationships. We may also be hindered or prevented from enforcing our rights with respect to a government entity or instrumentality because of the doctrine of sovereign immunity. Our ability to enforce our patent or other intellectual property rights depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their products or technologies. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product or technologies. Thus, we may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete and reduce demand for our products and technologies. We have in the past and may in the future become, involved in lawsuits to protect or enforce our intellectual property rights. An adverse result in any litigation proceeding could harm our business. In any lawsuit we bring to enforce our intellectual property rights, a court may refuse to stop the other party from using the technology at issue on grounds that our intellectual property rights do not cover the technology in question. Any claims we assert against perceived infringers could also provoke these parties to assert counterclaims against us alleging that we infringe, misappropriate or otherwise violate their intellectual property rights. If we initiate legal proceedings against a third party to enforce a patent covering a product or technology, the defendant could counterclaim that such patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are common, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of patentable subject matter, novelty, obviousness, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from USPTO, or made a misleading statement, during prosecution. Mechanisms for such challenges include re-examination, post-grant review, inter partes review, interference proceedings, derivation proceedings, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). In a patent or other intellectual property infringement proceeding, a court may decide that a patent or other intellectual property right of ours is invalid or unenforceable, in whole or in part, construe the patent's claims or other intellectual property narrowly or refuse to stop the other party from using the technology at issue on the

grounds that our patents or other intellectual property do not cover the technology in question. Furthermore, even if our patents or other intellectual property rights are found to be valid and infringed, a court may refuse to grant injunctive relief against the infringer and instead grant us monetary damages and/or ongoing royalties. Such monetary compensation may be insufficient to adequately offset the damage to our business caused by the infringer's competition in the market. An adverse result in any litigation or administrative proceeding could put one or more of our patents or other intellectual property rights at risk of being invalidated or interpreted narrowly, which could adversely affect our competitive business position, financial condition and results of operations. Moreover, even if we are successful in any litigation, we may incur significant expense in connection with such proceedings, and the amount of any monetary damages may be inadequate to compensate us for damage as a result of the infringement and the proceedings.

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

We may also be subject to claims that our former employees, contractors or collaborators, or other third parties have an ownership interest in our current or future patents, patent applications, or other intellectual property rights, including as an inventor or co-inventor. We may be subject to ownership or inventorship disputes in the future arising, for example, from conflicting obligations of employees, consultants or others who were or are involved in developing our products or services. Although it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property rights to execute agreements assigning such intellectual property rights to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property rights that we regard as our own, and we cannot be certain that our agreements with such parties will be upheld in the face of a potential challenge, or that they will not be breached, for which we may not have an adequate remedy. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we 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 rights, and other owners may be able to license their rights to other third parties, including our competitors. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Additionally, we may be subject to claims from third parties challenging ownership interest in or inventorship of intellectual property rights we regard as our own, based on claims that our agreements with employees or consultants obligating them to assign their intellectual property rights to us are ineffective or in conflict with prior or competing contractual obligations to assign inventions and intellectual property rights to another employer, to a former employer, or to another person or entity. Litigation may be necessary to defend against such claims, and it may be necessary or we may desire to obtain a license to such third party's intellectual property rights to settle any such claim; however, there can be no assurance that we would be able to obtain such license on commercially reasonable terms, if at all. If our defense to those claims fails, in addition to paying monetary damages or a settlement payment, a court could prohibit us from using technologies, features or other intellectual property rights that are essential to our products or technologies, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of another person or entity, including another or former employers. An inability to incorporate technologies, features or other intellectual property rights that are important or essential to our products or services could have a material adverse effect on our business, financial condition, results of operations, and competitive position, and may prevent us from developing, manufacturing and/or commercializing our products or technologies. In addition, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against these claims, litigation could result in substantial costs and could be a distraction to management and our employees. Any litigation or the threat thereof may adversely affect our ability to hire employees or contract with independent sales representatives. A loss of key personnel or their work product could hamper or prevent our ability to develop, manufacture and/or commercialize our products or services, which could materially and adversely affect our business, financial condition and results of operations.

We depend on certain intellectual property rights that are licensed to us. We may be unsuccessful in licensing or acquiring intellectual property rights from third parties that may be necessary to develop, manufacture and/or commercialize our current and/or future products or technologies.

Various proprietary technologies that are used in a substantial majority of our consumables are protected by intellectual property rights that we in-license from third parties. Our rights to use such intellectual property rights in our business are subject to the continuation of and our compliance with the terms of the license agreements between us and each of our licensors.

A third party may hold intellectual property rights, including patent rights, that are important or necessary to the development, manufacture and/or commercialization of our current and/or future products or technologies, in which case we would need to acquire or obtain a license to such intellectual property rights from such third party. A third party that perceives us to be a

competitor may be unwilling to assign or license its intellectual property rights to us. In addition, the licensing or acquisition of third-party intellectual property rights is a competitive area, and other companies may also pursue similar strategies to license or acquire such third party's intellectual property rights. Some of these companies may have a competitive advantage over us due to their size, capital resources and greater development, manufacturing and commercialization capabilities. We also may be unable to license or acquire third party intellectual property rights on commercially reasonable terms that would allow us to make an appropriate return on our investment, or we may be unable to obtain any such license or acquisition at all. If we are unable to successfully license or acquire necessary third-party intellectual property rights, we may not be able to develop, manufacture or commercialize our current and/or future products or technologies, which could have a material adverse effect on our business, financial condition and results of operations.

If we fail to execute invention assignment agreements with our employees and contractors involved in the development of intellectual property rights or are unable to protect the confidentiality of our trade secrets, the value of our products and technologies and our business and competitive position could be harmed.

In addition to patent protection, we also rely on other intellectual property rights, including protection of copyright, trade secrets, know-how and/or other proprietary information that is not patentable or that we elect not to patent.

However, trade secrets can be difficult to protect, and some courts are less willing or unwilling to protect trade secrets. To maintain the confidentiality of our trade secrets and proprietary information, we rely heavily on confidentiality provisions that we have in contracts with our employees, consultants, collaborators and other third parties. We generally enter into confidentiality and invention assignment agreements with our employees, consultants and third parties upon their commencement of a relationship with us. However, we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology and processes and we may not enter into such agreements with all employees, consultants and third parties who have been involved in the development of our intellectual property rights. Although we generally require all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information, or technology to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed. In addition, despite the protections we do place on our intellectual property or other proprietary rights, monitoring unauthorized use and disclosure of our intellectual property rights by employees, consultants and other third parties who have access to such intellectual property or other proprietary rights is difficult, and we do not know whether the steps we have taken to protect our intellectual property or other proprietary rights will be adequate. Therefore, we may not be able to prevent the unauthorized disclosure or use of our technical knowledge or other trade secrets by such employees, consultants, advisors or third parties, despite the existence generally of these confidentiality restrictions. These agreements may not provide meaningful protection against the unauthorized use or disclosure of our trade secrets, know-how or other proprietary information in the event the unwanted use is outside the scope of the provisions of the contracts or in the event of any unauthorized use, misappropriation, or disclosure of such trade secrets, know-how or other proprietary information that we fail to detect. There can be no assurances that such employees, consultants, advisors or third parties will not breach their agreements with us, that we will have adequate remedies for any breach, or that our trade secrets will not otherwise become known or independently developed by third parties, including our competitors. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed. The exposure of our trade secrets and other proprietary information would impair our competitive advantages and could have a material adverse effect on our business, financial condition and results of operations. In particular, a failure to protect our proprietary rights may allow competitors to copy our technology, which could adversely affect our pricing and market share.

Costly and time-consuming litigation could be necessary to enforce and determine the scope of our trade secret rights and related confidentiality and nondisclosure provisions, and outcomes are unpredictable. Further, it is possible that others will independently develop the same or similar technology, products or services or otherwise obtain access to our unpatented technology, and in such cases, we could not assert any trade secret rights against such parties. If we fail to obtain or maintain trade secret protection, or if our competitors obtain our trade secrets or independently develop technology or products similar to ours, our competitive market position could be materially and adversely affected. In addition, some courts are less willing or unwilling to protect trade secrets and agreement terms that address non-competition are difficult to enforce in many jurisdictions and might not be enforceable in certain cases.

In addition to contractual measures, we try to protect the confidential nature of our proprietary information by maintaining physical security of our premises and electronic security of our information technology systems. Such security measures may not, for example, in the case of misappropriation of a trade secret by an employee, consultant or other third party with authorized access, provide adequate protection for our proprietary information. Our security measures may not prevent an employee,

consultant or other third party from misappropriating our trade secrets and providing them to a competitor, and recourse we take against such misconduct may not provide an adequate remedy to protect our interests fully. Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products or services that we consider proprietary. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. Further, we may not be able to obtain adequate remedies for any breach. While we use commonly accepted security measures, trade secret violations are often a matter of state law in the United States, and the criteria for protection of trade secrets can vary among different jurisdictions. If the steps we have taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret. In addition, trade secrets may be independently developed by others in a manner that could prevent legal recourse by us. If any of our intellectual property rights or confidential or proprietary information, such as our trade secrets, were to be disclosed or misappropriated, or if any such information was independently developed by a competitor, it could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

We may be subject to claims that we or our employees have misappropriated the intellectual property rights of a third party, including trade secrets or know-how, or are in breach of non-competition or non-solicitation agreements with our competitors.

We may be subject to claims that our employees or consultants have wrongfully used for our benefit or disclosed to us confidential information, including trade secrets or know-how, of third parties. Many of our employees and consultants were previously employed at or engaged by other medical device companies, including our competitors or potential competitors. Some of these employees and consultants may have executed confidential information non-disclosure and inventions assignment agreements and non-competition agreements in connection with such previous employment or engagements. Although we try to ensure that our employees and consultants do not use the intellectual property rights, proprietary information, know-how or trade secrets of others in their work for us, we may be subject to claims that we or these individuals have, inadvertently or otherwise, misappropriated the intellectual property rights or disclosed the alleged trade secrets or other proprietary information, of these former employers, clients or other third parties. To the extent that our employees or consultants use intellectual property rights or proprietary information owned by others in their work for us, disputes may arise as to the rights in any related or resulting know-how and inventions. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and even if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees.

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

The U.S. Patent and Trademark Office, or USPTO, and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In addition, periodic maintenance fees, renewal fees, annuity fees and various other government fees on issued patents often must be paid to the USPTO and foreign patent agencies over the lifetime of the patent and/or applications and any patent rights we may obtain in the future. While an unintentional lapse of a patent or patent application can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our patent licensors fail to maintain the patents and patent applications covering our products, services or technology, we may not be able to stop a competitor from marketing products, services or technologies that are the same as or similar to our products, services or technologies which would have a material adverse effect on our business, financial condition and results of operations.

Changes in patent law could diminish the value of our patents in general, thereby impairing our ability to protect our current and future products, services or technologies, and could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our current or future patents.

Our ability to obtain patents and the breadth of any patents obtained is uncertain in part because, to date, some legal principles remain unresolved, and there has not been a consistent policy regarding the breadth or interpretation of claims allowed in patents in the United States and other countries. Changes in either patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property rights or narrow the scope of our patent protection, which in turn could diminish the commercial value of our products, services and technologies.

Patent reform legislation may pass in the future that could lead to additional uncertainties and increased costs surrounding the prosecution, enforcement and defense of our patents and applications. Furthermore, the U.S. Supreme Court and the U.S. Court of Appeals for the Federal Circuit have made, and will likely continue to make, changes in how the patent laws of the United States are interpreted. The United States Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations.

In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on actions by the United States Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce patents that we own or that we might obtain or license in the future. An inability to obtain, enforce, and defend patents covering our proprietary technologies would materially and adversely affect our business prospects and financial condition.

For example, 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. Specifically, these decisions stand for the proposition that patent claims that recite laws of nature (for example, the relationships between gene expression levels and the likelihood of risk of recurrence of cancer) are not themselves patentable unless those patent claims have sufficient additional features that provide practical assurance that the processes are genuine inventive applications of those laws rather than patent drafting efforts designed to monopolize the law of nature itself. What constitutes a “sufficient” additional feature is uncertain. Furthermore, in view of these decisions, in December 2014, the USPTO published revised guidelines for patent examiners to apply when examining process claims for patent eligibility. This guidance was updated by the USPTO in July 2015 and additional illustrative examples provided in May 2016. The USPTO provided additional guidance on examination procedures pertaining to subject matter eligibility in April 2018 and June 2018. The guidance indicates that claims directed to a law of nature, a natural phenomenon or an abstract idea that do not meet the eligibility requirements should be rejected as non-statutory, patent ineligible subject matter; however, method of treatment claims that practically apply natural relationships should be considered patent eligible. We cannot assure you that our patent portfolio will not be negatively impacted by the current uncertain state of the law, new court rulings or changes in guidance or procedures issued by the USPTO. 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 and validity of patents within the life sciences and any such changes could have a negative impact on our business.

Similarly, foreign courts have made, and will likely continue to make, changes in how the patent laws in their respective jurisdictions are interpreted. Changes in patent laws and regulations in other countries or jurisdictions, changes in the governmental bodies that enforce them, or changes in how the relevant governmental authority enforces patent laws or regulations may weaken our ability to obtain new patents or to enforce patents that we own or may obtain in the future. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. In addition, any protection afforded by foreign patents may be more limited than that provided under U.S. patent and intellectual property laws. We may encounter significant problems in enforcing and defending our intellectual property both in the United States and abroad. For example, if the issuance in a given country of a patent covering an invention is not followed by the issuance in other countries of patents covering the same invention, or if any judicial interpretation of the validity, enforceability or scope of the claims or the written description or enablement in a patent issued in one country is not similar to the interpretation given to the corresponding patent issued in other countries, our ability to protect our intellectual property rights in those countries may be limited. Changes in either patent laws or in interpretations of patent laws in the United States and other countries may materially diminish the value of our intellectual property rights or narrow the scope of our patent protection. We cannot predict future changes in the interpretation of patent laws or changes to patent laws that might be enacted into law by U.S. and foreign legislative bodies. Those changes may materially affect our patents or patent applications and our ability to obtain additional patent protection in the future. Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

In June 2023, the European Unitary Patent system and the European Unified Patent Court (“UPC”) were launched. European patent applications now have the option, upon grant of a patent, of becoming a Unitary Patent which is subject to the jurisdiction of the UPC. In addition, conventional European patents, both already granted at the time the new system began and granted thereafter, are subject to the jurisdiction of the UPC, unless actively opted out. This was a significant change in European patent practice, and deciding whether to opt-in or opt-out of Unitary Patent practice entail strategic and cost considerations. The UPC provides third parties with a new forum to centrally revoke our European patents and makes it possible for a third party to obtain pan-European injunctions against us. It will be several years before we will understand the scope of patent rights that will be recognized and the strength of patent remedies that will be provided by the UPC. While we have the right to opt our patents out of the UPC over the first seven years of the court’s existence, doing so may preclude us from realizing the benefits of the UPC.

Moreover, the decision whether to opt-in or opt-out of Unitary Patent status will require coordinating with co-applicants, if any, adding complexity to any such decision.

The legal systems in certain countries may also favor state-sponsored or companies headquartered in particular jurisdictions over our first-in-time patents and other intellectual property protection. We are aware of incidents where such entities have stolen the intellectual property of domestic companies in order to create competing products and we believe we may face such circumstances ourselves in the future. For example, through its "Annual Special 301 Report on Intellectual Property," the Office of the United States Trade Representative ("USTR") has been reporting on the adequacy and effectiveness of intellectual property protection in a number of foreign countries that are U.S. trading partners and their protection and enforcement of intellectual property rights. A number of countries in which both we and our distributors operate have been identified in the reports as being on the Priority Watch List. Placement of a country on the Priority Watch List indicates that particular problems exist in that country with respect to intellectual property protection, enforcement, or market access for persons relying on intellectual property rights. Countries placed on the Priority Watch List are the focus of increased bilateral attention concerning the specific problem areas. It is possible that we will not be able to enforce our intellectual property rights against third parties that misappropriate our proprietary technology in those countries.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

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

- others may independently develop, manufacture and commercialize products, services or technologies that are similar to or are alternatives or duplicates of any of our products, services or technologies without infringing, misappropriating or otherwise violating our intellectual property rights;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors;
- it is possible that our pending patent applications or those that we may own in the future will not lead to issued patents or even when they issue, the scope of the claims may be narrowed;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop, manufacture and commercialize competitive products, services or technologies for sale in our major commercial markets;
- we, or current or future licensors or collaborators, might not have been the first to make the inventions covered by the issued patent or pending patent application that we license or may own in the future;
- we, or current or future licensors or collaborators, might not have been the first to file patent applications covering certain of our or their inventions;
- we may not develop additional proprietary technologies that are patentable;
- the intellectual property rights of others may harm our business; and
- we may choose not to seek patent protection for some of our proprietary technology to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such trade secrets or know-how.

If our trademarks and trade names are not adequately protected, we may not be able to build name recognition in our markets of interest and our competitive position may be harmed.

Our trademarks could be challenged, invalidated, infringed, and circumvented by third parties, and our trademarks could also be diluted, declared generic or found to be infringing on other marks. If any of the foregoing occurs, we could be forced to re-brand our products, services or technologies, resulting in loss of brand recognition and requiring us to devote resources to advertising and marketing new brands, and suffer other competitive harm. Third parties may also adopt trademarks similar to ours, which could harm our brand identity and lead to market confusion. Further, there can be no assurance that competitors will not infringe our trademarks or that we will have adequate resources to enforce our trademarks. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. Certain of our current or future trademarks may become so well known by the public that their use becomes generic and they lose trademark protection. 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. Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, operating results and prospects.

We rely on our trademarks, trade names and brand names, such as our 10X, 10X GENOMICS, CHROMIUM, VISIUM and XENIUM marks, to distinguish our products, services and technologies from the products, services and technologies of our competitors, and have registered or applied to register many of these trademarks in the United States and certain countries outside the United States, however, we have not yet registered all of our trademarks in all of our current and potential markets. There can be no assurance that our trademark applications will be approved for registration. During trademark registration proceedings, we may receive rejections. Although we are given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in proceedings before the USPTO and comparable agencies in many foreign jurisdictions, third parties may also oppose our trademark applications and may seek to cancel trademark registrations or otherwise challenge our use of the trademarks. Opposition or cancellation proceedings may be filed against our trademark filings in these agencies, and such filings may not survive such proceedings. While we may be able to continue the use of our trademarks in the event registration is not available, particularly in the United States, where trademark rights are acquired based on use and not registration, third parties may be able to enjoin the continued use of our trademarks if such parties are able to successfully claim infringement in court. In addition, opposition or cancellation proceedings may be filed against our trademark applications and registrations and our trademarks may not survive such proceedings. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would. Our trademarks or trade names may be infringed, circumvented, declared generic or determined to be violating or infringing on other marks.

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

Our solutions contain software tools licensed by third parties under open source software licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source software licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source software licenses contain requirements that the licensee make its source code publicly available if the licensee creates modifications or derivative works using such open source software, depending on the type of open source software the licensee uses and how the licensee uses it. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source software licenses, be required to make available the source code of certain of our proprietary software to the public for free. This could allow our competitors to create similar products with less development effort and time and ultimately could result in a loss of product sales and revenue. In addition, some companies that use third-party open source software have faced claims challenging their use of such open source software and their compliance with the terms of the applicable open source license. We may be subject to suits by third parties claiming ownership of what we believe to be open source software, or claiming non-compliance with the applicable open source licensing terms. Use of open source software may also present additional security risks because the public availability of such software may make it easier for hackers and other third parties to compromise or attempt to compromise our technology platform and systems.

Although we typically review our use of open source software to avoid subjecting our solutions to conditions we do not intend, the terms of many open source software licenses have not been interpreted by United States courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our solutions. Moreover, our processes for monitoring and controlling our use of open source software in our solutions may not be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our solutions on terms that are not economically feasible, to re-engineer our solutions, to discontinue the sale of our solutions if re-engineering could not be accomplished on a timely basis, to pay statutory or other damages to the license holder or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, operating results and financial condition.

We collect, process, store, share, disclose and use personal information and other data, which subjects us to governmental regulations and other legal obligations related to privacy and security, and our actual or perceived failure to comply with such obligations could harm our business.

We collect, process, store, transmit, disclose and use information from our employees, customers and others, including personal information and other data, some of which may be sensitive in nature. There are numerous federal, state and foreign laws and regulations regarding data protection, privacy and security. We strive to comply with applicable laws, our posted policies and legal contractual obligations relating to privacy and data protection. However, the scope of these laws is changing, is subject to differing interpretations, may be costly to comply with and may be inconsistent among countries and jurisdictions or conflict with other rules. Our business, including our ability to operate and expand internationally, could be adversely affected if legislation or regulations are adopted, interpreted or implemented in a manner that is inconsistent with our current business practices and that require changes to these practices.

The global data protection landscape is rapidly evolving and new laws and regulations are constantly being enacted such as China's "Personal Information Protection Law" and Singapore's "Personal Data Protection Act." Violations of existing and new laws and regulations may subject companies to significant penalties and fines, government investigations and/or enforcement actions, private litigation and other claims. Our operations abroad may also be subject to increased scrutiny or attention from data protection authorities. For example, in Europe, the GDPR went into effect in May 2018 and imposes stringent requirements for processing personal data of individuals within the European Economic Area ("EEA"). The processing of sensitive personal data, such as physical health conditions, may impose heightened compliance burdens under the GDPR and is a topic of active interest among foreign regulators. In addition, the GDPR provides for breach reporting requirements, more robust regulatory enforcement and greater penalties for noncompliance than previous data protection laws, including fines of up to €20 million or 4% of a noncompliant company's global annual revenue for the preceding financial year, whichever is greater. Among other requirements, the GDPR regulates transfers of personal data subject to the GDPR to third countries outside the EEA that have not been found to provide adequate protection to such personal data, including the United States, and the efficacy and longevity of current transfer mechanisms between the EEA and the United States remains uncertain. Case law from, the Court of Justice of the EU ("CJEU") states that reliance on the standard contractual clauses, or SCCs - a standard form of contract approved by the European Commission as an adequate personal data transfer mechanism - alone may not necessarily be sufficient in all circumstances and that transfers must be assessed on a case-by-case basis. On July 10, 2023, the European Commission adopted its Adequacy Decision in relation to the new EU-US Data Privacy Framework ("DPF"), rendering the DPF effective as a GDPR transfer mechanism to U.S. entities self-certified under the DPF. We expect the existing legal complexity and uncertainty regarding international personal data transfers to continue. As supervisory authorities issue further guidance on personal data export mechanisms, including circumstances where the SCCs cannot be used, and/or start taking enforcement action, we could suffer additional costs, complaints and/or regulatory investigations or fines, and/or if we are otherwise unable to transfer personal data between and among countries and regions in which we operate, it could affect the manner in which we provide our services, the geographical location or segregation of our relevant systems and operations, and could adversely affect our financial results.

Since the beginning of 2021, we have also been subject to the UK data protection regime, which imposes separate but similar obligations to those under the GDPR and comparable penalties, including fines of up to £17.5 million or 4% of a noncompliant company's global annual revenue for the preceding financial year, whichever is greater. On October 12, 2023, the UK Extension to the DPF came into effect (as approved by the UK Government), as a data transfer mechanism from the UK to U.S. entities self-certified under the DPF. Other foreign jurisdictions, such as China and Russia, are increasingly implementing or developing their own privacy regimes with complex and onerous compliance obligations and robust regulatory enforcement powers. As we continue to expand into other foreign countries and jurisdictions, we may be subject to additional laws and regulations that may affect how we conduct business.

In the United States, California enacted the California Consumer Privacy Act of 2018 (the "CCPA"), which came into effect on January 1, 2020 and limits and imposes requirements on how we may collect and use personal information and provides for civil penalties for violations and a private right of action for data breaches. Further, the California Privacy Rights Act (the "CPRA"), generally went into effect in January 2023. It expands the CCPA and established a new California Privacy Protection Agency authorized to issue substantive regulations, which could result in increased privacy and information security enforcement. In addition to applying to businesses that buy and sell personal information, the CPRA applies to businesses that buy, sell or share personal information and sets forth a new category of "sensitive personal information" that includes genetic data; biometric or health information; and sex life or sexual orientation information. In addition to the modifications that enhance individuals' rights under the CCPA, the CPRA added five more rights, including the authority for the State to regulate the requirement for businesses to conduct risk assessments and cybersecurity audits. There is still a significant amount of uncertainty with respect to the CPRA's three-year compliance roll-out and the impact it will have on us and others in our industry, however, we expect to incur increased compliance costs and may be subject to increased potential liability in the event we fail to comply. Similar laws have passed in other states and are continuing to be proposed at the state and federal level, reflecting a trend toward more stringent privacy legislation in the United States. The enactment of such laws could have potentially conflicting requirements that would make compliance challenging.

Furthermore, the Federal Trade Commission ("FTC") has authority to initiate enforcement actions against entities that mislead customers about HIPAA compliance, make deceptive statements about privacy and data sharing in privacy policies, fail to limit third-party use of personal health information, fail to implement policies to protect personal health information or engage in other unfair practices that harm customers or that may violate Section 5(a) of the FTC Act. The FTC and many state Attorneys General also continue to enforce federal and state consumer protection laws against companies for online collection, use, dissemination and security practices that appear to be unfair or deceptive. For example, according to the FTC, failing to take appropriate steps to keep consumers' personal information secure can constitute unfair acts or practices in or affecting commerce in violation of Section 5(a) of the FTC Act. The FTC expects a company's data security measures to be reasonable and appropriate in light of the

sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities.

Any failure or perceived failure by us or our vendors or partners to comply with these laws and regulations, our privacy and notice policies, our privacy-related obligations to employees, customers or other third parties or privacy or security-related legal obligations, or any actual or perceived compromise of security that results in the unauthorized access to or disclosure, alteration, theft, loss, transfer or use of personal or other information, including personally identifiable information or other sensitive data, may result in governmental enforcement actions, fines and penalties, litigation or public statements critical of us by consumer advocacy groups or others and could cause our customers, partners or others to lose trust in us, which could have an adverse effect on our business.

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

We collect and maintain information in digital form that is necessary to conduct our business, and we are increasingly dependent on information technology systems and infrastructure to operate our business. In the ordinary course of our business, we collect, store and transmit large amounts of confidential information, including intellectual property, proprietary business information, preclinical and clinical trial data, health-related information and personal information of our customers, employees and other related third parties (collectively, "Confidential Information"). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such Confidential Information.

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. We operate some of these systems but we also rely on third-party providers for a range of software, products and services that are critical to our operations and business. Both our and our third-party providers' information technology systems are vulnerable to attack, damage or disruption due to breakdown, malicious intrusion, computer viruses, malware (e.g. ransomware) or other disruptive events, including but not limited to, natural disasters and catastrophes. In addition, malicious code (such as viruses, worms and ransomware), bugs or vulnerabilities in our code, employee theft or misuse, human error, social engineering and phishing scams, denial-of-service attacks and sophisticated nation-state and nation-state supported attacks (including advanced persistent threat intrusions), are all increasingly common threats to companies like us.

Despite significant efforts to create security barriers to such threats, it is impossible for us to entirely mitigate these risks. If our security measures are compromised as a result of third-party action, employee or customer error, malfeasance, stolen or fraudulently obtained log-in credentials or otherwise, our reputation could be damaged, our business may be harmed and we could incur significant liability. If we were to experience a prolonged system disruption in our information technology systems or those of certain of our vendors, it could negatively impact our ability to serve our customers, which could adversely impact our business. If operations at our facilities were disrupted, it may cause a material disruption in our business if we are not capable of restoring functionality on an acceptable timeframe. An attack or security incident that exposes Confidential Information to unauthorized persons could lead to the loss of trade secrets or other intellectual property, or could lead to the exposure of personal data 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.

Concerns regarding data privacy and security may cause some of our customers to stop using our platform for Cloud Services or other product solutions. This discontinuance in use could substantially harm our business, operating results and growth prospects. In addition, any access, disclosure, loss or unauthorized use of information or data could result in legal claims or proceedings, regulatory investigations or actions, and other types of liability under laws that protect the privacy and security of personal information, including federal, state and foreign data protection and privacy regulations, violations of which could result in significant penalties and fines. In addition, although we seek to detect and investigate all data security incidents, security breaches and other incidents of unauthorized access to our information technology systems and data can be difficult to detect and any delay in identifying such breaches or incidents may lead to increased harm and legal exposure of the type described above.

We have not always been able in the past and may be unable in the future to anticipate or prevent techniques used to obtain unauthorized access or to compromise our systems because the techniques used change frequently and are generally not detected until after an incident has occurred. We may also face increased cybersecurity risks due to our reliance on internet technology when our employees are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities. 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 and threat actors are increasingly utilizing tools and techniques designed to evade controls, to avoid detection and even to obfuscate or remove forensic evidence.

We have experienced cyberattacks and other security incidents and expect to continue to experience such events. For example, in March 2020, we experienced a ransomware attack in which cybercriminals were able to access our information technology systems. While we isolated the source of the attack and restored normal operations with no material day-to-day impact to us or our ability to access our data, we believe Confidential Information was stolen. We believe the ransomware attack could lead to the disclosure of our trade secrets or other intellectual property, or could lead to the exposure of personal information of our employees. The release of any of this information could, but is not reasonably likely to, have a material adverse effect on our business, operations, business strategy, results of operations or financial condition. In addition, the March 2020 ransomware attack has not, but it is possible that it 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, but is not reasonably likely to, result in significant judgements against us, penalties and fines.

The cost of investigating, mitigating, responding to and remediating potential data security breaches and complying with applicable breach notification obligations to individuals, regulators, partners and others, including the March 2020 ransomware attack, could be significant. Our insurance policies may not be adequate to compensate us for the potential costs and other losses arising from cybersecurity-related disruptions, failures, attacks or breaches. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, defending a suit, regardless of its merit, could be costly, divert management attention and harm our reputation.

Threats involving the misuse or access of our network, systems, and information by our current or former employees, contractors, vendors, or partners, whether intentional or unintentional, also pose a risk to the security of our network, systems, information and data. For example, we are subject to the risk that employees may inadvertently share Confidential Information with unintended third parties, or that departing employees may take, or create their own information based on, our Confidential Information upon leaving the company. In addition, any such insiders may be the victims of social engineering attacks that enable third parties to access our network, systems, and information using an authorized person's credentials. We and our network, systems, and information are also vulnerable to malicious acts by insiders, including leaking, modifying, or deleting Confidential Information, or performing other acts that could materially interfere with our operations and business. While we provide regular training to our employees regarding cybersecurity threats and best practices, we cannot ensure that such training or other efforts will prevent unauthorized access to or sabotage of our network, systems, and information.

While we implement security measures designed to reduce these risks, there is no guarantee these measures will be adequate to safeguard all systems and networks. Any failure to maintain performance, reliability, security and availability of our systems and networks may result in accidental or unlawful destruction, damage, loss, unavailability, alteration, impairment, misuse, unauthorized disclosure of, or unauthorized access to our data, including personal or proprietary information.

We rely on on-premise, co-located and third-party data centers and platforms to host our website and other online services, as well as for research and development purposes and any interruptions of service or failures may impair and harm our business.

Our proprietary software is a crucial component of our solutions, as our software allows our end users to visualize genomic and multiomic information provided by our instruments and reagents. Our software is generally downloadable free of charge from our website for installation and use by end users on their computer systems. Our website is hosted with various third-party service providers located in the United States. We rely on on-premises, co-located and third-party infrastructure in the San Francisco Bay Area and other regions in the United States to perform computationally demanding analysis tasks for our research and development programs and for other business purposes.

In the event of any technical problems that may arise in connection with our on-premise, co-located or third-party data centers, we could experience interruptions in our ability to provide products and services to our customers or in our internal functions, including research and development, which rely on such services. Interruptions or failures may be caused by a variety of factors, including infrastructure changes, human or software errors, viruses, worms, ransomware, security attacks, fraud, spikes in customer usage and denial of service issues. Interruptions or failures in our operations or services may reduce our revenue, result in the loss of customers, adversely affect our ability to attract new customers or harm our reputation. Significant interruptions to our research and development programs could cause us to delay the introduction of new products or improvements to existing products, which could adversely impact our business, our results of operations and the competitiveness of our products.

Our current solutions are capable of generating large datasets, the analysis of which can be time consuming without access to a high-performance computing system. The visualization of such data can also be computationally intensive. As we iterate and improve our products and as the related technologies advance, our continued growth may require an ability to provide our

customers with direct access to a high-performance computing system and/or alternative means of obtaining our software. As a result, we expect our reliance on internal and third-party data centers to increase in the future.

Further, as we rely on third-party and public-cloud infrastructure, we will depend in part on third-party security measures to protect against unauthorized access, cyberattacks and the mishandling of customer data. In addition, failures to meet customers' expectations with respect to security and confidentiality of their data and information could damage our reputation and affect our ability to retain customers, attract new customers and grow our business. In addition, a cybersecurity event could result in significant increases in costs, including costs for remediating the effects of such an event, lost revenue due to a decrease in customer trust and network downtime; increases in insurance coverage costs due to cybersecurity incidents; and damages to our reputation because of any such incident.

We are subject to certain manufacturing restrictions related to licensed intellectual property rights that were developed with the financial assistance of United States government grants.

Under the Bayh-Dole Act, the federal government retains a "nonexclusive, nontransferable, irrevocable, paid-up license" in inventions produced with its financial assistance ("Government Funded Inventions") for its own benefit. The Bayh-Dole Act provides federal agencies with march-in rights ("March-In Rights"), which allows a government agency, in specified circumstances, to require the patent owner or successors in title to the patent directed to such Government Funded Inventions ("Patent Owner") to grant a "nonexclusive, partially exclusive, or exclusive license" to a "responsible applicant or applicants," which if exercised, would allow such government agency to require such Patent Owner to grant a non-exclusive, partially exclusive or exclusive license in any field of use to a third-party designated by such agency. The Bayh-Dole Act also provides that the Patent Owner manufacture products embodying the respective Government Funded Inventions domestically in accordance with certain requirements. If this domestic manufacturing requirement is not met, the government agency that funded the relevant grant is entitled to exercise March-In Rights. We are subject to the Bayh-Dole Act with respect to certain licensed technologies that were developed with United States government grants. Such licensed technologies are used, for example, in a substantial majority of our consumables. Further, we cannot be sure that if we acquired intellectual property rights in the future it will be free from government rights or regulations pursuant to the Bayh-Dole Act.

If we own, co-own or in-license Government Funded Inventions that are critical to our business, our ability to enforce or otherwise exploit patents covering such technology may be adversely affected. Further, the exercise of March-In Rights, the requirement that we grant additional licenses to third parties, or the termination of our license of the relevant technologies could materially adversely affect our business, operations and financial condition. The restrictions of the Bayh-Dole Act may also limit our ability to manufacture our products in locations where it may be otherwise more favorable for us to do so, which could limit our ability to respond to competitive developments or otherwise adversely affect our results of operations. Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

Risks related to litigation and our intellectual property

We may become a party to intellectual property litigation or administrative proceedings that could be expensive, time-consuming, unsuccessful, and could interfere with our ability to develop, manufacture and commercialize our products or technologies.

Our commercial success depends, in part, on our ability to develop, manufacture or commercialize our products and technologies without infringing, misappropriating or otherwise violating the proprietary rights and intellectual property of third parties. Our industry has been characterized by extensive litigation regarding patents, trademarks, trade secrets, and other intellectual property rights, and companies in the industry have used intellectual property litigation to gain a competitive advantage. While we take steps to ensure that we do not infringe upon, misappropriate or otherwise violate the intellectual property rights of others, there may be other more pertinent rights of which we are presently unaware.

Third parties may initiate, and have in the past initiated, legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property rights. The outcome of such proceedings are uncertain and could have a negative impact on the success of our business. It is possible that U.S. and foreign patents and pending patent applications controlled by third parties may be alleged to cover our products and technologies, or that we may be accused of misappropriating third parties' trade secrets or infringing third parties' trademarks. We have in the past, and may in the future become party to, or be threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our products or technologies, including interference proceedings, post grant review and inter partes review before the USPTO or equivalent foreign regulatory authority. Furthermore, we may also become involved in other proceedings, such as reexamination, derivation or opposition proceedings before the USPTO or other jurisdictional body relating to our intellectual property rights or the intellectual property rights of others. Third parties may assert infringement claims against us based on existing patents or patents that may be granted

in the future, regardless of their merit. Because patent applications can take many years to issue and because publication schedules for pending applications vary by jurisdiction, there may be applications now pending of which we are unaware and which may result in issued patents, which our current or future products or services infringe. Also, because the claims of published patent applications can change between publication and patent grant, there may be published patent applications that may ultimately issue with claims that we infringe. There is a risk that third parties may choose to engage in litigation with us to enforce or to otherwise assert their patent rights against us. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid and enforceable, and infringed by the use of our products and/or technologies, which could have a negative impact on the commercial success of our current and any future products or technologies. If we were to challenge the validity of any such third-party U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. We will have similar burdens to overcome in foreign courts in order to successfully challenge a third-party claim of patent infringement.

Our defense of any litigation or interference proceedings may fail and, even if successful, defending such claims brought against us would cause us to incur substantial expenses and distract our management and other employees. If such claims are successfully asserted against us, we could be forced to pay substantial damages. Further, if a patent infringement or other intellectual property rights-related lawsuit were brought against us, we could be forced, including by court order, to cease developing, manufacturing and/or commercializing the infringing product or technologies. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent or other intellectual property right. Although patent, trademark, trade secret, and other intellectual property disputes have often been settled through licensing or similar arrangements, costs associated with such arrangements may be substantial and could include ongoing royalties. We may not be able to obtain licenses on commercially reasonable terms, or at all, in which event our business would be materially and adversely affected. Even if we were able to obtain a license, the rights may be nonexclusive, which could result in our competitors and other third parties gaining access to the same intellectual property. Ultimately, if we are unable to obtain such licenses or make any necessary changes to our products or services, we could be forced to cease some aspect of our business operations, which could harm our business significantly.

A finding of infringement or an unfavorable interference or derivation proceedings outcome could prevent us from developing, manufacturing and/or commercializing our products or technologies, or force us to cease some or all of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business, financial condition, results of operations and prospects. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of litigation or administrative proceedings more effectively than we can because of greater financial resources and more mature and developed intellectual property portfolios. We could encounter delays in product introductions while we attempt to develop alternative products or technologies.

If third parties assert infringement, misappropriation or other claims against our customers, these claims may require us to initiate or defend protracted and costly litigation on behalf of our customers, regardless of the merits of these claims. If any of these claims succeed or settle, we may be forced to pay damages or settlement payments on behalf of our customers or may be required to obtain licenses for the products they use. If we cannot obtain all necessary licenses on commercially reasonable terms, our customers may be forced to stop using our products or technologies.

Our competitors, many of which have substantially greater resources and have made substantial investments in patent portfolios, trade secrets, trademarks, and competing technologies, may have applied for or obtained, or may in the future apply for or obtain, patents or trademarks that will prevent, limit or otherwise interfere with our ability to make, use, sell and/or export our products or to use our technologies or product names. As the number of competitors in our market grows and the number of patents issued in this area increases, the possibility of patent infringement claims against us may increase. Moreover, individuals and groups that are non-practicing entities, commonly referred to as "patent trolls," purchase patents and other intellectual property assets for the purpose of making claims of infringement in order to extract settlements. From time to time, we may receive threatening letters, notices or "invitations to license," or may be the subject of claims that our products and business operations infringe, misappropriate or otherwise violate the intellectual property rights of others. These matters can be time-consuming, costly to defend in litigation, divert management's attention and resources, damage our reputation and brand and cause us to incur significant expenses or make substantial payments. Additionally, we purchase product components, including hardware and software, from suppliers, and the design of these components may be outside of our direct control. These suppliers may not indemnify us in the event that a third party alleges the use of such components infringes its intellectual property rights.

Any lawsuits relating to intellectual property rights could subject us to significant liability for damages and invalidate our intellectual property. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop developing, making, selling or using products or technologies that allegedly infringe, misappropriate or otherwise violate the asserted intellectual property right;
- pay substantial damages or royalties to the party whose intellectual property rights we may be found to be infringing, misappropriating or otherwise violating;
- redesign those products, services or technologies that contain the allegedly infringing intellectual property, which could be costly, disruptive and infeasible; and attempt to obtain a license to the relevant intellectual property rights from third parties, which may not be available on commercially reasonable terms or at all, or from third parties who may attempt to license rights that they do not have;
- lose the opportunity to license our intellectual property rights to others or to collect royalty payments based upon successful protection and assertion of our intellectual property rights against others;
- incur significant legal expenses; or
- pay the attorney's fees and costs of litigation to the party whose intellectual property rights we may be found to be infringing, misappropriating or otherwise violating.

Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, inter partes review and equivalent proceedings in foreign jurisdictions (for example, opposition proceedings). Such proceedings could result in revocation of or amendment to our patents in such a way that they no longer cover our products or technologies. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we, our patent counsel, and the patent examiner were unaware during prosecution. If a third party were to prevail on a legal assertion of invalidity and/or unenforceability, we may lose at least part, and perhaps all, of the patent protection on our products or technologies. Such a loss of patent protection would have a material adverse impact on our business, financial condition, results of operations, and prospects.

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 litigation. There could also be public announcements of the results of hearing, motions, or other interim developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of shares of our common stock. Even if we ultimately prevail, a court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may not be an adequate remedy. Furthermore, the monetary cost of such litigation and the diversion of the attention of our management could outweigh any benefit we receive as a result of the proceedings. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our business. Any of the foregoing may cause us to incur substantial costs, and could place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation.

We are involved in lawsuits to protect, enforce or defend our patents and other intellectual property rights, which are expensive, time consuming and could ultimately be unsuccessful.

NanoString

On May 6, 2021, we filed suit against NanoString Technologies, Inc. ("NanoString") in the U.S. District Court for the District of Delaware alleging that NanoString's GeoMx Digital Spatial Profiler and associated instruments and reagents infringe U.S. Patent Nos. 10,472,669, 10,662,467, 10,961,566, 10,983,113 and 10,996,219 (the "GeoMx Action"). On May 19, 2021, we filed an amended complaint additionally alleging that the GeoMx products infringe U.S. Patent Nos. 11,001,878 and 11,008,607. On May 4, 2022, we filed an amended complaint in the GeoMx Action additionally alleging that the GeoMx products infringe U.S. Patent No. 11,293,917 and withdrawing our claims of infringement of U.S. Patent No. 10,662,467. We are seeking, among other relief, injunctive relief and unspecified damages (including attorneys' fees) in relation to NanoString's making, using, selling, offering to sell, exporting and/or importing in the United States the GeoMx Digital Spatial Profiler and associated instruments and reagents. NanoString filed its answer to the GeoMx Action on May 18, 2022. A Markman hearing was held on February 17, 2023 and the Court issued its claim construction order on February 28, 2023. On September 7, 2023, the Court issued an order granting our motion for summary judgment that the asserted patents are not invalid for indefiniteness and denying NanoString's motion for summary judgment that the asserted patents are invalid for indefiniteness and lack of written description. On November 17, 2023, a jury found that NanoString willfully infringed the asserted patents and that the asserted patents are valid. The jury awarded us more than $31 million in damages, consisting of approximately $25 million in lost profits and approximately $6 million in

royalties. Post-trial motions, including our motions for a permanent injunction, ongoing royalties, enhanced damages, attorneys' fees and pre- and post-judgment interest, are pending. NanoString filed for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code in the U.S. bankruptcy court in Delaware on February 4, 2024, and the Court's consideration of these post-trial motions is currently stayed due to the bankruptcy filing.

On February 28, 2022, we filed a second suit against NanoString in the U.S. District Court for the District of Delaware alleging that NanoString's CosMx Spatial Molecular Imager and associated instruments, reagents and services infringe U.S. Patent Nos. 10,227,639 and 11,021,737 (the "CosMx Action"). On May 12, 2022, we filed an amended complaint in the CosMx Action additionally alleging that the CosMx products additionally infringe U.S. Patent Nos. 11,293,051, 11,293,052 and 11,293,054. NanoString filed its answer to the CosMx Action on May 26, 2022. On March 1, 2023, we filed a second amended complaint additionally alleging that the CosMx products infringe U.S. Patent No. 11,542,554. We are seeking, among other relief, injunctive relief and unspecified damages (including attorneys' fees) in relation to NanoString's making, using, selling, offering to sell, exporting and/or importing in the United States the CosMx Spatial Molecular Imager and associated instruments, reagents and services. NanoString filed its answer to the second amended complaint on March 22, 2023. Discovery is in progress. A Markman hearing was held on January 10, 2024, and the Court issued its claim construction order on February 1, 2024. Trial is scheduled for September 2024. This litigation is currently stayed due to NanoString's bankruptcy filing.

On August 16, 2022, NanoString filed a counterclaim in the CosMx Action alleging that our Visium products infringe U.S. Patent No. 11,377,689 (the "689 patent"). We filed our answer to NanoString's counterclaim in the CosMx Action on August 30, 2022. On November 23, 2022, we moved to sever claims relating to NanoString's assertion of the 689 patent and consolidate those claims with the patent case NanoString filed against us on October 20, 2022 (discussed below). On January 24, 2023, the Court granted our motion.

On May 1, 2023, NanoString filed a motion in the CosMx Action to add antitrust, unfair competition, tort, and contract counterclaims. NanoString seeks, among other relief, injunction relief (including that we grant NanoString a license to the patents that we asserted against NanoString in the CosMx Action) and unspecified damages (including attorneys' fees). On July 10, 2023, the Court denied NanoString's motion for leave to add a contract counterclaim but otherwise granted the motion for leave to amend. On May 24, 2023, NanoString filed a motion to bifurcate its amended counterclaims and a motion for expedited discovery. On June 6, 2023, the Court denied NanoString's motion to bifurcate and granted its motion for expedited discovery. We believe NanoString's claims are meritless and intend to vigorously defend ourselves.

On October 20, 2022, NanoString filed suit against us in the U.S. District Court for the District of Delaware alleging that our Visium products infringe U.S. Patent No. 11,473,142 ("the 142 patent"), a continuation of the 689 patent (the "NanoString Action"). NanoString seeks, among other relief, injunctive relief and unspecified damages (including attorneys' fees) in relation to NanoString's making, using, selling, offering to sell, exporting and/or importing in the United States Visium products and associated instruments, reagents and services. On January 24, 2023, the Court severed NanoString's claims with respect to the 689 patent from the CosMx Action and consolidated those claims with this action. NanoString filed an amended complaint on January 27, 2023. We filed an answer to the NanoString Action on February 10, 2023. Discovery is in progress. A Markman hearing was held on January 10, 2024, and the Court issued its claim construction order on February 1, 2024. Trial is scheduled for December 2024. We believe NanoString's claims in the NanoString Action are meritless and intend to vigorously defend ourselves.

On August 16 and September 25, 2023, we filed petitions for inter partes review ("IPR") of the 689 patent and the 142 patent, respectively. On February 1, 2024, IPR was instituted for the 689 patent. An institution decision for the IPR against the 142 patent is expected in April 2024.

On March 9, 2022, we filed suit in the Munich Regional Court in Germany alleging that NanoString's CosMx Spatial Molecular Imager and associated instruments, reagents and services infringe EP Patent No. 2794928B1 (the "EP 928 patent") (the "Germany CosMx Action"). A hearing on infringement was held on March 23, 2023. On May 17, 2023, the Munich Regional Court found that the CosMx products infringe the EP 928 patent and issued a permanent injunction requiring NanoString to stop selling and supplying CosMx instruments and reagents for RNA detection in Germany. The injunction took effect on June 1, 2023. On May 25, 2023, NanoString filed an appeal of the Germany CosMx Action in the Munich Higher Regional Court. A hearing date has not yet been set for this appeal. On October 30, 2023, NanoString requested that the Higher Regional Court temporarily stay enforcement of the injunction pending the appeal. On December 20, 2023, the Higher Regional Court granted NanoString's request conditioned upon NanoString posting a 2.3 million Euro security deposit. To date, NanoString has not posted this security deposit.

On July 29, 2022, NanoString filed a nullity action with the German Federal Patent Court challenging the validity of the EP 928 patent. On February 10, 2023, the Federal Patent Court issued a preliminary opinion upholding the validity of certain claims of the EP 928 patent directed to in situ analysis. A hearing on validity is scheduled before the Federal Patent Court in May 2024.

On June 1, 2023, we filed requests for preliminary injunctions in the Munich Local Division of the Unified Patent Court ("UPC") alleging that NanoString's CosMx Spatial Molecular Imager and associated instruments, reagents and services for RNA detection infringe the EP 928 patent and EP Patent No. 4108782 (the "EP 782 patent"). Hearings were held for the EP 782 and EP 928 patents on September 5 and September 19, respectively. On September 19, 2023, the UPC granted our request for the EP 782 patent and issued a preliminary injunction requiring NanoString to stop selling and supplying CosMx instruments and reagents for RNA detection in all 17 UPC member states. On October 10, 2023, the UPC denied our preliminary injunction request for the EP 928 patent. On October 2, 2023, NanoString filed an appeal of the preliminary injunction for the EP 782 patent in the UPC Court of Appeals. A hearing was held before the UPC Court of Appeals on December 18, 2023, and a decision is pending.

On August 31 and September 18, 2023 we filed main requests in the Munich Local Division of the UPC alleging that NanoString's CosMx Spatial Molecular Imager and associated instruments, reagents and services for RNA detection infringe the EP 782 and EP 928 patents, respectively. No hearings have yet been set for these main requests.

On July 18, 2023, NanoString filed an opposition in the European Patent Office challenging the validity of the EP 782 patent. No schedule has yet been set for this opposition. On July 27, 2023, NanoString filed a revocation action in the Munich Central Division of the UPC challenging the validity of the EP 928 patent. A hearing in the revocation action is scheduled on April 17, 2024.

On January 30, 2024, NanoString filed a petition for IPR of U.S. Patent No. 11,542,554, which is asserted by us against NanoString in the CosMx Action.

The impact of NanoString's bankruptcy filing on our actions against NanoString outside of the U.S. District Court for the District of Delaware is not yet fully resolved.

Vizgen

On May 3, 2022, we filed suit against Vizgen, Inc. ("Vizgen") in the U.S. District Court for the District of Delaware alleging that Vizgen's MERSCOPE Platform and workflow and/or Vizgen's Lab Services program, including associated instruments and reagents, infringe U.S. Patent Nos. 11,021,737, 11,293,051, 11,293,052, 11,293,054 and 11,299,767. We seek, among other relief, injunction relief and unspecified damages (including attorneys' fees) in relation to Vizgen's making using, selling, offering to sell, exporting and/or importing in the United States the MERSCOPE Platform and workflow and/or Vizgen's Lab Services program, including associated instruments and reagents. On July 25, 2022, Vizgen filed a motion to dismiss our claims for willful and indirect infringement, which the Court denied on September 19, 2022. Discovery is in progress. A Markman hearing was held on January 10, 2024, and the Court issued its claim construction order on February 1, 2024. Trial is scheduled for October 2024.

On August 30, 2022, Vizgen filed its answer and counterclaims alleging that our Xenium product infringes U.S. Patent No. 11,098,303 (the "303 patent"). Vizgen seeks, among other relief, injunction relief and unspecified damages (including attorneys' fees) in relation to our making, using, selling, offering to sell, exporting and/or importing in the United States Xenium products, including associated instruments and reagents. Vizgen also filed counterclaims alleging that we tortiously interfered with Vizgen's contractual and business relationship with Harvard and that we engaged in unfair practices under Massachusetts state law. On October 27, 2022, we filed a partial answer and motion to dismiss the infringement counterclaim and the tort counterclaims. On February 2, 2023, our motion to dismiss was denied. We believe Vizgen's claims are meritless and intend to vigorously defend ourselves.

On March 15, 2023, we filed an amended complaint additionally alleging that the MERSCOPE Platform and workflow and Vizgen's Lab Services program infringe U.S. Patent No. 11,549,136 and withdrawing our claim of infringement of U.S. Patent No. 11,293,054. On April 17, 2023, Vizgen filed its answer adding amended counterclaims including antitrust, unfair competition, tort, and contract counterclaims. Vizgen seeks, among other relief, injunctive relief (including that we grant Vizgen a license to the patents that we asserted against Vizgen) and unspecified damages (including attorneys' fees). On May 18, 2023, we filed a motion to dismiss Vizgen's amended counterclaims. On July 10, 2023, the Court granted our motion to dismiss Vizgen's contract counterclaim but otherwise denied our motion to dismiss. We believe Vizgen's claims are meritless and intend to vigorously defend ourselves.

On June 1, 2023, we filed suit in the Hamburg Local Division of the UPC alleging that Vizgen's MERSCOPE products infringe the EP782 patent. We seek, among other relief, injunction relief and unspecified damages (including attorneys' fees) in relation to Vizgen's MERSCOPE products in all 17 UPC member states. A hearing has not yet been set.

On August 30, 2023, we filed a petition for IPR of the 303 patent. An institution decision is expected by March 2023.

Parse

On August 24, 2022, we filed suit against Parse Biosciences, Inc. ("Parse") in the U.S. District Court for the District of Delaware alleging that Parse's Evercode Whole Transcriptomics products and ATAC-seq products infringe U.S. Patent Nos. 10,155,981 (the "981 patent"), 10,697,013 (the "013 patent"), 10,240,197 (the "197 patent"), 10,150,995, 10,619,207, and 10,738,357. We seek, among other relief, injunction relief and unspecified damages (including attorneys' fees) in relation to Parse's making using, selling, offering to sell, exporting and/or importing in the United States Parse's Evercode Whole Transcriptomics products and ATAC-seq products. On October 17, 2022, Parse filed a motion to dismiss alleging that the asserted claims are directed to patent ineligible subject matter. The Court held a hearing on the motion to dismiss on November 22, 2022, and supplemental briefing was submitted on December 15, 2022. On September 14, 2023, the Court denied the motion. Parse filed its answer on October 6, 2023. Discovery is in progress. A Markman hearing is scheduled for February 2024, and trial is scheduled for December 2024.

Between April 20 and June 21, 2023, Parse filed petitions for IPR of all of the patents asserted. On October 13, 2023, IPR was instituted on the 981 patent. The PTAB denied institution of Parse's petitions for IPR on the other five asserted patents. On January 2 and 5, 2024, Parse filed rehearing requests with the PTAB for the 197 and 013 patents, respectively. On November 6, 2023, Parse filed a motion to stay the Delaware action pending the IPRs. On December 21, 2023, the court denied Parse's motion to stay. On February 5, 2024, the PTAB instituted IPRs for the 197 and 013 patents on Parse's requests for rehearing. On February 8, 2024, Parse filed a renewed motion to stay.

Curio

On December 1, 2023, we filed suit against Curio Bioscience, Inc. ("Curio") in the U.S. District Court for the District of Delaware alleging that the Curio Seeker Spatial Mapping Kit and associated products and services infringe U.S. Patent Nos. 10,480,022, 10,662,468, 11,001,879, 11,549,138, and 11,761,030. On February 1, 2024, Curio filed a motion to dismiss alleging that the asserted claims are directed to patent ineligible subject matter. A case schedule has not yet been set.

On December 4, 2023, we filed a request for a preliminary injunction in the Dusseldorf Local Division of the UPC alleging that the Curio Seeker Spatial Mapping Kit and associated products and services infringe EP Patent No. 2697391 (the "EP 391 patent"). A hearing for the preliminary injunction request has been set for March 26, 2024.

In addition to the litigation discussed above, we may in the future be a party to other litigation or legal proceedings to protect, enforce or defend our patents or other intellectual property, which, if resolved adversely to us, could invalidate or render unenforceable our intellectual property or generally preclude us from restraining, enjoining or otherwise seeking to exclude competitors from commercializing products using technology developed or used by us. For example, our patents and any patents which we in-license may be challenged, narrowed, invalidated or circumvented. If patents we own or license are invalidated or otherwise limited, other companies may be better able to develop products that compete with ours, which would adversely affect our competitive position, business prospects, results of operations and financial condition.

The following are examples of litigation and other adversarial proceedings or disputes that we could become a party to involving our patents or patents licensed to us:

- we have initiated, and in the future may initiate, litigation or other proceedings against third parties to enforce our patent rights;
- third parties have initiated, and in the future may initiate, litigation or other proceedings seeking to invalidate patents owned by or licensed to us or to obtain a declaratory judgment that their product or technology does not infringe our patents or patents licensed to us or that such patents are invalid or unenforceable;
- third parties have initiated, and in the future may initiate, oppositions, IPRs, post grant reviews or reexamination proceedings challenging the validity or scope of our patent rights, requiring us and/or licensors to participate in such proceedings to defend the validity and scope of our patents;
- there are, and in the future may be, more challenges or disputes regarding inventorship or ownership of patents currently identified as being owned by or licensed to us; or

- at our initiation or at the initiation of a third-party, the USPTO may initiate an interference between patents or patent applications owned by or licensed to us and those of our competitors, requiring us and/or licensors to participate in an interference proceeding to determine the priority of invention, which could jeopardize our patent rights.

Furthermore, many of our employees were previously employed at universities or other life sciences companies, including our competitors or potential competitors. We or our employees may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers without consent. Although no such claims are currently pending, litigation may be necessary to defend against such claims if they arise in the future. If we fail to successfully defend such claims, in addition to paying monetary damages, we may be subject to injunctive relief and lose valuable intellectual property rights. A loss of key research personnel work product could hamper or prevent our ability to commercialize certain potential products, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Risks related to ownership of our Class A common stock

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

Sales of a substantial number of shares of our Class A common stock in the public market could occur at any time. We have registered all shares of Class A common stock that we may issue under our equity compensation and employee stock purchase plans. These shares can be freely sold in the public market upon issuance and, if applicable, vesting, subject to our insider trading policy, where applicable, and applicable securities laws including volume limitations applicable to affiliates under Rule 144 and Rule 701. Sales of Class A common stock in the public market may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the trading price of our Class A common stock to fall and make it more difficult for you to sell shares of our Class A common stock.

The multi-class structure of our common stock has the effect of concentrating voting control with those stockholders who held our capital stock prior to the completion of our IPO, including our co-founders, and may depress the trading price of our Class A common stock.

Our Class A common stock has one vote per share and our Class B common stock has ten votes per share, except as otherwise required by law. Because of the ten-to-one voting ratio between our Class B common stock and Class A common stock, the holders of our Class B common stock collectively control a majority of the combined voting power of our common stock and therefore are able to control all matters submitted to our stockholders for approval, other than matters that require a supermajority for approval. This concentrated control is expected to limit or preclude Class A stockholders' ability to influence certain corporate matters requiring stockholder approval. In addition, this may prevent or discourage unsolicited acquisition proposals or offers for our capital stock that an investor may feel is in her or his best interest as one of our stockholders.

Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions, such as certain transfers effected for estate planning purposes where sole dispositive power and exclusive voting control with respect to the shares of Class B common stock is retained by the transferring holder and transfers between our co-founders. In addition, each outstanding share of Class B common stock held by a stockholder who is a natural person, or held by the permitted entities of such stockholder (as described in our amended and restated certificate of incorporation), will convert automatically into one share of Class A common stock upon the death of such natural person. In the event of the death or permanent and total disability of a co-founder, shares of Class B common stock held by such co-founder or his permitted entities will convert to Class A common stock, provided that the conversion will be deferred for nine months, or up to 18 months if approved by a majority of our independent directors, following his death or permanent and total disability. Transfers between our co-founders are permitted transfers and will not result in conversion of the shares of Class B common stock that are transferred. The conversion of Class B common stock to Class A common stock has had, and is expected to continue to have, the effect, over time, of increasing the relative voting power of those individual holders of Class B common stock who retain their shares in the long term. To date, such conversions have had the effect of increasing the relative voting power of our co-founders and certain of our directors and is expected to continue to have such an effect if our co-founders and such directors retain their shares in the long term.

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

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

- any transaction that would result in a change in control of our company requires the approval of a majority of our outstanding Class B common stock voting as a separate class;
- our multi-class common stock structure provides our holders of Class B common stock with the ability to significantly influence the outcome of matters requiring stockholder approval, even if they own significantly less than a majority of the shares of our outstanding Class A common stock and Class B common stock;
- our board of directors is classified into three classes of directors with staggered three-year terms and directors are only able to be removed from office for cause by the affirmative vote of holders of at least two-thirds of the voting power of our then outstanding capital stock;
- certain amendments to our amended and restated certificate of incorporation require the approval of stockholders holding two-thirds of the voting power of our then outstanding capital stock;
- any stockholder-proposed amendment to our amended and restated bylaws requires the approval of stockholders holding two-thirds of the voting power of our then outstanding capital stock;
- our stockholders are only able to take action at a meeting of stockholders and are not able to take action by written consent for any matter;
- our stockholders are able to act by written consent only if the action is first recommended or approved by the board of directors;
- vacancies on our board of directors are able to be filled only by our board of directors and not by stockholders;
- only our chairman of the board of directors, chief executive officer or a majority of the board of directors are authorized to call a special meeting of stockholders;
- certain litigation against us can only be brought in Delaware;
- our restated certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued, without the approval of the holders of our capital stock; and
- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders.

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

Our amended and restated bylaws designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws provide that, unless we consent in writing to the selection of an alternative forum, (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, stockholders or employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our amended and restated bylaws or (iv) any action asserting a claim governed by the internal affairs doctrine of the law of the State of Delaware shall, to the fullest extent permitted by law, be exclusively brought in the Court of Chancery of the State of Delaware or, if such court does not have subject matter jurisdiction thereof, the federal district court of the State of Delaware. Our amended and restated bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States are the exclusive forum for the resolution of any claims under the Securities Act or any successor thereto. Nothing in our amended and restated bylaws precludes stockholders that assert claims under the Exchange Act, or any successor thereto, from bringing such claims in state or federal court, subject to applicable law. Any person or entity purchasing or otherwise acquiring or holding any interest in any of our securities shall be deemed to have notice of and consented to the foregoing forum selection provisions.

These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum of such stockholder's choosing for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees and may result in increased costs for investors to bring a claim. If a court were to find the exclusive-forum provisions in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could harm our results of operations.

General risk factors

We may fail to meet our publicly announced guidance or other expectations about our business, which could cause our stock price to decline.

In the past we have provided, and in the future we may provide, guidance and other expectations regarding our expected financial and business performance. Correctly identifying key factors affecting business conditions and predicting future events is inherently an uncertain process, and our guidance or the other expectations we set may not ultimately be accurate and has in the past been inaccurate in certain respects. For example, in February 2022 we announced our expectations regarding full year 2022 revenue, which we revised in August 2022 to reflect lower expected revenue for full year 2022. In August 2022, we announced our goal to attain cash flows from operating activities in excess of our capital investment requirements by the end of 2023. While we achieved this goal for the quarter ended December 31, 2023, we may not be able to maintain such cash flows from operating activities in excess of our capital investment requirements on a sustained basis, including if we do not generate sufficient revenue or achieve our gross margin targets, if we acquire businesses or technologies (or complete expenditures related to previous acquisitions), if our spending is higher than anticipated or due to many other factors. If our guidance varies from actual results or if we fail to meet other expectations regarding our business, the market value of our common stock could decline significantly.

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

The trading price of our Class A common stock has been and may continue to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition to the factors discussed in this "*Risk Factors*" section and elsewhere in this report, these factors include:

- the timing of our launch of future products and degree to which the launch and commercialization thereof meets the expectations of securities analysts and investors;
- changes in the structure or funding of research at academic and research laboratories and institutions, including changes that would affect their ability to purchase our instruments or consumables;
- the success of existing or new competitive businesses or technologies;
- announcements about new research programs or products of our competitors;
- general economic, industry and market conditions;
- volatility and variations in market conditions in the life sciences sector generally, or the genomics sector specifically;
- whether our financial results meet our publicly announced expectations or the expectations of securities analysts or investors;
- actual or anticipated changes in our estimates as to our financial results or development timelines, variations in our financial results or those of companies that are perceived to be similar to us or changes in estimates or recommendations by securities analysts, if any, that cover our Class A common stock or companies that are perceived to be similar to us;
- investor perceptions of us or our industry;
- the level of expenses related to any of our research and development programs or products;
- litigation and governmental investigations involving us, our industry or both;
- the outcomes of and related rulings in the litigation and administrative proceedings in which we are currently or may in the future become involved;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- regulatory or legal developments in the United States and other countries;
- the announcement or expectation of additional financing efforts;

- stock-based compensation expense;
- the failure or discontinuation of any of our product development and research programs;
- sales of our Class A common stock or Class B common stock by us, our insiders or other stockholders;
- natural disasters, infectious diseases, conflict, war, civil unrest, epidemics or pandemics such as COVID-19 outbreaks or resurgences or major catastrophic events; and
- the other factors described in this "*Risk Factors*" section.

In recent years, stock markets in general, and the market for life sciences technology companies in particular (including companies in the genomics, biotechnology, diagnostics and related sectors), have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations. Broad market and industry factors may seriously affect the market price of our Class A common stock, regardless of our actual operating performance. Volatility in our stock price also impacts the value of our equity compensation, which affects our ability to recruit and retain employees. In the past, when the market price of a stock has been volatile, securities litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business. We have currently obtained only director and officer liability coverage (commonly referred to as "Side A" coverage). This means that while our directors and officers have direct insurance coverage for acts which the company is not legally required or permitted to indemnify them, the company itself does not have coverage for amounts incurred in defending, among other things, stockholder derivative or securities class action lawsuits or in the event of certain investigative actions, for amounts it must pay as a result of such suits or amounts it must pay to indemnify our directors or officers. We are in essence self-insuring for these costs. Any costs incurred in connection with such litigation could have a material adverse effect on our business, financial condition and results of operations.

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

The trading market of our common stock is influenced to some extent by the research and reports that industry or financial analysts publish about us and our business. We do not control these analysts. The analysts who publish information about our common stock may have had relatively little experience with us or our industry, which could affect their ability to accurately forecast our results and could make it more likely that we fail to meet their estimates. If any of the analysts who cover us provide inaccurate or unfavorable research or issue an adverse opinion regarding our stock price, our stock price could decline. If one or more of these analysts cease coverage of us or fail to publish reports covering us regularly, we could lose visibility in the market, which in turn could cause our stock price or trading volume to decline. If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating results could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock. For example, the market price of our common stock declined after our financial results for the quarter ended June 30, 2022 fell short of the expectations of securities analysts and investors.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States ("GAAP") requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. We base our estimates on historical experience and 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. If our assumptions change or if actual circumstances differ from our assumptions, our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

We have incurred and will continue to incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to compliance initiatives and corporate governance practices, including maintaining an effective system of internal controls over financial reporting.

We have incurred and will continue to incur significant legal, accounting and other expenses because the Dodd-Frank Wall Street Reform and Consumer Protection Act, SOX, the listing requirements of Nasdaq and other applicable federal and Delaware rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices.

Our management and other personnel are required to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations have increased our legal and financial compliance costs and have made some activities more time-consuming and costly. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements also could make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. Moreover, these rules and regulations often are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

The rules and regulations applicable to us as a public company and recent trends in the insurance market have made it more expensive for us to obtain director and officer liability insurance. We have currently obtained only director and officer liability coverage (commonly referred to as “Side A” coverage). This means that while our directors and officers have direct insurance coverage for acts which the company is not legally required or permitted to indemnify them, the company itself does not have coverage for amounts incurred in defending, among other things, stockholder derivative or securities class action lawsuits or in the event of certain investigative actions, for amounts it must pay as a result of such suits or amounts it must pay to indemnify our directors or officers. We are in essence self-insuring for these costs. Any costs incurred in connection with such litigation could have a material adverse effect on our business, financial condition and results of operations.

In August 2021, the SEC announced that it had approved Nasdaq’s proposed rule change to advance board diversity and enhance transparency of board diversity statistics through new listing requirements. Under these listing rules, Nasdaq-listed companies are required, subject to certain exceptions, to annually disclose diversity statistics regarding their directors’ voluntary self-identified characteristics and include on their boards of directors at least two “Diverse” directors or publicly disclose why their boards do not include such “Diverse” directors. Under the phase-in period for these listing rules, for companies listed on the Nasdaq Global Select Market, this disclosure requirement regarding the existence of at least one “Diverse” director applies starting on the later of August 7, 2023, or the date that the company files its proxy statement for its annual shareholder meeting during 2023, and regarding the existence of at least two “Diverse” directors applies starting on the later of August 6, 2025, or the date that the company files its proxy statement for its annual shareholder meeting during 2025. Under the proposed rule, a “Diverse” director is someone who self-identifies either as (i) female, (ii) Black or African American, Hispanic or Latinx, Asian, Native American or Alaska Native, Native Hawaiian or Pacific Islander, or two or more races or ethnicities, or (iii) lesbian, gay, bisexual, transgender or a member of the queer community.

Our board of directors currently includes two female directors, and three directors from an “underrepresented community.” However, if our current or future female or other “Diverse” directors no longer serve on our board of directors prior to the applicable dates for the new Nasdaq listing rules, we could be out of compliance with the Nasdaq listing rules. We cannot assure that we can recruit, attract and/or retain qualified members of the board and meet gender and diversity requirements under Nasdaq listing rules, which may expose us to financial penalties and adversely affect our reputation.

Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity.

Cybersecurity Risk Management and Strategy

We have developed and implemented a cybersecurity risk management program intended to protect the confidentiality, integrity and availability of our critical systems and information. Our cybersecurity risk management program includes a cybersecurity incident response plan.

We design and assess our program based on the Center For Internet Security (“CIS”) Controls. While this does not imply that we meet any particular technical standards, specifications or requirements, we use the CIS Controls framework as a guide to help us identify, assess and manage cybersecurity risks relevant to our business.

Our cybersecurity risk management program is integrated into our overall enterprise risk management program, and shares common methodologies, reporting channels and governance processes that apply across the enterprise risk management program to other legal, compliance, strategic, operational and financial risk areas.

Our cybersecurity risk management program includes:

- risk assessments designed to help identify material cybersecurity risks to our critical systems, information, products, services and our broader enterprise information technology environment;
- a security team principally responsible for managing (1) our cybersecurity risk assessment processes, (2) our security controls and (3) our response to cybersecurity incidents;
- the use of external service providers, where appropriate, to assess, test or otherwise assist with aspects of our security controls;
- cybersecurity awareness training of our employees, incident response personnel and senior management;
- a cybersecurity incident response plan that includes procedures for responding to cybersecurity incidents; and
- a third-party risk management process for service providers, suppliers and vendors who have access to our critical systems and information.

We have not identified risks from known cybersecurity threats, including as a result of any prior cybersecurity incidents, that have materially affected or are reasonably likely to materially affect us, including our operations, business strategy, results of operations or financial condition. In March 2020, we experienced a ransomware attack in which cybercriminals were able to access our information technology systems. While we isolated the source of the attack and restored normal operations with no material day-to-day impact to us or our ability to access our data, we believe confidential information was stolen. We believe it is possible that the ransomware attack could lead to the disclosure of our trade secrets or other intellectual property, or could lead to the exposure of personal information of our employees. The release of any of this information could have, but is not reasonably likely to have, a material adverse effect on our business, operations, business strategy, results of operations or financial condition. The March 2020 ransomware attack has not, but it is possible that it 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, but is not reasonably likely to, result in significant judgements against us, penalties and fines.

For more information, see the section titled "*Risk Factor—Risks related to our intellectual roperty, information technology and data security—If we or our critical third-party providers experience a significant disruption in our information technology systems or breaches of data security, our business could be adversely affected.*"

Cybersecurity Governance

Our Board considers cybersecurity risk as part of its risk oversight function and has delegated to the Audit Committee oversight of cybersecurity and other information technology risks. The Audit Committee oversees management's implementation of our cybersecurity risk management program.

The Audit Committee receives periodic reports from management on our cybersecurity risks, including written reports. In addition, management updates the Audit Committee, as necessary, regarding any material cybersecurity incidents, as well as any incidents with lesser impact potential.

The Audit Committee reports to the full Board regarding its activities, including those related to cybersecurity.

Our management team, including our Chief Legal Officer, Chief Information Officer, President, Chief Financial Officer and Vice President of Data Analytics and Information Security is responsible for assessing and managing our material risks from cybersecurity threats. The team has primary responsibility for our overall cybersecurity risk management program and supervises both our internal cybersecurity personnel and our external cybersecurity consultants. Our management team's cumulative experience includes decades of experience managing cybersecurity risks including serving in similar roles leading and overseeing cybersecurity programs at other companies. Our Chief Information Officer has served in various roles in information technology for almost 20 years and has been with us since 2013. He holds undergraduate and postgraduate degrees in computer science from Harvard University. Our Vice President of Data Analytics and Information Security has served in various roles in information technology and information security for more than 10 years. He holds an undergraduate degree in engineering science from Harvard University and postgraduate degrees in computer science from Massachusetts Institute of Technology. Our Chief Legal Officer has over 25 years of experience managing risks, including risks arising from cybersecurity threats, at several large publicly-traded technology companies. Team members who support our information security program have relevant educational and industry experience, including holding similar positions at large technology companies.

Our management team supervises efforts to prevent, detect, mitigate and remediate cybersecurity risks and incidents through various means, which may include briefings from internal security personnel; threat intelligence and other information obtained from governmental, public or private sources, including external consultants engaged by us; and alerts and reports produced by security tools deployed in the information technology environment.

Item 2. Properties.

Our global corporate headquarters, research and development facilities, and manufacturing and distribution centers are located in Pleasanton, California, where we lease approximately 338,000 square feet of space under leases expiring between December 2024 and June 2033, as well as a manufacturing and distribution center in Singapore and a manufacturing center in Taiwan. Including the Pleasanton leases, we lease approximately 470,000 square feet globally. In 2023, we vacated some of our leased office space located in Pleasanton, California comprising of approximately 43,000 square feet for the remaining lease term through 2026 and entered into agreements to sublease some of the vacated office space. In January 2021, we completed the acquisition of certain real property located in Pleasanton, California for an aggregate cash purchase price of $29.4 million which become operational in April 2023. The property is comprised of approximately 150,000 square feet to support our manufacturing and operations functions. We believe that our current and planned facilities are sufficient to meet our ongoing needs and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

Item 3. Legal Proceedings.

See Note 7, Commitments and Contingencies, to the consolidated financial statements included in Item 8 of Part II of this Annual Report on Form 10-K for information regarding certain legal proceedings in which we are involved.

For further discussion of the risks relating to intellectual property and our pending litigation, see the section titled "*Risk Factors—Risks related to litigation and our intellectual property*" under Item 1A.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

Market Information

Our Class A common stock is listed on the Nasdaq Global Select Market under the symbol "TXG."

Holders of Common Stock

As of January 31, 2024, there were 38 holders of record of our Class A common stock and 19 holders of record of our Class B common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

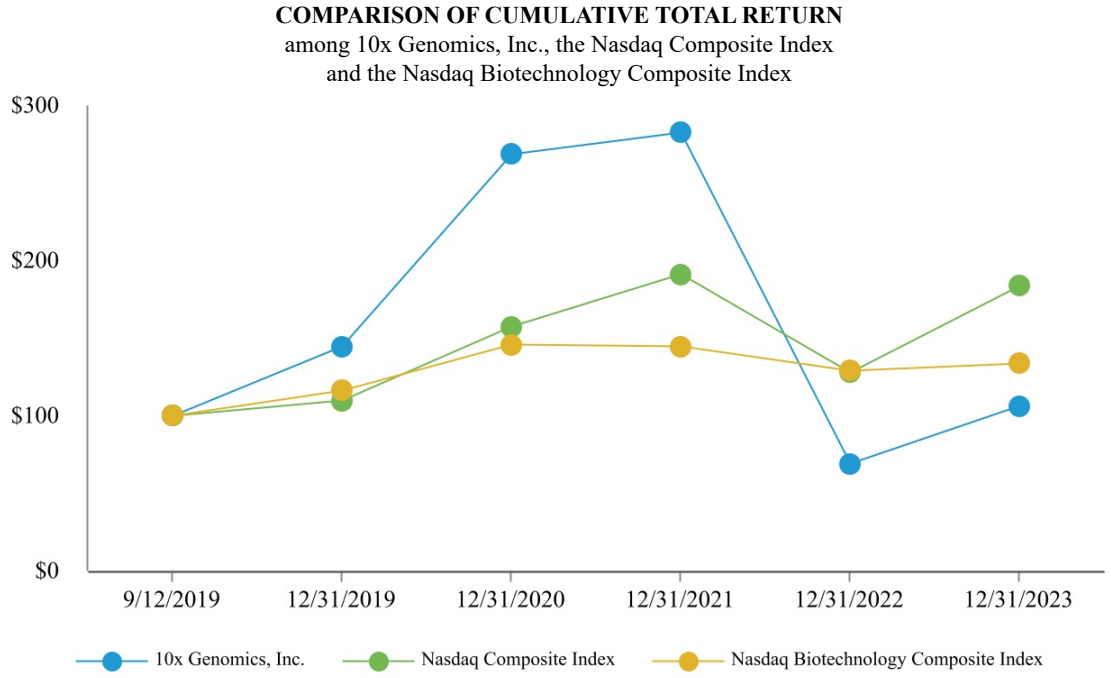
Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant.

Stock Performance Graph

This graph below is not "soliciting material" or deemed "filed" with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to liabilities under that section, and shall not be deemed incorporated by reference into this Annual Report or into any other filing of 10x Genomics, Inc. under the Securities Act except to the extent that we specifically incorporate this information by reference therein, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

The following graph compares the cumulative total return to stockholder return on our Class A common stock relative to the cumulative total returns of the Nasdaq Composite Index and the Nasdaq Biotechnology Composite Index. An investment of $100 is assumed to have been made in our Class A common stock and each index at market close on September 12, 2019 (the first day of trading of our Class A Common Stock on the Nasdaq Global Select Market) and its relative performance is tracked through December 31, 2023. Pursuant to applicable Securities and Exchange Commission rules, all values assume reinvestment of the full amount of all dividends, however no dividends have been declared on our Class A common stock to date. The offering price of our Class A common stock in our initial public offering ("IPO"), which had a closing stock price of $52.75 on September 12, 2019, was $39.00 per share. The stockholder returns shown on the graph below are based on historical results and are not indicative of future performance, and we do not make or endorse any predictions as to future stockholder returns.



	Cumulative Total Return					
	September 12, 2019	December 31, 2019	December 31, 2020	December 31, 2021	December 31, 2022	December 31, 2023
10x Genomics, Inc.	$ 100	$ 144.55	$ 268.44	$ 282.39	$ 69.08	$ 106.09
Nasdaq Composite Index	100	109.50	157.28	190.92	127.73	183.19
Nasdaq Biotechnology Composite Index	$ 100	$ 115.79	$ 145.53	$ 144.61	$ 128.83	$ 133.65

Securities Authorized for Issuance under Equity Compensation Plans

The information required by this item is incorporated by reference to the definitive Proxy Statement for our 2023 Annual Meeting of Stockholders, which will be filed with the SEC no later than 120 days after December 31, 2023.

Sales of Unregistered Securities

None.

Use of Proceeds

None.

Issuer Purchases of Equity Securities

None.

Item 6. [Reserved]

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

You should read the following discussion of our financial condition and results of operations in conjunction with our audited consolidated financial statements and the related notes and other financial information included elsewhere in this Annual Report and our audited consolidated financial statements and notes thereto.

As discussed in the section titled "Special Note Regarding Forward-looking Statements," the following discussion and analysis, in addition to historical financial information, contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section titled "Risk Factors" under Part I, Item 1A above.

Overview

We are a life sciences technology company focused on building innovative products and solutions to interrogate, understand and master biology. Our integrated solutions include instruments, consumables and software for analyzing biological systems at resolution and scale that matches the complexity of biology. We have launched multiple products that enable researchers to understand and interrogate biological analytes in their full biological context. Our commercial product portfolio leverages our Chromium X Series and Chromium Connect instruments, which we refer to as "Chromium instruments," our Visium CytAssist, an instrument designed to simplify the Visium solution workflow by facilitating the transfer of transcriptomic probes from standard glass slides to Visium slides, and our Xenium Analyzer, an instrument designed for fully automated high-throughput analysis of cells in their tissue environment, which we refer to as "Spatial instruments," and our proprietary microfluidic chips, slides, reagents and other consumables for our Chromium, Visium and Xenium solutions, which we refer to as "consumables." We bundle our software with these products to guide customers through the workflow, from sample preparation through analysis and visualization.

Our products cover a wide variety of applications and allow researchers to analyze biological systems at fundamental resolutions and on massive scale, such as at the single cell level for millions of cells. Customers purchase instruments and consumables from us for use in their experiments. In addition to instrument and consumable sales, we derive revenue from post-warranty service contracts for our instruments.

Since our inception in 2012, we have incurred net losses in each year. Our net losses were $255.1 million and $166.0 million for the years ended December 31, 2023 and 2022, respectively. As of December 31, 2023, we had an accumulated deficit of $1.3 billion and cash and cash equivalents and marketable securities totaling $388.7 million. We expect to continue to incur significant expenses for the foreseeable future and to incur operating losses in the near term. We expect our expenses will increase in connection with our ongoing activities, as we:

- attract, hire and retain qualified personnel;
- scale our technology platforms and introduce new products and services;
- protect and defend our intellectual property;
- acquire businesses or technologies; and
- invest in processes, tools and infrastructure to support the growth of our business.

Key business metrics

We regularly review a number of operating and financial metrics, including cumulative instruments sold and total consumables reactions, to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. We believe that these metrics are representative of our current business; however, we anticipate these may change or may be substituted for additional or different metrics as our business grows and as we introduce new products.

Cumulative instruments sold

	As of December 31,		
	2023	2022	2021
Chromium	5,180	4,411	3,511
Visium	531	211	—
Xenium	255	8	—
Cumulative instruments sold	5,966	4,630	3,511

Our products are sold to academic and translational researchers and biopharmaceutical companies. Our Chromium Controller, Chromium X Series and Visium CytAssist instruments are user installable and do not require in-person training. Our Chromium Connect and Xenium instruments require installation and we offer in-person training for their use. We believe cumulative instruments sold is one of the indicators of our ability to drive customer adoption of our products. We define cumulative instruments sold as the cumulative number of Chromium instruments, including the Chromium X Series, the Chromium Connect and the legacy Chromium Controller, Visium CytAssist instruments and Xenium instruments sold since inception.

Our quarterly instrument unit volumes can fluctuate due to a number of factors, including the procurement and budgeting cycles of many of our customers, especially government and academic institutions where unused funds may be forfeited or future budgets reduced if purchases are not made by their fiscal year end, and the purchasing patterns of international customers which vary due to procurement or budgeting cycles, holidays or other factors which may result in a disproportionate amount of their purchasing activity occurring in specific periods. Similarly, our biopharmaceutical customers typically have calendar year fiscal years which may result in a disproportionate amount of their purchasing activity occurring during our fourth quarter. We also believe the timing of unit sales has been impacted and will continue to be impacted by the timing of product introductions and transitions which can either accelerate or delay demand of existing and new products depending on the needs of individual researchers to conclude existing studies or to use new and improved product capabilities. Also, the timing of our price increases, typically at the beginning of a new calendar year, can pull forward additional volume to the quarter before. We therefore believe that an annual representation of cumulative instruments sold is most appropriate for assessing trends in our business.

Total consumables reactions sold

	Year ended December 31,	
	2023	2022
Chromium	312,500	290,900
Visium	29,300	28,300
Xenium	5,200	100
Total consumable reactions	347,000	319,300

A consumable reaction is the reagent setup needed to perform an experiment using one of our solutions. Reactions represent the unit volumes that we sell when a researcher purchases our consumables. As such, consumable reactions sold is an appropriate metric for assessing trends in our business. The figures in the table above (rounded to the nearest hundred) represent the total consumable reactions for the years ended December 31, 2023 and 2022.

Key factors affecting our performance

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

Instrument sales

Management focuses on instrument sales as an indicator of current business success and a leading indicator of likely future sales of consumables. We expect our instrument sales to continue to grow as we increase penetration in our existing markets and expand into, or offer new features and solutions that appeal to, new markets.

We plan to grow our instrument sales in the coming years through multiple strategies including expanding our sales efforts globally and continuing to enhance the underlying technology and applications for life sciences research. We regularly solicit feedback from our customers and focus our research and development efforts on enhancing the fleet of 10x instruments and enabling their ability to use additional applications that address their needs, which we believe in turn helps to drive additional sales of our instruments and consumables. In 2020, we introduced our Chromium Connect instrument, which is an automated version of our legacy Chromium Controller instrument. In 2021, we introduced our Chromium X Series which consists of the Chromium X, a high-throughput instrument to deliver routine million cell experiments, and the Chromium iX, an instrument capable of running experiments for tens of thousands of cells seamlessly upgradable to the Chromium X as scientists expand their research projects. In 2022, we introduced our Visium CytAssist instrument, which streamlines the workflow of our Visium Spatial assays, and our Xenium Analyzer instrument, which is designed for fully automated high-throughput analysis of cells in their tissue environment.

Our sales process varies considerably depending upon the type of customer to whom we are selling. Our sales process with small laboratories and individual researchers is often short, and in some cases, we receive purchase orders from these customers in under a month. Our sales process with other institutions can be longer with most customers submitting purchase orders within six months. Given the variability of our sales cycle, we have in the past experienced, and likely will in the future experience, fluctuations in our instrument sales on a period-to-period basis.

Recurring consumable revenue

We regularly assess trends relating to recurring consumable revenue based on our product offerings, our customer base and our understanding of how our customers use our products. We sell additional instruments and launch additional consumables solutions, some of which do not require the use of a 10x instrument, to drive increased consumables usage by our existing customers and to gain new customers. Consumables revenue on an absolute basis is expected to increase over time and remain the bulk of our revenue.

Revenue mix and gross margin

Our revenue is derived from sales of our instruments, consumables and services. There have been fluctuations in the mix between instruments and consumables and amongst our consumables. Each of our consumables solutions is designed to allow researchers to study a different aspect of biology, such as DNA, RNA, protein or epigenetics, at a resolution and scale that may be impractical or impossible using previously existing tools. As each of our solutions has been introduced, they have been initially purchased by a small number of early adopters. As these early adopters successfully perform experiments and publish scientific articles using our solutions, the utility of these solutions is more broadly understood and the solutions are then subsequently adopted by the larger research community. The revenue contribution from these and other consumable products has varied and is expected to vary on a quarterly basis due to several factors, including the publication of scientific papers demonstrating the value of the consumables, the availability of grants to fund research, budgetary timing, our introduction of new product features and new consumables offerings and our own manufacturing capacity or the capacity of our partners.

For each of the years ended December 31, 2023, 2022 and 2021, our Single Cell Gene Expression consumables, which were introduced in 2016, were our highest selling consumables product. For the year ended December 31, 2023, the remaining consumables revenue was comprised of sales of our Single Cell Immune Profiling, Single Cell Multiome ATAC+Gene Expression, Single Cell Gene Expression Flex, Single Cell ATAC, and Visium and Xenium consumables. Revenue contribution from our Single Cell Gene Expression, Single Cell Multiome ATAC+Gene Expression and Single Cell Immune Profiling consumables decreased as a percentage of overall consumables revenue while revenue contribution from our Single Cell Gene Expression Flex, Single Cell ATAC and Visium and Xenium consumables increased as a percentage of overall consumables revenue for the year ended December 31, 2023.

Our margins are generally higher for those instruments and consumables that we sell directly to customers as compared to those that we sell through distributors. While we expect the mix of direct sales as compared to sales through distributors to remain relatively constant in the near term, we are evaluating increasing our direct sales capabilities in certain geographies.

We expect our gross margin will continue to trend lower due in part to change in product mix with newly introduced products, the impacts of inflation including, among other impacts, employee compensation and benefits, increased supply chain costs and increased costs due to expanding our operations infrastructure. In particular, the Xenium instrument currently carries a significantly lower margin than our other instruments. We believe that potential increases for average selling price, as well as potential opportunities for cost reductions due to economies of scale will improve instrument margin over the long term.

Continued investment in growth

Our significant revenue growth has been driven by rapid innovation towards novel solutions that command price premiums and quick adoption of our solutions by our customer base. We intend to continue to make focused investments to increase revenue and scale operations to support the growth of our business and therefore expect expenses in this area to increase.

We have invested, and will continue to invest, in our manufacturing capabilities and commercial infrastructure. We completed the expansion of our research and development center and manufacturing facility adjacent to our Pleasanton global headquarters in 2023. Excluding acquisitions, we expect our operating expenditures to continue to increase in 2024 and beyond as we increase our investment in new and existing research and development projects, increase commercial efforts to support revenue growth and incentives to retain key talent. In addition, we expect increased legal costs in 2024 to support the protection of our intellectual property portfolio. As cost of revenue, operating expenses and capital expenditures fluctuate over time, we may experience short-term, negative impacts to our results of operations and cash flows, but we are undertaking such investments in the belief that they will contribute to long-term growth.

Acquisitions of key technologies

We have made, and intend to continue to make, investments that meet management's criteria to expand or add key technologies that we believe will facilitate the commercialization of new products in the future. Such investments could take the form of an acquisition of a business, asset acquisition or the exclusive or non-exclusive in-license of intellectual property rights. Any such acquisitions we make may affect our future financial results. Our 2023 acquisition of certain intangible and other assets from Centrillion Technologies, Inc. and Centrillion Technology Holdings Corp. and 2020 acquisitions of CartaNA and ReadCoor were largely comprised of purchases of intellectual property which were expensed as in-process research and development in the quarter during which such acquisitions occurred or when certain technology development milestones were met. While we have not previously entered into material joint-development, partnership or joint-venture agreements, we may in the future decide to do so and any such arrangements may limit our rights and the commercial opportunities of any jointly developed technology.

Components of Results of Operations

Revenue

We generate virtually all of our revenue through the sale of our instruments and consumables to customers. We also generate a small portion of our revenue from instrument service agreements which relate to extended warranties. Our revenue is subject to fluctuation based on the foreign currency in which our products are sold, principally for sales denominated in the euro, Great British pound and Japanese yen.

Our revenue from consumables includes sales of our Chromium, Visium and Xenium consumable products. Our consumables are designed to work exclusively with our instruments. Our Chromium, Xenium and Visium Spatial Proteogenomics consumables require the use of a 10x Genomics instrument, while use of a 10x instrument is optional for our Visium Spatial Gene Expression solution. Our instruments and consumables are generally sold without the right of return. Revenue is recognized as instruments and consumables are shipped. Revenue is recognized net of any sales incentive, distributor rebates and commissions and any taxes collected from customers. Instrument service agreements are typically entered into for a one-year term, with the coverage period beginning after the expiration of the standard one-year warranty period. Revenue from the sale of instrument service agreements are recognized ratably over the coverage period.

Cost of revenue, gross profit and gross margin

Cost of revenue. Cost of revenue primarily consists of manufacturing costs incurred in the production process including personnel and related costs, costs of component materials, manufacturing overhead, packaging and delivery costs and allocated costs including facilities and information technology. In addition, cost of revenue includes royalty costs for licensed technologies included in our products, warranty costs, provisions for slow-moving and obsolete inventory and personnel and related costs and component costs incurred in connection with our obligations under our instrument service agreements. We record royalty accruals relating to sales of majority of our products as cost of revenue.

Gross profit/gross margin. Gross profit is calculated as revenue less cost of revenue. Gross margin is gross profit expressed as a percentage of revenue. Our gross profit and gross margins in future periods are expected to fluctuate from quarter to quarter and will depend on a variety of factors, including: market conditions that may impact our pricing; sales mix changes among consumables, instruments and services; product mix changes between established products and new products; impacts of inflation and increased supply chain costs; excess and obsolete inventories; royalties; our cost structure for manufacturing operations relative to volume; and product warranty obligations. We currently anticipate that we will experience an increase in absolute dollars of both revenue and cost of revenue as we grow our business.

Research and development. Research and development expense primarily consists of personnel and related costs, independent contractor costs, laboratory supplies, equipment maintenance prototype and materials expenses, amortization of developed technology and intangibles and allocated costs including facilities and information technology.

We plan to continue to invest in our research and development efforts to enhance existing products and develop new products. As a result of these and other initiatives, we expect research and development expense will increase in absolute dollars in future periods and vary from period to period as a percentage of revenue. Having completed the expansion of our global headquarters in Pleasanton in 2023, we expect allocated facilities and information technology costs to remain relatively flat in 2024.

In-process research and development. In-process research and development consists of costs incurred to acquire intellectual property for research and development. We expect these costs to be recognized, in most cases, only in periods during which we complete an acquisition of assets comprised in whole or part of intellectual property for research and development. We periodically evaluate acquisitions of this nature.

Selling, general and administrative. Selling, general and administrative expense primarily consists of costs related to the selling and marketing of our products, including sales incentives and advertising expenses and costs associated with our finance, accounting, legal (excluding accrued contingent liabilities), human resources and administrative personnel. Related costs associated with these functions, such as attorney and accounting fees, recruiting services, administrative services, insurance, public relations and communication activities, marketing programs and trade show appearances, travel, customer service costs, safety equipment purchases and cleaning and allocated costs including facilities and information technology, are also included in selling, general and administrative expenses.

We expect to incur additional selling, general and administrative expenses due to continued investment in our sales, marketing and customer service efforts to support the anticipated growth of our business and increased legal costs to support the protection of our intellectual property portfolio. We expect infrastructure costs including allocated facilities and information technology costs to remain flat in absolute dollars. As a result of these and other initiatives, we expect selling, general and administrative expenses to vary from period to period as a percentage of revenue and increase in absolute dollars in future periods. We expect our stock-based compensation expense allocated to cost of revenue, research and development expenses and selling, general and administrative expenses to increase in absolute dollars.

Accrued contingent liabilities

In 2021, accrued contingent liabilities were comprised of the original charge, estimated royalties and interest charges primarily related to our litigation with Bio-Rad Laboratories, Inc. We did not incur any accrued contingent liabilities in 2023 and 2022.

Interest income

Interest income consists of interest earned on our cash and cash equivalents which are invested in bank deposits, money market funds and marketable securities.

Other income (expense), net

Other income (expense), net primarily consists of realized and unrealized gains and losses related to foreign exchange rate remeasurements.

Provision for income taxes

Our provision for income taxes consists primarily of foreign taxes. As we expand the scale and scope of our international business activities, any changes in the U.S. and foreign taxation of such activities may increase our overall provision for income taxes in the future.

As of December 31, 2023, we had federal net operating loss ("NOL") carryforwards of $672.3 million and federal tax credit carryforwards of $77.3 million. Our federal NOLs generated after December 31, 2017, which total $665.9 million, are carried forward indefinitely, while all of our other federal NOL and tax credit carryforwards expire beginning in 2033. As of December 31, 2023, we had state NOL carryforwards of $412.2 million, which expire beginning in 2033. In addition, we had state tax credit carryforwards of $58.5 million, which carry forward indefinitely. Our ability to utilize such carryforwards for income tax savings is subject to certain conditions and may be subject to certain limitations in the future due to ownership changes. As such, there can be no assurance that we will be able to utilize such carryforwards. We have experienced a history of losses and a lack of future taxable income would adversely affect our ability to utilize these NOL and tax credit carryforwards. We currently maintain a full valuation allowance against these tax assets.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOL carryforwards and other pre-change attributes, such as tax credits, to offset its post-change income may be limited. In general, an "ownership change" will occur if there is a cumulative change in our ownership by "5% shareholders" that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. The annual limitation generally is determined by multiplying the value of our stock at the time of such ownership change (subject to certain adjustments) by the applicable long-term tax-exempt rate. Such limitations may result in expiration of a portion of the NOL carryforwards before utilization. We completed a study through September 30, 2023 to determine whether an ownership change had occurred under Section 382 or 383 of the Code, and we determined that an ownership change occurred in 2013. As a result, our NOLs generated through November 1, 2013 may be subject to limitation under Section 382 of the Code. In addition, certain ReadCoor tax attributes are subject to annual limitations as a result of our acquisition of ReadCoor, which constituted an ownership change of ReadCoor. Such limitations may result in expiration of a portion of our NOL or tax credit carryforwards before utilization. Our ability to use NOL or tax credit carryforwards to reduce future taxable income and liabilities may be further limited as a result of future changes in stock ownership. As a result, if we generate taxable income, our ability to use our pre-change NOL or tax credit carryforwards to offset U.S. federal and state taxable income may still be subject to limitations, which could potentially result in increased future tax liability.

Results of Operations

In this section, we discuss the results of our operations for the year ended December 31, 2023 compared to the year ended December 31, 2022. For a discussion of the year ended December 31, 2022 compared to the year ended December 31, 2021, please refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2022.

(in thousands)	Year Ended December 31, 2023	2022	2021
Revenue	$ 618,727	$ 516,409	$ 490,490
Cost of revenue	209,414	120,386	74,091
Gross profit	409,313	396,023	416,399
Operating expenses:			
Research and development	270,332	265,667	211,752
In-process research and development	60,980	—	—
Selling, general and administrative	343,330	298,300	257,560
Accrued contingent liabilities	—	—	(660)
Total operating expenses	674,642	563,967	468,652
Loss from operations	(265,329)	(167,944)	(52,253)
Other income (expense):			
Interest income	16,906	6,647	206
Interest expense	(33)	(476)	(866)
Other expense, net	(307)	(198)	(802)
Total other income (expense)	16,566	5,973	(1,462)
Loss before provision for income taxes	(248,763)	(161,971)	(53,715)
Provision for income taxes	6,336	4,029	4,508
Net loss	$ (255,099)	$ (166,000)	$ (58,223)

Revenue

	Year Ended December 31, 2023	2022	Change $	%
Instruments				
Chromium	$ 47,866	$ 58,552	$ (10,686)	(18)%
Spatial	75,605	13,844	61,761	446 %
Total instruments revenue	123,471	72,396	51,075	71 %
Consumables				
Chromium	420,316	400,433	19,883	5 %
Spatial	59,237	35,155	24,082	69 %
Total consumables revenue	479,553	435,588	43,965	10 %
Services	15,703	8,425	7,278	86 %
Total revenue	$ 618,727	$ 516,409	$ 102,318	20 %

Revenue increased $102.3 million, or 20%, for the year ended December 31, 2023 as compared to year ended December 31, 2022. Instruments revenue increased $51.1 million, or 71%, to $123.5 million for the year ended December 31, 2023 as compared to the year ended December 31, 2022, primarily due to higher volume of Spatial instruments sold. The revenues for the years ended December 31, 2023 and 2022 included twelve and three months of sales of Xenium instruments, respectively. Chromium instruments revenue decreased $10.7 million, or 18%, to $47.9 million primarily due to lower volume of Chromium instruments sold and changes in product mix. Consumables revenue increased $44.0 million, or 10%, to $479.6 million for the year ended December 31, 2023 as compared to the year ended December 31, 2022, primarily driven by growth in both Chromium and Spatial consumables sales.

Cost of revenue, Gross Profit and Gross Margin

(dollars in thousands)	Year Ended December 31, 2023	Year Ended December 31, 2022	Change $	Change %
Cost of revenue	$ 209,414	$ 120,386	$ 89,028	74 %
Gross profit	$ 409,313	$ 396,023	$ 13,290	3 %
Gross margin	66 %	77 %		

Cost of revenue increased $89.0 million, or 74%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily driven by higher manufacturing costs of $79.0 million due to increased sales and higher costs of newly introduced products, $4.4 million of higher inventory write-downs and $4.4 million of higher warranty charges.

Operating Expenses

(dollars in thousands)	Year Ended December 31, 2023	Year Ended December 31, 2022	Change $	Change %
Research and development	$ 270,332	$ 265,667	$ 4,665	2 %
In-process research and development	60,980	—	60,980	N/A
Selling, general and administrative	343,330	298,300	45,030	15 %
Total operating expenses	$ 674,642	$ 563,967	$ 110,675	20 %

Research and development expense increased $4.7 million, or 2%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily driven by an increase in personnel expenses of $15.0 million, including $13.6 million in stock-based compensation expense and higher costs for facilities and information technology of $4.6 million including a lease impairment charge of $2.1 million. The increase was partially offset by lower costs of laboratory materials, supplies and expensed equipment of $13.7 million used to support our research and development efforts and $2.0 million in consulting and professional services.

In-process research and development expense recorded during the year ended December 31, 2023 related to the January 2023 agreement to acquire certain intangible and other assets from Centrillion Technologies, Inc. and Centrillion Technology Holdings Corp. which was accounted for as an asset acquisition. In connection with the acquisition, we recognized an in-process research and development intangible asset of $61.0 million which did not have alternative future use and therefore was recognized as an expense during the period. See Note 4 to the consolidated financial statements for further details. There were no similar purchases in year ended December 31, 2022.

Selling, general and administrative expenses increased $45.0 million, or 15%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily driven by increases in outside legal expenses of $18.1 million, personnel expenses of $14.4 million, including $14.7 million in stock-based compensation expense, $6.4 million for facilities and information technology including lease impairment charges of $2.8 million, $4.5 million of impairment charges relating to the discontinuance of a product line, and higher consulting and professional services of $1.8 million. The increase in personnel expenses was partially offset by $2.5 million in restructuring expenses for the year ended December 31, 2022.

Excluding acquisitions, we expect our operating expenditures to continue to increase in 2024 and beyond as we increase our investment in new and existing research and development projects, commercial efforts to support revenue growth and incentives to retain key talent. In addition, we expect increased legal costs in 2024 to support the protection of our intellectual property portfolio.

Other Income (Expense), Net

(dollars in thousands)	Year Ended December 31, 2023	Year Ended December 31, 2022	Change $	Change %
Interest income	$ 16,906	$ 6,647	$ 10,259	154 %
Interest expense	(33)	(476)	443	(93)%
Other expense, net	(307)	(198)	(109)	55 %
Total other income (expense)	$ 16,566	$ 5,973	$ 10,593	177 %

Interest income increased by $10.3 million for the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily due to interest income generated from our cash equivalents and marketable securities during the year ended December 31, 2023 reflecting an increase in interest rates.

Other expense, net increased by $0.1 million for the year ended December 31, 2023 as compared to the year ended December 31, 2022 and was driven by realized and unrealized losses from foreign currency rate measurement fluctuations.

Provision for Income Taxes

The Company’s provision for income taxes was $6.3 million and $4.0 million, respectively, for the year ended December 31, 2023 and 2022. The provision for income taxes increased by $2.3 million for the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily due to higher foreign income.

Acquisition

On January 28, 2023, we signed an agreement to acquire certain intangible and other assets from Centrillion Technologies, Inc. and Centrillion Technology Holdings Corp. for an upfront cash payment of $10.0 million relating to an intellectual property license. Upon the close of the transaction on July 14, 2023, we paid additional cash consideration of $10.0 million upon acquiring the assets. Under the agreement, we are obligated to provide additional cash consideration if certain technology development milestones are met. As of December 31, 2023, we had paid $21.3 million relating to the completion of development milestones. We paid an additional $20.0 million in January 2024 in relation to a development milestone which was accrued in the Company's consolidated financial statements as of December 31, 2023. Up to $15.0 million of cash consideration is due if an additional technology development milestone is met. Furthermore, the Company expects to pay cash consideration tied to future sales milestones if such milestones are met. See Note 4 to the consolidated financial statements for further details.

Liquidity and Capital Resources

As of December 31, 2023, we had approximately $388.7 million in cash and cash equivalents, and marketable securities which were primarily held in U.S. banks. We have generated negative cumulative cash flows from operations since inception through the year ended December 31, 2023, and we have generated losses from operations since inception as reflected in our accumulated deficit of $1.3 billion.

We currently anticipate making aggregate capital expenditures of between approximately $20 million and $25 million during the next 12 months, which we expect to include, among other expenditures, equipment to be used for manufacturing and research and development.

Our future capital requirements will depend on many factors including our revenue growth rate, research and development efforts, investments in or acquisitions of complementary or enhancing technologies or businesses, the timing and extent of additional capital expenditures to invest in existing and new facilities, the expansion of sales and marketing and international activities, legal costs associated with defending and enforcing intellectual property rights and the introduction of new products.

We take a long-term view in growing and scaling our business and we regularly review acquisition and investment opportunities, and we may in the future enter into arrangements to acquire or invest in businesses, real estate, services and technologies, including intellectual property rights, and any such acquisitions or investments could significantly increase our capital needs. We regularly review opportunities that meet our long-term growth objectives.

In January 2023, we signed an agreement to acquire certain intangible and other assets from Centrillion Technologies, Inc. and Centrillion Technology Holdings Corp. for an upfront cash payment of $10.0 million relating to an intellectual property license. Upon the close of the transaction on July 14, 2023, we paid additional cash consideration of $10.0 million upon acquiring the assets. Under the agreement, we are obligated to provide additional cash consideration if certain technology development milestones are met. As of December 31, 2023, we have paid $21.3 million relating to the completion of development milestones. We paid an additional $20.0 million in January 2024 in relation to a development milestone which was accrued in our consolidated financial statements as of December 31, 2023. Up to $15.0 million of cash consideration is due if an additional technology development milestone is met. Furthermore, we expect to pay cash consideration tied to future sales milestones if such milestones are met.

We expect to continue to incur operating losses for the foreseeable future. We believe that our existing cash and cash equivalents and cash generated from sales of our products will be sufficient to meet our anticipated cash needs for at least the next 12 months. However, our liquidity assumptions may prove to be incorrect, and we could exhaust our available financial resources sooner than we currently expect. We maintain the majority of our cash and cash equivalents in accounts with major U.S. and multi-national financial institutions, and our deposits at these institutions exceed insured limits. Market conditions can impact the viability of these institutions. In the event of failure of any of the financial institutions where we maintain our cash and cash equivalents, there can be no assurance that we would be able to access uninsured funds in a timely manner or at all. Any inability to access or delay in accessing these funds could adversely affect our business and financial position.

We intend to continue to evaluate market conditions and may in the future pursue additional sources of funding, such as mortgage or other financing, to further enhance our financial position and to execute our business strategy. In addition, should prevailing economic, financial, business or other factors adversely affect our ability to meet our operating cash requirements, we could be required to obtain funding though traditional or alternative sources of financing. We cannot be certain that additional funds would be available to us on favorable terms when required, or at all.

Sources of liquidity

Since our inception, we have financed our operations and capital expenditures primarily through sales of convertible preferred stock and common stock, revenue from sales of our products and the incurrence of indebtedness. In September 2019, we completed our initial public offering for aggregate proceeds of $410.8 million, net of offering costs, underwriter discounts and commissions. In September 2020, we completed a public offering of our Class A common stock for aggregate proceeds of $482.3 million, net of offering costs, underwriting discounts and commissions.

Cash flow summary

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

	Year Ended December 31,	
	2023	2022
	(in thousands)	
Net cash (used in) provided by:		
Operating activities	$ (15,197)	$ (33,606)
Investing activities	133,492	(350,887)
Financing activities	13,669	15,817
Effect of exchange rates changes on cash, cash equivalents, and restricted cash	(33)	(44)
Net increase (decrease) in cash, cash equivalents, and restricted cash	$ 131,931	$ (368,720)

Operating activities

The net cash used in operating activities of $15.2 million for the year ended December 31, 2023 was due primarily to a net loss of $255.1 million, partially offset by stock-based compensation expense of $167.0 million, depreciation and amortization of $35.5 million, net cash inflow from changes in operating assets and liabilities of $17.3 million, asset impairment charges of $9.8 million, amortization of leased right-of-use assets of $8.1 million, realized losses on sale of marketable securities of $1.7 million and other non-cash expenses of $0.4 million. The net cash inflow from operating assets and liabilities was primarily due to an increase in accrued expenses and other current liabilities of $28.3 million primarily driven by $20.0 million of accrued purchase consideration, an increase in deferred revenue of $10.9 million, a decrease in inventory of $7.9 million and an increase in other noncurrent liabilities of $1.3 million. The net cash inflow from operating assets and liabilities was partially offset by an increase in accounts receivable of $10.6 million primarily due to an increase in revenue and timing of collections, a decrease of $8.7 million due to payment of operating lease liabilities, a decrease in accounts payable of $6.0 million due to timing of vendor payments, a decrease in accrued compensation and other related benefits of $2.6 million and an increase in prepaid expenses and other current assets of $2.4 million.

The net cash used in operating activities of $33.6 million for the year ended December 31, 2022 was due primarily to a net loss of $166.0 million, net cash outflow from changes in operating assets and liabilities of $39.4 million, partially offset by stock-based compensation expense of $136.8 million, depreciation and amortization of $25.4 million, amortization of leased right-of-use assets of $7.6 million, loss on disposal of property and equipment of $1.1 million and amortization of premium and accretion of discount on marketable securities, net of $0.9 million. The net cash outflow from operating assets and liabilities was primarily due to an increase in inventory of $21.2 million due to anticipated demand including new product introductions and supply chain management, an increase in accounts receivable of $18.9 million primarily due to increase in revenue and timing of collections, a decrease of $6.4 million due to payment of operating lease liabilities, an increase in prepaid expenses and other current assets of $4.5 million and a decrease in other noncurrent liabilities of $2.9 million. The net cash outflow from operating assets and liabilities was partially offset by an increase in accounts payable of $5.9 million due to timing of vendor payments, an increase in deferred revenue of $3.4 million, an increase in accrued expenses and other current liabilities of $3.3 million, an increase in accrued compensation and other related benefits of $1.1 million and a decrease in other noncurrent assets of $0.9 million.

Investing activities

The net cash provided by investing activities of $133.5 million in the year ended December 31, 2023 was due to the proceeds from sales and maturities of marketable securities of $100.2 million and $82.8 million, respectively, partially offset by purchases of property and equipment and intangible assets of $48.6 million and $0.9 million, respectively.

The net cash used in investing activities of $350.9 million in the year ended December 31, 2022 was due to purchases of marketable securities of $282.9 million, purchases of property and equipment of $131.7 million and payment of acquisition-related holdback cash and contingent consideration of $4.0 million, partially offset by proceeds from sales and maturities of marketable securities of $49.1 million and $18.5 million, respectively.

Financing activities

The net cash provided by financing activities of $13.7 million in the year ended December 31, 2023 was primarily from proceeds of $19.5 million from the issuance of common stock from the exercise of stock options and employee stock purchase plan purchases partially offset by payments on financing arrangements of $5.8 million.

The net cash provided by financing activities of $15.8 million in the year ended December 31, 2022 was primarily from proceeds of $21.2 million from the issuance of common stock from the exercise of stock options and employee stock purchase plan purchases partially offset by payments on financing arrangements of $5.4 million.

Critical Accounting Estimates

Our consolidated financial statements and the related notes thereto included elsewhere in this Annual Report are prepared in accordance with GAAP. The preparation of consolidated financial statements also requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ significantly from our estimates. To the extent that there are differences between our estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that the accounting estimates described below involve a significant degree of judgment and complexity. Accordingly, we believe these are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of operations. For further information, see Note 2 of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report.

Revenue recognition

We generate revenue from sales of products and services, and our products consist of instruments and consumables. Revenue from product sales is recognized when control of the product is transferred, which is generally upon shipment to the customer. Instrument service agreements, which relate to extended warranties, are typically entered into for one-year terms, following the expiration of the standard one-year warranty period. Revenue for extended warranties is recognized ratably over the term of the extended warranty period as a stand ready performance obligation. Revenue is recorded net of discounts, distributor commissions and sales taxes collected on behalf of governmental authorities. Customers are invoiced generally upon shipment, or upon order for services, and payment is typically due within 30 days. Cash received from customers in advance of product shipment or providing services is recorded as a liability. Our contracts with our customers generally do not include rights of return or a significant financing component.

We regularly enter into contracts that include various combinations of products and services which are generally distinct and accounted for as separate performance obligations. The transaction price is allocated to each performance obligation in proportion to its standalone selling price. We determine standalone selling price using average selling prices with consideration of current market conditions. If the product or service has no history of sales or if the sales volume is not sufficient, we rely upon prices set by management, adjusted for applicable discounts.

Inventory

Inventory is recorded at the lower of cost, determined on a first-in, first-out basis, or net realizable value. We use judgment to analyze and determine if the composition of our inventory is obsolete, slow-moving, unsalable or otherwise carried above the net realizable value and frequently review such determinations. We write down specifically identified unusable, obsolete, slow-moving or known unsalable inventory and inventory otherwise carried above the net realizable value in the period that it is first recognized by using a number of factors including product expiration dates, open and unfulfilled orders and sales forecasts. Any write-down of inventory to net realizable value establishes a new cost basis and will be maintained even if certain circumstances suggest that the inventory is recoverable in subsequent periods. Costs associated with the write-down of inventory are recorded to cost of revenue on our consolidated statements of operations. We make assumptions about future demand, market conditions and the release of new products that may supersede old ones. However, if actual market conditions are less favorable than anticipated, additional inventory write-downs could be required.

Stock-based compensation

Our stock-based compensation relates to stock options, restricted stock units (“RSUs”), market-based performance stock awards ("PSAs") including performance stock options and performance RSUs granted pursuant to equity incentive plans and stock purchase rights under an Employee Stock Purchase Plan (“ESPP”). Stock-based compensation expense for stock-based awards are based on their grant date fair value. We determine the fair value of RSUs based on the closing price of our stock price, which is listed on Nasdaq Stock Market LLC, at the date of the grant. We estimate the fair value of stock option awards under an equity incentive plan and stock purchase right under an ESPP on the grant date using the Black-Scholes option-pricing model. The fair values of stock-based awards, excluding PSAs, are recognized as compensation expense on a straight-line basis over the requisite service period in which the awards are expected to vest and forfeitures are recognized as they occur.

The Black-Scholes model considers several variables and assumptions in estimating the fair value of stock-based awards. These variables include the per share fair value of the underlying common stock, exercise price, expected term, risk-free interest rate, expected annual dividend yield and the expected stock price volatility over the expected term. We calculate the expected term using the simplified method, which is the mid-point between the vesting and contractual term. We determine expected volatility using the historical volatility of the stock price of similar publicly traded peer companies. The risk-free interest rate is based on the yield available on U.S. Treasury zero-coupon issues similar in duration to the expected term of the equity-settled award.

During the years ended December 31, 2023 and 2022, we issued market-based performance stock awards ("PSAs") comprising of performance stock options and performance restricted stock units. The PSAs consist of three separate tranches and the vesting of each tranche is subject to the Class A common stock closing price being maintained at or above certain

predetermined share price goals for each tranche. We estimated the value of the PSA awards granted using a Monte Carlo simulation model, using assumptions including volatility, risk-free interest rate, cost of equity and dividends. We will recognize the compensation expense over the derived service period using the accelerated attribution method commencing on the grant date. The derived service period is the median duration of the successful stock price paths to meet the price goal for each tranche as simulated in the Monte Carlo valuation model. If the related market condition is achieved earlier than its estimated derived service period, the stock-based compensation expense will be accelerated, and a cumulative catch-up expense will be recorded during the period in which the market condition is met.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

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

Interest Rate Risk

We have exposure to interest rate risk that relates primarily to our cash equivalents and marketable securities. All of our cash equivalents and marketable securities are designated as available-for-sale and carried at fair market value. We invest in a number of securities including corporate bonds, U.S. agency notes, asset-backed securities, commercial paper, U.S. treasuries and money market funds. We attempt to ensure the safety and preservation of our invested principal funds by limiting default risk, market risk and reinvestment risk. We mitigate default risk by investing in high grade investment securities. The fair market value of our fixed rate securities may be adversely impacted by increases in interest rates. For example, market interest rates increased during 2022, which contributed to unrealized losses on our cash equivalents and marketable securities. In 2023, we reduced our marketable securities portfolio which decreased our unrealized losses from the impact of further increases in interest rates during the year. A hypothetical 100 basis-point (one percentage point) increase in interest rates compared to rates at December 31, 2023 and December 31, 2022 would have adversely affected the fair value of our investment portfolio by approximately $0.1 million and $1.4 million, respectively.

Foreign Currency Exchange Risk

Our reporting currency is the U.S. dollar and the functional currency of each of our subsidiaries is either its local currency or the U.S. dollar depending on the circumstances. Historically, most of our revenue is denominated in U.S. dollars, although we sell our products and services in local currency outside of the United States, principally the euro, Great British pound and Japanese yen. For the years ended December 31, 2023 and 2022, approximately 23% and 18%, respectively, of our sales were denominated in currencies other than U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States. We are exposed to gains or losses due to changes in foreign currency exchange rates. For example, if the value of U.S. dollar increases relative to foreign currencies, we will incur losses on the remeasurement on customer receivables which are denominated in foreign currencies. In addition, for our price lists denominated in foreign currencies, if the value of the U.S. dollar increases relative to the foreign currencies, the value of the revenue transactions when translated or remeasured to our U.S. dollar reporting currency will be lower. We do not currently maintain a program to hedge exposures to non-U.S. dollar currencies. We have performed a sensitivity analysis as of December 31, 2023 and as of December 31, 2022, using a modeling technique that measures the change in the amount of non-U.S. dollar monetary assets arising from a hypothetical 10% movement in the levels of foreign currency exchange rates relative to the U.S. dollar, with all other variables held constant. The sensitivity analysis indicated that a hypothetical 10% movement in foreign currency exchange rates would change the amount of cash and cash equivalents and accounts receivable that we would report in U.S. Dollars as of December 31, 2023 and December 31, 2022 by approximately $3.8 million and $6.0 million, respectively.

Item 8. Financial Statements and Supplementary Data.

10x Genomics, Inc.

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of 10x Genomics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of 10x Genomics, Inc. (the Company) as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2023, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) and our report dated February 15, 2024 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

	Revenue Recognition
Description of the Matter	For the year ended December 31, 2023, the Company recognized revenues of $618.7 million. As discussed in Note 2 to the consolidated financial statements, the Company recognizes revenue when control of the products and services is transferred to its customers in an amount that reflects the consideration it expects to receive from its customers in exchange for those products and services. Auditing the Company's revenue recognition can be complex due to the volume of sales transactions including multiple performance obligations.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of the controls over the allocation of the transaction price to performance obligations in revenue transactions. For example, we tested management's controls over establishing stand-alone selling price, and tested the automated system controls for the application of the stand-alone selling price to the revenue transactions. Our audit procedures included, among others, evaluating the allocation of consideration using stand-alone selling price for a sample of individual sales transactions. For the sample, we inspected the customer contract, identified the distinct performance obligation(s) in the contract, and recalculated the allocation of the transaction price. For the sample, we further tested the timing of revenue recognition based on evidence of transfer of control of the goods to the customer or the recognition of revenue over time for extended warranty service performance obligations.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2015.

San Jose, California
February 15, 2024

10x Genomics, Inc.
Consolidated Balance Sheets
(In thousands, except share and per share data)

	December 31, 2023	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 359,284	$ 219,746
Marketable securities	29,411	210,238
Restricted cash	—	2,633
Accounts receivable, net	114,832	104,211
Inventory	73,706	81,629
Prepaid expenses and other current assets	18,789	16,578
Total current assets	596,022	635,035
Property and equipment, net	279,571	289,328
Restricted cash	—	4,974
Operating lease right-of-use assets	65,361	69,882
Goodwill	4,511	4,511
Intangible assets, net	16,616	22,858
Other noncurrent assets	3,062	2,392
Total assets	$ 965,143	$ 1,028,980
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 15,738	$ 21,599
Accrued compensation and related benefits	30,105	32,675
Accrued expenses and other current liabilities	56,648	59,779
Deferred revenue	13,150	7,867
Operating lease liabilities	11,521	9,037
Total current liabilities	127,162	130,957
Operating lease liabilities, noncurrent	83,849	86,139
Deferred revenue, noncurrent	8,814	3,165
Other noncurrent liabilities	4,275	2,976
Total liabilities	224,100	223,237
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, $0.00001 par value; 100,000,000 shares authorized, no shares issued or outstanding as of December 31, 2023 and 2022	—	—
Common stock, $0.00001 par value; 1,100,000,000 shares authorized (Class A 1,000,000,000, Class B 100,000,000); 119,095,362 (Class A 105,038,529, Class B 14,056,833) and 115,195,009 (Class A 96,527,754, Class B 18,667,255) shares issued and outstanding as of December 31, 2023 and 2022, respectively	2	2
Additional paid-in capital	2,025,890	1,839,397
Accumulated deficit	(1,284,420)	(1,029,321)
Accumulated other comprehensive loss	(429)	(4,335)
Total stockholders' equity	741,043	805,743
Total liabilities and stockholders' equity	$ 965,143	$ 1,028,980

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

10x Genomics, Inc.
Consolidated Statements of Operations
(In thousands, except share and per share data)

	Year Ended December 31,		
	2023	2022	2021
Revenue	$ 618,727	$ 516,409	$ 490,490
Cost of revenue	209,414	120,386	74,091
Gross profit	409,313	396,023	416,399
Operating expenses:			
Research and development	270,332	265,667	211,752
In-process research and development	60,980	—	—
Selling, general and administrative	343,330	298,300	257,560
Accrued contingent liabilities	—	—	(660)
Total operating expenses	674,642	563,967	468,652
Loss from operations	(265,329)	(167,944)	(52,253)
Other income (expense):			
Interest income	16,906	6,647	206
Interest expense	(33)	(476)	(866)
Other expense, net	(307)	(198)	(802)
Total other income (expense)	16,566	5,973	(1,462)
Loss before provision for income taxes	(248,763)	(161,971)	(53,715)
Provision for income taxes	6,336	4,029	4,508
Net loss	$ (255,099)	$ (166,000)	$ (58,223)
Net loss per share, basic and diluted	$ (2.18)	$ (1.46)	$ (0.53)
Weighted-average shares used to compute net loss per share, basic and diluted	117,165,036	113,858,684	110,347,937

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

10x Genomics, Inc.
Consolidated Statements of Comprehensive Loss
(In thousands)

	December 31,		
	2023	2022	2021
Net loss	$ (255,099)	$ (166,000)	$ (58,223)
Other comprehensive income (loss), net of tax:			
Unrealized gains (losses) on available-for-sale marketable securities	2,210	(4,116)	—
Realized loss on available-for-sale marketable securities reclassified into net loss	1,718	—	—
Foreign currency translation adjustment	(22)	(241)	72
Other comprehensive income (loss), net of tax	3,906	(4,357)	72
Comprehensive loss	$ (251,193)	$ (170,357)	$ (58,151)

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

10x Genomics, Inc.
Consolidated Statements of Stockholders' Equity
(In thousands, except share data)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount				
Balance as of December 31, 2020	108,485,909	$ 2	$ 1,544,218	$ (805,098)	$ (50)	$ 739,072
Issuance of Class A common stock related to equity awards	4,029,068	—	40,325	—	—	40,325
Vesting of shares subject to repurchase, including early exercised options	—	—	154	—	—	154
Stock-based compensation	—	—	96,168	—	—	96,168
Net loss	—	—	—	(58,223)	—	(58,223)
Other comprehensive income	—	—	—	—	72	72
Balance as of December 31, 2021	112,514,977	2	1,680,865	(863,321)	22	817,568
Issuance of Class A common stock related to equity awards	2,680,032	—	21,226	—	—	21,226
Vesting of shares subject to repurchase, including early exercised options	—	—	96	—	—	96
Stock-based compensation	—	—	137,210	—	—	137,210
Net loss	—	—	—	(166,000)	—	(166,000)
Other comprehensive loss	—	—	—	—	(4,357)	(4,357)
Balance as of December 31, 2022	115,195,009	2	1,839,397	(1,029,321)	(4,335)	805,743
Issuance of Class A common stock related to equity awards	3,900,353	—	19,483	—	—	19,483
Stock-based compensation	—	—	167,010	—	—	167,010
Net loss	—	—	—	(255,099)	—	(255,099)
Other comprehensive income	—	—	—	—	3,906	3,906
Balance as of December 31, 2023	119,095,362	$ 2	$ 2,025,890	$ (1,284,420)	$ (429)	$ 741,043

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

10x Genomics, Inc.
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2023	2022	2021
Operating activities:			
Net loss	$ (255,099)	$ (166,000)	$ (58,223)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation expense	166,950	136,848	95,962
Depreciation and amortization	35,512	25,368	21,118
Asset impairment charges	9,845	—	—
Amortization of right-of-use assets	8,107	7,638	7,136
Realized loss on marketable securities	1,718	—	—
Other	427	1,957	79
Changes in operating assets and liabilities:			
Accounts receivable	(10,613)	(18,948)	(34,041)
Inventory	7,871	(21,192)	(30,132)
Prepaid expenses and other current assets	(2,429)	(4,495)	(1,053)
Other noncurrent assets	(678)	925	1,045
Accounts payable	(6,017)	5,858	11,084
Accrued compensation and other related benefits	(2,637)	1,114	16,337
Deferred revenue	10,932	3,350	1,535
Accrued contingent liabilities	—	—	(44,173)
Accrued expenses and other current liabilities	28,301	3,336	(873)
Operating lease liability	(8,671)	(6,423)	(2,469)
Other noncurrent liabilities	1,284	(2,942)	(4,705)
Net cash used in operating activities	(15,197)	(33,606)	(21,373)
Investing activities:			
Proceeds from sales of marketable securities	100,191	49,117	—
Proceeds from maturities of marketable securities	82,825	18,528	—
Purchases of property and equipment	(48,601)	(131,661)	(101,278)
Purchase of intangible assets	(923)	—	—
Acquisition of business, net of cash acquired	—	(4,000)	(5,451)
Purchase of marketable securities	—	(282,871)	—
Net cash provided by (used in) investing activities	133,492	(350,887)	(106,729)
Financing activities:			
Payments on technology license financing arrangement	(5,814)	(5,409)	(5,028)
Issuance of common stock from exercise of stock options and employee stock purchase plan purchases	19,483	21,226	40,325
Net cash provided by financing activities	13,669	15,817	35,297
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(33)	(44)	234
Net increase (decrease) in cash, cash equivalents, and restricted cash	131,931	(368,720)	(92,571)
Cash, cash equivalents, and restricted cash at beginning of year	227,353	596,073	688,644
Cash, cash equivalents, and restricted cash at end of year	$ 359,284	$ 227,353	$ 596,073
Supplemental disclosures of cash flow information:			
Cash paid for interest	$ 436	$ 841	$ 1,222
Cash paid for taxes	$ 4,927	$ 3,925	$ 8,660
Noncash investing and financing activities			
Purchases of property and equipment included in accounts payable, accrued expenses and other current liabilities	$ 3,324	$ 26,750	$ 16,972
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 6,518	$ 16,562	$ 21,284
Contingent consideration payable related to business acquisition	$ —	$ —	$ 1,500

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

10x Genomics, Inc.
Notes to Consolidated Financial Statements

1. Description of Business and Basis of Presentation

Organization and Description of Business

10x Genomics, Inc. (the "Company") is a life sciences technology company focused on building innovative products and solutions to interrogate, understand and master biological systems at resolution and scale that matches the complexity of biology. The Company's integrated solutions include the Company's Chromium X Series and Chromium Connect instruments, which the Company refers to as "Chromium instruments," the Company's Visium CytAssist and Xenium Analyzer instruments, which the Company refers to as "Spatial instruments," and the Company's proprietary microfluidic chips, slides, reagents and other consumables for the Company's Chromium, Visium and Xenium solutions, which the Company refers to as "consumables." The Company bundles its software with these products to guide customers through the workflow, from sample preparation through analysis and visualization. The Company was incorporated in the state of Delaware in July 2012 and began commercial and manufacturing operations and selling its instruments and consumables in 2015. The Company is headquartered in Pleasanton, California and has wholly-owned subsidiaries in Asia, Europe, Oceania and North America.

Basis of Presentation

The consolidated financial statements, which include the Company's accounts and the accounts of its wholly-owned subsidiaries, are prepared in accordance with U.S. generally accepted accounting principles (or "GAAP"). All intercompany transactions and balances have been eliminated.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, disclosure of contingent liabilities, and the reported amounts of revenue and expense. These judgments, estimates and assumptions are used for, but not limited to, revenue recognition, inventory valuation and write-downs, accounting for asset and business acquisitions and the valuation of stock-based compensation awards. The Company bases its estimates on various factors and information, which may include, but are not limited to, history and prior experience, the Company's forecasts and future plans, current economic conditions and information from third-party professionals that management believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities and recorded amounts of expenses that are not readily apparent from other sources. To the extent there are material differences between the Company's estimates and the actual results, the Company's future consolidated results of operation may be affected.

Segment Information

The Company operates as a single operating segment. The Company's chief operating decision maker, its Chief Executive Officer, manages the Company's operations on a consolidated basis for the purposes of allocating resources, making operating decisions and evaluating financial performance.

Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with an original maturity of three months or less from the date of purchase to be cash equivalents. Cash equivalents consist of amounts invested in money market funds and are stated at fair value.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported on the consolidated balance sheets that sum to the total of the same amounts shown in the consolidated statements of cash flows (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Cash and cash equivalents	$ 359,284	$ 219,746	$ 587,447
Restricted cash	—	7,607	8,626
Total cash, cash equivalents and restricted cash	$ 359,284	$ 227,353	$ 596,073

Marketable Securities

The Company designates investments in debt securities as available-for-sale. Available-for-sale debt securities with original maturities of three months or less from the date of purchase are classified within cash and cash equivalents. Available-for-sale debt securities with original maturities longer than three months are available to fund current operations and are classified as marketable securities, within current assets on the balance sheet. Available-for-sale debt securities are reported at fair value with the related unrealized gains and losses included in "Accumulated other comprehensive loss," a component of stockholders' equity, net of tax. Realized gains (losses) on the sale of marketable securities are determined using the specific-identification method and recorded in "Other expense, net," in the Consolidated Statements of Operations.

The available-for-sale debt securities are subject to a periodic impairment review. For investments in an unrealized loss position, the Company determines whether a credit loss exists by considering information about the collectability of the instrument, current market conditions and reasonable and supportable forecasts of economic conditions. The Company recognizes an allowance for credit losses, up to the amount of the unrealized loss when appropriate, and writes down the amortized cost basis of the investment if it is more likely than not that the Company will be required or will intend to sell the investment before recovery of its amortized cost basis. Allowances for credit losses and write-downs are recognized in "Other expense, net," and unrealized losses not related to credit losses are recognized in "Accumulated other comprehensive loss." There are no allowances for credit losses for the periods presented. As of December 31, 2023, the gross unrealized losses on available-for-sale securities are related to market interest rate changes and not attributable to credit.

Fair Value of Financial Instruments

Cash equivalents are comprised of money market funds which are classified as Level 1 in the fair value hierarchy. Assets recorded at fair value on a recurring basis in the balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1 - Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2 - Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3 - Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

The Company's financial instruments consist of Level 1 and Level 2 assets. Where quoted prices are available in an active market, securities are classified as Level 1. Money market funds are classified as Level 1. Level 2 assets consist primarily of corporate bonds, asset-backed securities, commercial paper, U.S. Government Treasury and agency securities, and debt securities in government-sponsored entities based upon quoted market prices for similar movements in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant inputs are observable in the market or can be corroborated by observable market data for substantially the full term of the assets. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs obtained from various third party-data providers, including but not limited to, benchmark yields, interest rate curves, reported trades, broker/dealer quotes and reference data.

Accounts Receivable, Net

Accounts receivable consist of amounts due from customers for the sales of products and services. The Company reviews its accounts receivable and provides allowances of specific amounts if collectability is no longer reasonably assured based on historical experience and specific customer collection issues. The allowance for doubtful accounts was $0.1 million as of December 31, 2023 and 2022, respectively.

Business Concentrations

The Company's instruments are mostly assembled and tested by third party contract manufacturers in Asia and the United States. The Company's agreement with the contract manufacturers contains purchase commitments. In addition, the Company is reliant on several suppliers for key components for its reagent kits. A significant disruption in the operations of the contract

manufacturers or suppliers may impact the production of the Company's products for a substantial period of time, which could have a material adverse effect on its business, financial condition and results of operations.

Concentrations

Financial instruments that potentially subject the Company to credit risk consist of cash equivalents, marketable securities (as described in this footnote under the header "Marketable Securities" above) and accounts receivable. The Company's cash and cash equivalents held with large financial institutions in the United States and deposits exceed the Federal Deposit Insurance Corporation's insurance limit. The Company performs periodic evaluations of the risks associated with its investments and the relative credit standing of these financial institutions.

The Company performs ongoing credit evaluations of its customers' financial condition. The Company does not require collateral from its customers but may require upfront payments from certain customers. The Company has not experienced material credit losses to date. For the years ended December 31, 2023, 2022, and 2021, no single customer represented more than 10% of revenue. As of December 31, 2022, one of the Company's distributors accounted for 11% of the Company's outstanding accounts receivable. No customer or distributor represented more than 10% of the Company's outstanding accounts receivable as of December 31, 2023 or 2021.

Substantially all the Company's long-lived assets are located in the United States.

Inventory

Inventory is recorded at the lower of cost, determined on a first-in, first-out basis, or net realizable value. The Company uses judgment to analyze and determine if the composition of its inventory is obsolete, slow-moving, unsalable or otherwise carried above the net realizable value and frequently reviews such determinations. The Company writes down specifically identified unusable, obsolete, slow-moving or known unsalable inventory and inventory otherwise carried above the net realizable value in the period that it is first recognized by using a number of factors including product expiration dates, open and unfulfilled orders and sales forecasts. Net realizable value is determined using the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. Any write-down of its inventory to net realizable value establishes a new cost basis and will be maintained even if certain circumstances suggest that the inventory is recoverable in subsequent periods. Costs associated with the write-down of inventory are recorded to cost of revenue on the Company's consolidated statements of operations.

Leases

The Company determines if an arrangement is or contains a lease at inception by assessing whether the arrangement contains an identified asset and whether it has the right to control the identified asset. Right-of-use ("ROU") assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Lease liabilities are recognized at the lease commencement date based on the present value of future lease payments over the lease term. ROU assets are based on the measurement of the lease liability and also include any lease payments made prior to or on lease commencement and exclude lease incentives and initial direct costs incurred, as applicable.

The Company uses its incremental borrowing rate based on the information available at the lease commencement date in determining the present value of future lease payments. The Company gives consideration to its credit risk, term of the lease and total lease payments and adjusts for the impacts of collateral, as necessary, when calculating its incremental borrowing rates. The lease terms may include options to extend or terminate the lease when the Company is reasonably certain it will exercise such options. Lease costs for the Company's operating leases are recognized on a straight-line basis within operating expenses and costs of goods sold over the reasonably assured lease term.

The Company evaluates ROU assets related to leases for indicators of impairment whenever events or changes in circumstances indicate that the carrying amount of an ROU asset may not be recoverable. When a decision has been made to sublease that space, the Company evaluates the asset for impairment and recognize the associated impact to the ROU asset and related expense, if applicable. The evaluation is performed at the lowest level of identifiable cash flows for an asset group. Undiscounted cash flows expected to be generated by the related ROU assets are estimated over the ROU assets' useful lives. If the evaluation indicates that the carrying amount of the ROU assets may not be recoverable, any potential impairment is measured based upon the fair value of the related ROU asset or asset group as determined by appropriate valuation techniques. Refer to

Note 7, *Commitments and Contingencies - Lease Agreements,* to the Notes to Consolidated Financial Statements for further details.

The Company has elected to not separate lease and non-lease components for any leases within its existing classes of assets and, as a result, accounts for any lease and non-lease components as a single lease component. The Company has also elected to not apply the recognition requirement to any leases within its existing classes of assets with a term of 12 months or less.

Internal-Use Software

The Company capitalizes costs incurred to develop internal-use software within property and equipment, net and capitalizes costs to develop hosting arrangements within other noncurrent assets in the consolidated balance sheets. Costs incurred during the preliminary planning and evaluation and post implementation stages of the project are expensed as incurred. Costs incurred during the application development stage of the project are capitalized. These costs are amortized on a straight-line basis over the estimated useful life of the asset.

Property and Equipment, Net

Property and equipment is stated at cost, net of accumulated depreciation. Depreciation is computed using the straight-line method based on the estimated useful lives of the following assets:

	Useful Life (Years)		
Building	10	-	40
Laboratory equipment and machinery	3	-	5
Computer equipment	2	-	5
Furniture and fixtures	3		
Leasehold improvements	1	-	10

Impairment of Long-Lived Assets

The Company evaluates long-lived assets, such as property and equipment and intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. If indicators of impairment exist and the undiscounted future cash flows that the assets are expected to generate are less than the carrying value of the assets, the Company reduces the carrying amount of the assets to their estimated fair values based on a discounted cash flow approach or, when available and appropriate, to comparable market values. The Company recorded impairment charges of $4.6 million primarily relating to intangible assets during the year ended December 31, 2023. There were no impairment losses recorded for the years ended December 31, 2022 and 2021. Refer to Note 5, Other Financial Statement Information - *Intangible Assets, Net,* to the Notes to Consolidated Financial Statements for further details.

Product Warranties

The Company generally provides a one-year warranty on its instruments. The Company reviews its exposure to estimated warranty obligations associated with instrument sales and establishes an accrual based on historical product failure rates and actual warranty costs incurred. This expense is recorded as a component of cost of revenue in the consolidated statements of operations.

Deferred Revenue

Deferred revenue consists of payments received in advance of revenue recognition primarily related to instrument service agreements, also referred to as extended warranties. Revenue under these agreements is recognized over the related service period. Deferred revenue expected to be recognized during the 12 months following the balance sheet date is recorded as current portion of deferred revenue and the remaining portion is recorded as long-term.

Revenue Recognition

The Company generates revenue from sales of products and services, and its products consist of instruments and consumables. Revenue from product sales is recognized when control of the product is transferred, which is generally upon shipment to the customer. Instrument service agreements, which relate to extended warranties, are typically entered into for one-year terms, following the expiration of the standard one-year warranty period. Revenue for extended warranties is recognized ratably over the term of the extended warranty period as a stand ready performance obligation. Revenue is recorded net of discounts, distributor commissions and sales taxes collected on behalf of governmental authorities. Customers are invoiced generally upon shipment, or upon order for services, and payment is typically due within 30 days. Cash received from customers in advance of product shipment or providing services is recorded as a contract liability. The Company's contracts with its customers generally do not include rights of return or a significant financing component.

The Company regularly enters into contracts that include various combinations of products and services which are generally distinct and accounted for as separate performance obligations. The transaction price is allocated to each performance obligation in proportion to its standalone selling price. The Company determines standalone selling price using average selling prices with consideration of current market conditions. If the product or service has no history of sales or if the sales volume is not sufficient, the Company relies upon prices set by management, adjusted for applicable discounts.

Cost of Revenue

Cost of revenue primarily consists of manufacturing costs incurred in the production process, including personnel and related costs, component materials, labor and overhead, packaging and delivery costs and allocated costs including facilities and information technology. In addition, cost of product revenue includes royalty costs for licensed technologies included in the Company's products, warranty costs and provisions for slow-moving and obsolete inventory.

Shipping and Handling Costs

Shipping and handling charged to customers are recorded as revenue. Shipping and handling costs are included in the Company's cost of revenue.

Research and Development

Research and development costs are expensed in the period incurred. Research and development expense consists of personnel and related costs, independent contractor costs, laboratory supplies, equipment maintenance, prototype and materials expenses, amortization of developed technology and intangibles and allocated costs including facilities and information technology.

See Note 4 for discussion of in-process research and development included in the consolidated statements of operations.

Advertising Costs

Advertising costs are expensed as incurred. The Company incurred advertising costs of $3.3 million, $3.7 million and $4.7 million for the years ended December 31, 2023, 2022 and 2021, respectively.

Stock-Based Compensation

The Company's stock-based compensation expense relates to stock options, restricted stock units ("RSUs"), market-based performance stock awards ("PSAs") including performance stock options and performance RSUs granted pursuant to equity incentive plans and stock purchase rights under an Employee Stock Purchase Plan ("ESPP"). Stock-based compensation expense for its stock-based awards is based on their grant date fair value. The Company determines the fair value of RSUs based on the closing price of its stock, which is listed on the Nasdaq Global Select Market, at the date of the grant (or on the most recent trading day prior to grant, if the date of grant is not a trading day). The Company estimates the fair value of stock option awards under an equity incentive plan and stock purchase rights under an ESPP on the grant date using the Black-Scholes option-pricing model. The fair values of stock-based awards excluding PSAs are recognized as compensation expense on a straight-line basis over the requisite service period in which the awards are expected to vest and forfeitures are recognized as they occur.

The Black-Scholes model considers several variables and assumptions in estimating the fair value of stock-based awards. These variables include the per share fair value of the underlying common stock, exercise price, expected term, risk-free interest rate, expected annual dividend yield and the expected stock price volatility over the expected term. The Company calculated the

expected term using the simplified method, which is the mid-point between the vesting and contractual term. Due to the short trading period of the Company's stock, the Company has estimated volatility by reference to the historical volatilities of the Company and that of similar publicly traded peer companies. The risk-free interest rate is based on the yield available on U.S. Treasury zero-coupon issues similar in duration to the expected term of the equity-settled award.

For PSAs, the Company derives the valuation of the award and the requisite service period for each separately vesting portion of the award using a Monte Carlo simulation model and the related compensation expense is recognized over the derived service period using the accelerated attribution method commencing on the grant date. The derived service period is the median duration of the successful stock price paths to meet the respective escalating stock price thresholds as simulated in the Monte Carlo valuation model which uses assumptions such as volatility, risk-free interest rate, cost of equity and dividend estimated for the performance period of the PSAs. If the related market condition is achieved earlier than its estimated derived service period, the stock-based compensation expense will be accelerated, and a cumulative catch-up expense will be recorded during the period in which the market condition is met.

Foreign Currency

For foreign subsidiaries where the functional currency is the local currency, assets and liabilities are translated to the U.S. dollar using month-end exchange rates, and revenue and expenses using average exchange rates. The adjustments resulting from these foreign currency translations are recorded in "Accumulated other comprehensive loss."

For entities where the functional currency is the U.S. dollar, monetary assets and liabilities are remeasured using exchange rates in effect at the balance sheet dates and non-monetary assets and liabilities are remeasured at historical exchange rates. Revenue and expenses are remeasured at the average exchange rates for the period. Gains or losses from foreign currency remeasurement are included in "Other expense, net" in the consolidated statements of operations. The Company recognized foreign currency transaction gains of $1.2 million and $0.2 million for the years ended December 31, 2023 and December 31, 2022, and foreign currency transaction losses of $0.9 million for the year ended December 31, 2021, respectively.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes, in which deferred tax assets and liabilities are recognized for the future tax consequences attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply in the years in which those tax assets and liabilities are expected to be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. A valuation allowance is established if it is more likely than not that all or a portion of the deferred tax asset will not be realized.

The Company's tax positions are subject to income tax audits. The Company recognizes the tax benefit of an uncertain tax position only if it is more likely than not that the position is sustainable upon examination by the taxing authority, based on the technical merits. The tax benefit recognized is measured as the largest amount of benefit which is more likely than not (greater than 50% likely) to be realized upon settlement with the taxing authority. The Company recognizes interest accrued and penalties related to unrecognized tax benefits in its tax provision.

The Company calculates the current and deferred income tax provision based on estimates and assumptions that could differ from the actual results reflected in income tax returns filed in subsequent years. Adjustments based on filed income tax returns are recorded when identified. The amount of income tax paid is subject to examination by U.S. and foreign tax authorities. The estimate of the potential outcome of any uncertain tax issue is subject to management's assessment of the relevant risks, facts and circumstances existing at that time. To the extent the assessment of such tax position changes, the change in estimate is recorded in the period in which the determination is made.

Net Loss Per Share

Net loss per share is computed using the two-class method required for multiple classes of common stock and participating securities. The rights, including the liquidation and dividend rights and sharing of losses, of the Class A common stock and Class B common stock are identical, other than voting rights. As the liquidation and dividend rights and sharing of losses are identical, the undistributed earnings are allocated on a proportionate basis and the resulting net loss per share will, therefore, be the same for both Class A and Class B common stock on an individual or combined basis.

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period, adjusted for outstanding shares that are subject to repurchase.

For the calculation of diluted net loss per share, basic net loss per share is adjusted by the effect of dilutive securities including awards under the Company's equity compensation plans. Diluted net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding. For periods in which the Company reports net losses, diluted net loss per share is the same as basic net loss per share because potentially dilutive shares of common stock are not assumed to have been issued if their effect is anti-dilutive.

Acquisitions

The Company evaluates acquisitions of assets and other similar transactions to assess whether or not the transaction should be accounted for as a business combination or asset acquisition by first applying a screen to determine if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If the screen is met, the transaction is accounted for as an asset acquisition. If the screen is not met, further determination is required as to whether or not the Company has acquired inputs and processes that have the ability to create outputs which would meet the requirements of a business in which case the transaction is accounted for using the acquisition method of accounting, which requires, among other things, that assets acquired and liabilities assumed be recognized at their estimated fair values as of the acquisition date, and that the fair value of acquired intangibles be recorded on the balance sheet. Transaction costs are expensed as incurred. Any excess of the purchase price over the assigned fair values of the net assets acquired is recorded as goodwill.

Goodwill is not amortized, rather assessed, at least annually, for impairment at a reporting unit level. During the goodwill impairment review, the Company assesses qualitative factors to determine whether it is more likely than not that the fair value of its reporting unit is less than the carrying amount, including goodwill. The qualitative factors include, but are not limited to, macroeconomic conditions, industry and market considerations and overall financial performance. If, after assessing the totality of these qualitative factors, the Company determines that it is not more likely than not that the fair values of our reporting unit is less than the carrying amount, then no additional assessment is deemed necessary. Otherwise, the Company proceeds to compare the estimated fair values of the reporting unit with the carrying value, including goodwill. If the carrying amounts of the reporting unit exceed the fair value, the Company records an impairment loss based on the difference.

The Company accounts for asset acquisitions under *ASC, Business Combinations Topic 805, Subtopic 50*, which requires the acquiring entity in an asset acquisition to recognize net assets based on the cost to the acquiring entity on a relative fair value basis, which includes transaction costs in addition to consideration given. In-process research and development expense is expensed as incurred provided there is no alternative future use. Contingent consideration payments in asset acquisitions are recognized when the contingency is resolved and the consideration is paid or becomes payable. Upon recognition of the contingent consideration payment, the amount is included in the cost of the acquired asset or group of assets.

3. Restructuring

On December 7, 2023, the Company committed to a restructuring plan related to the closure of one of its research and development facilities resulting in restructuring charges of $2.5 million associated with this plan, comprised primarily of long-lived assets impairment costs and one-time employee termination benefits which were recorded during the year ended December 31, 2023. Restructuring costs of $2.5 million were recorded in research and development and general and administrative expenses during the year ended December 31, 2023 in the Company's consolidated statements of operations. The restructuring activities are expected to be substantially complete by the end of the first half of 2024.

On August 3, 2022, the Company implemented a reduction in force plan in order to decrease costs and maintain a streamlined organization to support the business. Restructuring charges of $4.2 million associated with this plan, comprised primarily of severance-related costs, were recorded during the year ended December 31, 2022. Restructuring costs of $0.3 million, $1.4 million and $2.5 million were recorded in cost of revenue, research and development expense, and selling, general and administrative expense, respectively, during the year ended December 31, 2022 in the Company's consolidated statements of operations. The restructuring activities were substantially completed as of December 31, 2022.

The following table is a summary of restructuring costs related to the Company's restructuring activities as of December 31, 2023 (in thousands):

	Termination Benefits Costs	Long-lived Assets Impairment Expenses	Total
Balance at January 1, 2022	$ —	$ —	$ —
Restructuring charge	4,216	—	4,216
Cash payments made	(3,385)	—	(3,385)
Non-cash charge	(616)		(616)
Balance at December 31, 2022	215	—	215
Restructuring charge	310	2,171	2,481
Cash payments made	(215)	—	(215)
Non-cash charge	—	(2,171)	(2,171)
Balance at December 31, 2023	$ 310	$ —	$ 310

4. Acquisitions

2023 Acquisition

On January 28, 2023, the Company signed an agreement to acquire certain intangible and other assets from Centrillion Technologies, Inc. and Centrillion Technology Holdings Corp. for an upfront cash payment of $10.0 million relating to an intellectual property license. Upon the close of the transaction on July 14, 2023, the Company paid additional cash consideration of $10.0 million upon acquiring the assets. Under the agreement, the Company is obligated to provide additional cash consideration if certain technology development milestones are met. As of December 31, 2023, the Company had paid $21.3 million relating to the completion of development milestones. The Company paid an additional $20.0 million in January 2024 in relation to a development milestone which was accrued in the Company's consolidated financial statements as of December 31, 2023. Up to $15.0 million of cash consideration is due if an additional technology development milestone is met. Furthermore, the Company expects to pay cash consideration tied to future sales milestones if such milestones are met.

The transaction was accounted for as an asset acquisition. In connection with this acquisition and milestone payments, the Company acquired an in-process research and development intangible asset of $61.0 million during the year ended December 31, 2023 which did not have alternative future use and therefore was recognized as an expense and included as a component of "In-process research and development" in the condensed consolidated statements of operations. The Company also acquired an intangible asset of $0.2 million related to assembled workforce which is included in "Intangible assets, net" in the consolidated balance sheets.

The following table summarizes the value of assets acquired and liabilities assumed (in thousands):

Assets Acquired and Liabilities Assumed	
In-process research and development	$ 60,980
Intangible assets - acquired workforce	200
Property and equipment	671
Operating lease liabilities	(1,496)
Other assets and liabilities, net	758
Total net assets acquired	$ 61,113

2021 Acquisition

Tetramer Shop Acquisition

On January 8, 2021 (the "acquisition date"), the Company purchased 100% of the outstanding shares of Tetramer Shop ApS ("Tetramer Shop"), a privately held company based in Copenhagen, Denmark, for a total cash consideration of $8.5 million, net of cash acquired of $0.2 million and including $1.5 million of fair value of contingent consideration. The contingent

consideration was recorded as a liability on the acquisition date and was paid in 2022 upon the successful completion of the transfer of Tetramer Shop's technology.

Tetramer Shop was a life sciences technology company which developed and provided reagents for precise monitoring of antigen-specific T-cells in research and development. The Company acquired Tetramer Shop for its expertise in building empty, loadable major histocompatibility complex (MHC) molecules.

The acquisition was accounted for using the acquisition method of accounting, with Tetramer Shop treated as the acquiree. The acquired assets, including identified intangible assets, and liabilities were recorded at their respective fair values with an amount recorded to goodwill representing the difference between the acquisition consideration and the fair value of the identifiable net assets. The fair values assigned to the assets acquired and liabilities assumed were based on management's assumptions as of the reporting date.

Our consolidated statements of operations include the financial results of Tetramer Shop subsequent to the acquisition date. Revenue related to Tetramer Shop since the acquisition date was included in our consolidated statements of operations.

The fair value of assets acquired, including goodwill and intangibles, and liabilities assumed as of the acquisition date were as follows (in thousands):

	Amount
Cash and cash equivalents	$ 224
Other assets acquired	83
Tangible assets acquired	307
Other liabilities assumed	(652)
Deferred tax liability - non-current	(1,131)
Total net tangible assets acquired and liabilities assumed	(1,476)
Intangible assets	5,640
Goodwill	4,511
Net assets acquired	$ 8,675

The intangible assets as of the acquisition date included (in thousands):

	Amount	Weighted Average Useful Life (in years)
Developed technology	$ 5,500	10
Customer relationships	140	3
	$ 5,640	

The fair value of the intangible assets acquired in connection with the acquisition was determined using either the income or replacement cost methodologies. The developed technology and customer relationships were amortized over ten years and three years, respectively. During the year ended December 31, 2023, the Company recorded impairment charges of $4.5 million, in general and administrative expenses, related to this acquired developed technology. The impairment charge was triggered by a decision to discontinue a product.

Identifiable Intangible Assets

Developed technology acquired primarily consists of existing technology related to developing reagents for precise monitoring of antigen-specific T-cells in research and development, enabling the Company to strengthen its efforts in immunology. The Company valued the developed technology using the multi-period excess earnings method under the income approach. Using this approach, the final fair values were calculated using expected future cash flows discounted to their net present values at an appropriate risk-adjusted rate of return.

Goodwill

The excess of purchase price over the fair value assigned to the assets acquired and liabilities assumed represents the amount of goodwill resulting from the acquisition. The Company does not expect any portion of this goodwill to be deductible for tax purposes. The goodwill attributable to the acquisition was recorded as a noncurrent asset and is not amortized but is subject to an annual review for impairment.

5. Other Financial Statement Information

Available-for-sale Securities

Available-for-sale securities at December 31, 2023 consisted of the following (in thousands):

	December 31, 2023				December 31, 2022				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Fair Value Measurement
Cash equivalents:									
Money market funds	$ 348,539	$ —	$ —	$ 348,539	$ 163,184	$ —	$ —	$ 163,184	Level 1
Marketable securities:									
Corporate debt securities	10,022	—	(51)	9,971	153,794	4	(2,768)	151,030	Level 2
Government debt securities	18,152	—	(125)	18,027	54,136	—	(1,247)	52,889	Level 2
Asset-backed securities	1,425	—	(12)	1,413	6,424	—	(105)	6,319	Level 2
Total available-for-sale securities	$ 378,138	$ —	$ (188)	$ 377,950	$ 377,538	$ 4	$ (4,120)	$ 373,422	

The contractual maturities of marketable securities as of December 31, 2023 were as follows (in thousands):

	Fair Value
Due in one year or less	$ 28,045
Due after one year to five years	1,366
	$ 29,411

The company incurred gross realized losses of $1.7 million and no gross realized gains from the sale of available-for-sales debt securities during the year ended December 31, 2023. The Company incurred no material gross realized gains or losses from available-for-sales debt securities for the years ended December 31, 2022 and 2021. Realized gains (losses) on the sale of marketable securities are recorded in “Other expense, net” in the condensed consolidated statements of operations.

The available-for-sale debt securities are subject to a periodic impairment review. For investments in an unrealized loss position, the Company determines whether a credit loss exists by considering information about the collectability of the instrument, current market conditions and reasonable and supportable forecasts of economic conditions. The Company recognizes an allowance for credit losses, up to the amount of the unrealized loss when appropriate, and writes down the amortized cost basis of the investment if it is more likely than not that the Company will be required or will intend to sell the investment before recovery of its amortized cost basis. Allowances for credit losses and write-downs are recognized in “Other expense, net,” and unrealized losses not related to credit losses are recognized in “Accumulated other comprehensive loss.” There are no allowances for credit losses for the periods presented. As of December 31, 2023, the gross unrealized losses on available-for-sale securities are related to market interest rate changes and not attributable to credit.

Inventory

Inventory was comprised of the following (in thousands):

	December 31,	
	2023	2022
Purchased materials	$ 34,484	$ 34,497
Work in progress	21,975	24,650
Finished goods	17,247	22,482
Inventory	$ 73,706	$ 81,629

Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

	December 31,	
	2023	2022
Land	$ 36,765	$ 36,780
Building	146,044	—
Laboratory equipment and machinery	69,238	54,658
Computer equipment and software	16,379	12,565
Furniture and fixtures	10,979	9,642
Leasehold improvements	96,405	91,518
Construction in progress	7,252	152,995
Total property and equipment	383,062	358,158
Less: accumulated depreciation and amortization	(103,491)	(68,830)
Property and equipment, net	$ 279,571	$ 289,328

Depreciation expense was $32.9 million, $22.8 million and $18.5 million for the years ended December 31, 2023, 2022, and 2021, respectively.

Intangible Assets, Net

Intangible assets, net consisted of the following (dollars in thousands):

	December 31, 2023				December 31, 2022		
	Remaining Useful Life in Years	Gross Carrying Amount	Accumulated Amortization	Intangibles, Net	Gross Carrying Amount	Accumulated Amortization	Intangibles, Net
Technology licenses	10.7	$ 22,504	$ (6,546)	$ 15,958	$ 22,504	$ (5,043)	$ 17,461
Developed technology	N/A	—	—	—	5,500	(1,100)	4,400
Customer relationships	1.1	945	(789)	156	945	(563)	382
Assembled workforce	2.0	1,328	(826)	502	1,128	(513)	615
Intangible assets, net		$ 24,777	$ (8,161)	$ 16,616	$ 30,077	$ (7,219)	$ 22,858

During the year ended December 31, 2023, the Company recorded impairment charges of $4.6 million related to its developed technology and assembled workforce. No impairment losses were recognized for intangible assets during the years ended December 31, 2022 and 2021.

The estimated annual amortization of intangible assets for the next five years is shown below (in thousands):

	Estimated Annual Amortization
2024	$ 1,865
2025	1,704
2026	1,509
2027	1,473
2028	1,473
Thereafter	8,592
Total	$ 16,616

Actual amortization expense to be reported in future periods could differ from these estimates as a result of acquisitions, divestitures and asset impairments, among other factors.

Accrued Compensation and Related Benefits

Accrued compensation and related benefits were comprised of the following (in thousands):

	December 31,	
	2023	2022
Accrued payroll and related costs	$ 2,262	$ 2,052
Accrued bonus	18,254	17,081
Accrued commissions	6,410	5,143
Accrued acquisition-related compensation	—	5,470
Other	3,179	2,929
Accrued compensation and related benefits	$ 30,105	$ 32,675

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities were comprised of the following (in thousands):

	December 31,	
	2023	2022
Accrued purchase consideration	$ 20,000	$ —
Accrued legal and related costs	3,839	3,102
Accrued license fee	—	6,231
Accrued royalties for licensed technologies	5,455	4,707
Accrued property and equipment	3,199	26,750
Accrued professional services	6,577	5,180
Product warranties	8,116	3,023
Taxes payable	5,049	4,079
Other	4,413	6,707
Accrued expenses and other current liabilities	$ 56,648	$ 59,779

Product Warranties

Changes in the reserve for product warranties were as follows (in thousands):

	Year Ended December 31,	
	2023	2022
Beginning of period	$ 3,023	$ 994
Amounts charged to cost of revenue	10,701	5,708
Repairs and replacements	(5,608)	(3,679)
End of period	$ 8,116	$ 3,023

Revenue and Deferred Revenue

As of December 31, 2023, the aggregate amount of remaining performance obligations related to separately sold extended warranty service agreements, or allocated amounts for extended warranty service agreements bundled with sales of instruments, was $22.0 million, of which approximately $13.1 million is expected to be recognized to revenue in the next 12 months, with the remainder thereafter. The contract liabilities of $22.0 million and $11.0 million as of December 31, 2023 and 2022, respectively, consisted of deferred revenue related to extended warranty service agreements.

A summary of the change in contract liabilities is as follows (in thousands):

	Year Ended December 31,	
	2023	2022
Beginning of period	$ 11,032	$ 7,688
Revenue recognized that was included in the contract liability at the beginning of the year	(6,588)	(4,793)
Revenue deferred excluding amounts recognized as revenue during the period	17,520	8,137
End of period	$ 21,964	$ 11,032

The following table represents revenue by source for the periods indicated (in thousands). Spatial products include the Company's Visium and Xenium products:

	Year Ended December 31,		
	2023	2022	2021
Instruments			
Chromium	$ 47,866	$ 58,552	$ 64,171
Spatial	75,605	13,844	303
Total instruments revenue	123,471	72,396	64,474
Consumables			
Chromium	420,316	400,433	390,883
Spatial	59,237	35,155	27,857
Total consumables revenue	479,553	435,588	418,740
Services	15,703	8,425	7,276
Total revenue	$ 618,727	$ 516,409	$ 490,490

The following table presents revenue by geography based on the location of the customer for the periods indicated (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Americas			
United States	$ 360,091	$ 284,987	$ 258,274
Americas (excluding United States)	13,101	8,791	6,714
Total Americas	373,192	293,778	264,988
Europe, Middle East and Africa	142,276	117,068	108,491
Asia-Pacific			
China[1]	50,965	64,356	77,899
Asia-Pacific (excluding China)	52,294	41,207	39,112
Total Asia-Pacific	103,259	105,563	117,011
Total Revenue	$ 618,727	$ 516,409	$ 490,490

[1] Includes Hong Kong effective from the fiscal year of 2023. Comparative periods have been adjusted for this inclusion.

6. Income Tax

Income (loss) before provision for income taxes were as follows (in thousands):

	Year Ended December 31,		
	2023	2022	2021
United States	$ (263,292)	$ (172,038)	$ (73,070)
International	14,529	10,067	19,355
Total	$ (248,763)	$ (161,971)	$ (53,715)

The provision for income taxes consisted of the following (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Current provision:			
Federal	$ 351	$ —	$ —
State	180	533	50
Foreign	6,252	3,360	5,148
Total current provision for income taxes	6,783	3,893	5,198
Deferred provision:			
Federal	—	—	—
State	—	—	—
Foreign	(447)	136	(690)
Total deferred provision for income taxes	(447)	136	(690)
Provision for income taxes	$ 6,336	$ 4,029	$ 4,508

A reconciliation of the federal statutory income tax provision to the effective income tax provision is as follows (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Income tax provision at federal statutory rate	$ (52,240)	$ (34,014)	$ (11,280)
State taxes, net of federal benefit	(14,831)	(11,782)	(20,136)
Tax credits	(14,551)	(9,028)	(11,836)
Foreign taxes	3,888	1,522	142
Stock-based compensation	2,422	5,812	(78,852)
Change in valuation allowance	79,551	50,077	126,386
Acquisition related expenses	2,296	—	(793)
Other	(199)	1,442	877
Total provision for income taxes	$ 6,336	$ 4,029	$ 4,508

Deferred income taxes reflect the net tax effect of temporary differences between amounts recorded for financial reporting purposes and amounts used for tax purposes. The major components of deferred tax assets and liabilities are as follows (in thousands):

	Year Ended December 31,	
	2023	2022
Deferred tax assets		
Net operating loss carryforwards	$ 166,607	$ 175,018
Research and development tax credits	89,521	69,271
Accruals and reserves	10,610	7,116
Operating lease liability	22,000	21,873
Intangibles	39,117	39,061
Stock-based compensation	24,342	20,910
Capitalized research and development [1]	108,255	49,462
Total deferred tax assets	460,452	382,711
Valuation allowance	(443,074)	(364,263)
Net deferred tax assets	$ 17,378	$ 18,448
Deferred tax liabilities		
Property and equipment	(2,609)	(4,046)
Operating right-of-use assets	$ (14,975)	$ (15,054)
Total deferred tax liabilities	$ (17,584)	$ (19,100)
Net deferred tax liabilities	$ (206)	$ (652)

[1] Effective beginning January 1, 2022, under the 2017 Tax Cuts and Jobs Act, our research and development expenditures were capitalized and amortized.

As of December 31, 2023 and 2022, the Company maintained a full valuation allowance on its U.S. net deferred tax assets. The U.S. deferred tax assets predominantly relate to operating losses, tax credits and capitalized R&D intangibles. The U.S. valuation allowance was estimated based on an assessment of both positive and negative evidence to determine whether it is more likely than not that deferred tax assets are recoverable. Such assessment is required on a jurisdiction-by-jurisdiction basis. The Company's history of cumulative losses, along with expected future U.S. losses, required that a full valuation allowance be recorded against all U.S. net deferred tax assets. The Company intends to maintain a full valuation allowance on U.S. net deferred tax assets until sufficient positive evidence exists to support a reversal of the valuation allowance. The valuation allowance increased by $78.8 million and by $51.1 million for the years ended December 31, 2023 and 2022, respectively.

As of December 31, 2023, the Company had federal net operating loss (NOL) carryforwards of $672.3 million and federal tax credit carryforwards of $77.3 million. The federal NOL carryforwards generated after December 31, 2017 totaling $665.9 million are carried forward indefinitely, while all others, along with the federal tax credit carryforwards, expire in years beginning in 2033. As of December 31, 2023, the Company had state NOL carryforwards of $412.2 million, which begin to expire in 2033. In addition, the Company had state tax credit carryforwards of $58.5 million, which do not expire.

The federal and state NOL and tax credit carryforwards are subject to change of ownership limitations provided by the Internal Revenue Code and similar state provisions. In general, if the Company experiences a greater than 50 percentage point aggregate change in ownership over a 3-year period (a "Section 382 ownership change"), utilization of its pre-change NOL and credit carryforwards are subject to an annual limitation. The Company completed a study through September 30, 2023 and determined that a Section 382 ownership change occurred in 2013. As a result, the Company's NOLs generated through November 1, 2013 may be subject to limitation under Section 382 of the Code. The amount of pre-change NOL carryforwards which may be subject to this limitation is $4.8 million. In addition, certain attributes are subject to annual limitations as a result of the Company's acquisition of ReadCoor, Inc. in 2020, which constituted a change in ownership as defined under Section 382. Such limitations may result in expiration of a portion of the carryforwards before utilization. The Company's ability to use NOL or tax credit carryforwards to reduce future taxable income and liabilities may be further limited as a result of future changes in stock ownership. As a result, if the Company generates taxable income, its ability to use pre-change NOL or tax credit carryforwards to offset U. S. federal and state taxable income may still be subject to limitations, which could potentially result in increased future tax liability.

The total balance of unrecognized gross tax benefits resulting primarily from research and development tax credits claimed on the Company's annual tax returns were as follows (in thousands):

	2023	2022
Unrecognized tax benefits at beginning of year	$ 31,755	$ 23,759
Reductions based on prior year tax provisions	—	(380)
Additions based on prior year tax provisions	3,511	2,474
Additions based on current year tax provisions	10,447	5,902
Unrecognized tax benefits at end of year	$ 45,713	$ 31,755

The total amount of unrecognized gross tax benefits was $45.7 million and $31.8 million as of December 31, 2023 and 2022, respectively, of which $2.7 million and $2.4 million, if recognized, would affect our effective tax rate, respectively.

The Company is subject to the examination of its income tax returns by the U.S. Internal Revenue Service and other domestic and foreign tax authorities. The United States, California, and Sweden are considered as major jurisdictions. The Company has not been audited in such jurisdictions. Tax examinations are expected to focus primarily on research and development tax credits and intercompany transfer pricing practices. Due to NOLs and tax credit carryforwards, as of December 31, 2023, federal and California income tax returns for the years ended 2012 through the current period are open to examination. Significant foreign income tax returns for the years 2019 through the current period are open to examination. Due to the number of years remaining that are subject to examination, the Company is unable to estimate the full range of possible adjustments to the balance of gross unrecognized tax benefits.

It is reasonably possible that the Company's unrecognized tax benefits will change significantly over the next 12 months, likely due to increases related to research and development tax credits. For U.S. uncertain tax positions, due to a full valuation allowance, such liabilities have been netted against deferred tax attribute carryovers. As a result, if recognized, the unrecognized tax benefits would not materially impact income tax expense.

The Company includes interest and penalties related to income tax matters within the provision for income taxes. As of December 31, 2023, the total amount of gross interest and penalties accrued was $0.9 million. The Company recognized interest and penalty expenses of $0.5 million in 2023.

The Company maintained undistributed earnings overseas as of December 31, 2023 and the Company believed the funds held by all non-U.S. subsidiaries will be permanently reinvested outside of the U.S. However, if these funds were repatriated to the U.S. or used for U.S. operations, the Company may be subject to withholding taxes in the foreign countries. As a result of tax reform, the Company's unrepatriated earnings are no longer subject to federal income tax in the U.S. when distributed.

7. Commitments and Contingencies

Indemnification

From time to time, the Company has entered into indemnification provisions under certain agreements in the ordinary course of business, typically with business partners, customers and suppliers. Pursuant to these agreements, the Company may indemnify, hold harmless and agree to reimburse the indemnified parties on a case-by-case basis for losses suffered or incurred by the indemnified parties in connection with any patent or other intellectual property infringement claim by any third party with respect to the Company's products. The Company maintains product liability insurance coverage that would generally enable it to recover a portion of the amounts paid. The Company has also agreed to indemnify its directors and executive officers for costs associated with any fees, expenses, judgments, fines and settlement amounts incurred by them in any action or proceeding to which any of them are, or are threatened to be, made a party by reason of their service as a director or officer (see "—Litigation" below). The Company also may be subject to indemnification obligations by law with respect to the actions of its employees under certain circumstances and in certain jurisdictions.

Non-cancelable Purchase Commitments

The Company's contract manufacturers make advance purchases of components based on the instrument unit forecasts and purchase orders placed by the Company. To the extent these components are purchased by a contract manufacturer on the Company's behalf and cannot be used by their other customers, the Company is obligated to purchase these components. In addition, certain supplier agreements require that the Company to make minimum annual purchases under the agreements. As of December 31, 2023, the Company has commitments to make a total of $13.0 million in purchases over the next two years. To date, the Company has met the minimum purchase commitments.

As of December 31, 2023, the Company has entered into non-cancelable arrangements for subscription software services to make payments aggregating to $20.5 million over the next six years.

Intellectual Property Licensing

In July 2021, the Company entered into a global settlement and patent cross license agreement with Bio-Rad Laboratories, Inc. pursuant to which both parties granted each other a non-exclusive, worldwide, royalty-bearing license to develop products and services related to single cell analysis. Each company shall pay to the other royalties from licensed products and licensed services through 2030.

The minimum commitments related to the Company's license arrangements aggregate to $14.6 million as of December 31, 2023 to be paid over the next 15 years.

Lease Agreements

The Company leases office, laboratory, manufacturing, distribution and server space with lease terms up to 10 years. These leases require monthly lease payments that may be subject to annual increases throughout the lease term. Certain of these leases also include renewal options at the election of the Company to renew or extend the lease. The Company evaluates renewal options at lease inception and on an ongoing basis and includes renewal options that it is reasonably certain to exercise in its expected lease terms when classifying leases and measuring lease liabilities.

On November 6, 2020, the Company entered into a Master Lease Agreement ("MLA") to lease additional office building space near the Company's Pleasanton, California headquarters. All of the components of the MLA have commenced and are expected to terminate on June 30, 2033.

For the years ended December 31, 2023, 2022 and 2021, the Company incurred $13.6 million, $13.1 million and $10.5 million, respectively, of operating lease costs and $0.2 million, $0.4 million and $0.6 million, respectively, of variable lease costs. The variable lease cost is comprised primarily of the Company's proportionate share of operating expenses, property taxes and insurance and is classified as lease cost due to the Company's election to not separate lease and non-lease components.

Cash paid for amounts included in the measurement of operating lease liabilities for the years ended December 31, 2023, 2022 and 2021 were $15.2 million, $12.1 million and $6.2 million, respectively, and were included in net cash used in operating activities in the Company's consolidated statements of cash flows.

The payments due under of the Company's operating lease liabilities as of December 31, 2023 are as follows (in thousands):

	Operating Leases
2024	$ 16,719
2025	14,884
2026	15,438
2027	15,639
2028	15,793
Thereafter	40,720
Total lease payments	$ 119,193
Less: imputed interest	(23,823)
Present value of operating lease liabilities	$ 95,370
Operating lease liabilities, current	$ 11,521
Operating lease liabilities, noncurrent	83,849
Total operating lease liabilities	$ 95,370

The following table summarizes additional information related to operating leases as of December 31, 2023:

	December 31, 2023	December 31, 2022
Weighted-average remaining lease term:		
Operating leases	7.5 years	8.1 years
Weighted-average discount rate:		
Operating leases	5.9 %	5.5 %

During the year ended December 31, 2023, the Company made the decision to vacate some of its leased office space for the remaining lease term, sublease certain portions of the vacated office space and to terminate additional leased office space. In connection with these actions, the Company recognized an aggregate $4.9 million of impairment losses associated with these long-lived assets of which $2.1 million was classified in research and development, and $2.8 million was classified in selling, general and administrative expenses in the consolidated statement of operations.

Litigation

The Company is regularly subject to lawsuits, claims, arbitration proceedings, administrative actions and other legal and regulatory proceedings involving intellectual property disputes, commercial disputes, competition and other matters, and the Company may become subject to additional types of lawsuits, claims, arbitration proceedings, administrative actions, government investigations and legal and regulatory proceedings in the future. As of December 31, 2023, the Company has concluded that a loss is not probable and a contingent liability has not been recorded.

NanoString

On May 6, 2021, the Company filed suit against NanoString Technologies, Inc. (“NanoString”) in the U.S. District Court for the District of Delaware alleging that NanoString’s GeoMx Digital Spatial Profiler and associated instruments and reagents infringe U.S. Patent Nos. 10,472,669, 10,662,467, 10,961,566, 10,983,113 and 10,996,219 (the “GeoMx Action”). On May 19, 2021, the Company filed an amended complaint additionally alleging that the GeoMx products infringe U.S. Patent Nos. 11,001,878 and 11,008,607. On May 4, 2022, the Company filed an amended complaint in the GeoMx Action additionally alleging that the GeoMx products infringe U.S. Patent No. 11,293,917 and withdrawing the Company’s claims of infringement of U.S. Patent No. 10,662,467. The Company is seeking, among other relief, injunctive relief and unspecified damages (including attorneys’ fees) in relation to NanoString’s making, using, selling, offering to sell, exporting and/or importing in the United States the GeoMx Digital Spatial Profiler and associated instruments and reagents. NanoString filed its answer to the GeoMx Action on May 18, 2022. A Markman hearing was held on February 17, 2023 and the Court issued its claim construction order on February 28, 2023. On September 7, 2023, the Court issued an order granting the Company’s motion for summary judgment that the asserted patents are not invalid for indefiniteness and denying NanoString’s motion for summary judgment that the asserted patents are invalid for indefiniteness and lack of written description. On November 17, 2023, a jury found that NanoString

willfully infringed the asserted patents and that the asserted patents are valid. The jury awarded the Company more than $31 million in damages, consisting of approximately $25 million in lost profits and approximately $6 million in royalties. Post-trial motions, including the Company's motions for a permanent injunction, ongoing royalties, enhanced damages, attorneys' fees and pre- and post-judgment interest, are pending. NanoString filed for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code in the U.S. bankruptcy court in Delaware on February 4, 2024, and the Court's consideration of these post-trial motions is currently stayed due to the bankruptcy filing. Due to the uncertainties in collecting the jury award, the Company has not recorded a receivable from NanoString as of December 31, 2023.

On February 28, 2022, the Company filed a second suit against NanoString in the U.S. District Court for the District of Delaware alleging that NanoString's CosMx Spatial Molecular Imager and associated instruments, reagents and services infringe U.S. Patent Nos. 10,227,639 and 11,021,737 (the "CosMx Action"). On May 12, 2022, the Company filed an amended complaint in the CosMx Action additionally alleging that the CosMx products additionally infringe U.S. Patent Nos. 11,293,051, 11,293,052 and 11,293,054. NanoString filed its answer to the CosMx Action on May 26, 2022. On March 1, 2023, the Company filed a second amended complaint additionally alleging that the CosMx products infringe U.S. Patent No. 11,542,554. The Company is seeking, among other relief, injunctive relief and unspecified damages (including attorneys' fees) in relation to NanoString's making, using, selling, offering to sell, exporting and/or importing in the United States the CosMx Spatial Molecular Imager and associated instruments, reagents and services. NanoString filed its answer to the second amended complaint on March 22, 2023. Discovery is in progress. A Markman hearing was held on January 10, 2024, and the Court issued its claim construction order on February 1, 2024. Trial is scheduled for September 2024. This litigation is currently stayed due to NanoString's bankruptcy filing.

On August 16, 2022, NanoString filed a counterclaim in the CosMx Action alleging that the Company's Visium products infringe U.S. Patent No. 11,377,689 (the "689 patent"). The Company filed its answer to NanoString's counterclaim in the CosMx Action on August 30, 2022. On November 23, 2022, the Company moved to sever claims relating to NanoString's assertion of the 689 patent and consolidate those claims with the patent case NanoString filed against the Company on October 20, 2022 (discussed below). On January 24, 2023, the Court granted the Company's motion.

On May 1, 2023, NanoString filed a motion in the CosMx Action to add antitrust, unfair competition, tort, and contract counterclaims. NanoString seeks, among other relief, injunction relief (including that the Company grant NanoString a license to the patents that the Company asserted against NanoString in the CosMx Action) and unspecified damages (including attorneys' fees). On July 10, 2023, the Court denied NanoString's motion for leave to add a contract counterclaim but otherwise granted the motion for leave to amend. On May 24, 2023, NanoString filed a motion to bifurcate its amended counterclaims and a motion for expedited discovery. On June 6, 2023, the Court denied NanoString's motion to bifurcate and granted its motion for expedited discovery. The Company believes NanoString's claims are meritless and intends to vigorously defend itself.

On October 20, 2022, NanoString filed suit against the Company in the U.S. District Court for the District of Delaware alleging that the Company's Visium products infringe U.S. Patent No. 11,473,142 (the "142 patent"), a continuation of the 689 patent (the "NanoString Action"). NanoString seeks, among other relief, injunctive relief and unspecified damages (including attorneys' fees) in relation to the Company's making, using, selling, offering to sell, exporting and/or importing in the United States Visium products and associated instruments, reagents and services. On January 24, 2023, the Court severed NanoString's claims with respect to the 689 patent from the CosMx Action and consolidated those claims with this action. NanoString filed an amended complaint on January 27, 2023. The Company filed an answer to the NanoString Action on February 10, 2023. Discovery is in progress. A Markman hearing was held on January 10, 2024, and the Court issued its claim construction order on February 1, 2024. Trial is scheduled for December 2024. The Company believes NanoString's claims in the NanoString Action are meritless and intends to vigorously defend itself.

On August 16 and September 25, 2023, the Company filed petitions for inter partes review ("IPR") of the 689 patent and the 142 patent, respectively. On February 1, 2024, IPR was instituted for the 689 patent. An institution decision for the IPR against the 142 patent is expected in April 2024.

On March 9, 2022, the Company filed suit in the Munich Regional Court in Germany alleging that NanoString's CosMx Spatial Molecular Imager and associated instruments, reagents and services infringe EP Patent No. 2794928B1 (the "EP928 patent") (the "Germany CosMx Action"). A hearing on infringement was held on March 23, 2023. On May 17, 2023, the Munich Regional Court found that the CosMx products infringe the EP928 patent and issued a permanent injunction requiring NanoString to stop selling and supplying CosMx instruments and reagents for RNA detection in Germany. The injunction took effect on June 1, 2023. On May 25, 2023, NanoString filed an appeal of the Germany CosMx Action in the Munich Higher Regional Court. A hearing date has not yet been set for this appeal. On October 30, 2023, NanoString requested that the Higher Regional Court temporarily stay enforcement of the injunction pending the appeal. On December 20, 2023, the Higher Regional Court granted

NanoString's request conditioned upon NanoString posting a 2.3 million Euro security deposit. To date, NanoString has not posted this security deposit.

On July 29, 2022, NanoString filed a nullity action with the German Federal Patent Court challenging the validity of the EP 928 patent. On February 10, 2023, the Federal Patent Court issued a preliminary opinion upholding the validity of certain claims of the EP 928 patent directed to in situ analysis. A hearing on validity is scheduled before the Federal Patent Court in May 2024.

On June 1, 2023, the Company filed requests for preliminary injunctions in the Munich Local Division of the Unified Patent Court ("UPC") alleging that NanoString's CosMx Spatial Molecular Imager and associated instruments, reagents and services for RNA detection infringe the EP928 patent and EP Patent No. 4108782 (the "EP782 patent"). Hearings were held for the EP 782 and EP 928 patents on September 5 and September 19, respectively. On September 19, 2023, the UPC granted the Company's request for the EP782 patent and issued a preliminary injunction requiring NanoString to stop selling and supplying CosMx instruments and reagents for RNA detection in all 17 UPC member states. On October 10, 2023, the UPC denied the Company's preliminary injunction request for the EP928 patent. On October 2, 2023, NanoString filed an appeal of the preliminary injunction for the EP782 patent in the UPC Court of Appeals. A hearing was held before the UPC Court of Appeals on December 18, 2023, and a decision is pending.

On August 31 and September 18, 2023 we filed main requests in the Munich Local Division of the UPC alleging that NanoString's CosMx Spatial Molecular Imager and associated instruments, reagents and services for RNA detection infringe the EP 782 and EP 928 patents, respectively. No hearings have yet been set for these main requests.

On July 18, 2023, NanoString filed an opposition in the European Patent Office challenging the validity of the EP782 patent. No schedule has yet been set for this opposition. On July 27, 2023, NanoString filed a revocation action in the Munich Central Division of the UPC challenging the validity of the EP928 patent. A hearing in the revocation action is scheduled on April 17, 2024.

On January 30, 2024, NanoString filed a petition for IPR of U.S. Patent No. 11,542,554, which is asserted by the Company against NanoString in the CosMx Action.

The impact of NanoString's bankruptcy filing on the Company's actions against NanoString outside of the U.S. District Court for the District of Delaware is not yet fully resolved.

Vizgen

On May 3, 2022, the Company filed suit against Vizgen, Inc. ("Vizgen") in the U.S. District Court for the District of Delaware alleging that Vizgen's MERSCOPE Platform and workflow and/or Vizgen's Lab Services program, including associated instruments and reagents, infringe U.S. Patent Nos. 11,021,737, 11,293,051, 11,293,052, 11,293,054 and 11,299,767. The Company seeks, among other relief, injunction relief and unspecified damages (including attorneys' fees) in relation to Vizgen's making, using, selling, offering to sell, exporting and/or importing in the United States the MERSCOPE Platform and workflow and/or Vizgen's Lab Services program, including associated instruments and reagents. On July 25, 2022, Vizgen filed a motion to dismiss the Company's claims for willful and indirect infringement, which the Court denied on September 19, 2022. Discovery is in progress. A Markman hearing was held on January 10, 2024, and the Court issued its claim construction order on February 1, 2024. Trial is scheduled for October 2024.

On August 30, 2022, Vizgen filed its answer and counterclaims alleging that the Company's Xenium product infringes U.S. Patent No. 11,098,303 (the "303 patent"). Vizgen seeks, among other relief, injunction relief and unspecified damages (including attorneys' fees) in relation to the Company's making, using, selling, offering to sell, exporting and/or importing in the United States Xenium products, including associated instruments and reagents. Vizgen also filed counterclaims alleging that the Company tortiously interfered with Vizgen's contractual and business relationship with Harvard and that the Company engaged in unfair practices under Massachusetts state law. On October 27, 2022, the Company filed a partial answer and motion to dismiss the infringement counterclaim and the tort counterclaims. On February 2, 2023, the Company's motion to dismiss was denied. The Company believes Vizgen's claims are meritless and intends to vigorously defend itself.

On March 15, 2023, the Company filed an amended complaint additionally alleging that the MERSCOPE Platform and workflow and Vizgen's Lab Services program infringe U.S. Patent No. 11,549,136 and withdrawing its claim of infringement of U.S. Patent No. 11,293,054. On April 17, 2023, Vizgen filed its answer adding amended counterclaims including antitrust, unfair competition, tort and contract counterclaims. Vizgen seeks, among other relief, injunctive relief (including that the Company grant Vizgen a license to the patents that the Company asserted against Vizgen) and unspecified damages (including attorneys' fees). On May 18, 2023, the Company filed a motion to dismiss Vizgen's amended counterclaims. On July 10, 2023, the Court granted the Company's motion to dismiss Vizgen's contract counterclaim but otherwise denied the Company's motion to dismiss. The Company believes Vizgen's claims are meritless and intends to vigorously defend itself.

On June 1, 2023, the Company filed suit in the Hamburg Local Division of the Unified Patent Court alleging that Vizgen's MERSCOPE products infringe the EP782 patent. The Company seeks, among other relief, injunction relief and unspecified damages (including attorneys' fees) in relation to Vizgen's MERSCOPE products in all 17 UPC member states. A hearing has not yet been set.

On August 30, 2023, the Company filed a petition for IPR of the 303 patent. An institution decision is expected by March 2023.

Parse

On August 24, 2022, the Company filed suit against Parse Biosciences, Inc. ("Parse") in the U.S. District Court for the District of Delaware alleging that Parse's Evercode Whole Transcriptomics products and ATAC-seq products infringe U.S. Patent Nos. 10,155,981 (the "981 patent"), 10,697,013 (the "013 patent"), 10,240,197 (the "197 patent"), 10,150,995, 10,619,207 and 10,738,357. The Company seeks, among other relief, injunction relief and unspecified damages (including attorneys' fees) in relation to Parse's making, using, selling, offering to sell, exporting and/or importing in the United States Parse's Evercode Whole Transcriptomics products and ATAC-seq products. On October 17, 2022, Parse filed a motion to dismiss alleging that the asserted claims are directed to patent ineligible subject matter. The Court held a hearing on the motion to dismiss on November 22, 2022, and supplemental briefing was submitted on December 15, 2022. On September 14, 2023, the Court denied the motion. Parse filed its answer on October 6, 2023. Discovery is in progress. A Markman hearing is scheduled for February 2024, and trial is scheduled for December 2024.

Between April 20 and June 21, 2023, Parse filed petitions for IPR of all of the patents asserted. On October 13, 2023, IPR was instituted on the 981 patent. The PTAB denied institution of Parse's petitions for IPR on the other five asserted patents. On January 2 and 5, 2024, Parse filed rehearing requests with the PTAB for the 197 and 013 patents, respectively. On November 6, 2023, Parse filed a motion to stay the Delaware action pending the IPRs. On December 21, 2023, the court denied Parse's motion to stay. On February 5, 2024, the PTAB instituted IPRs for the 197 and 013 patents on Parse's requests for rehearing. On February 8, 2024, Parse filed a renewed motion to stay.

Curio

On December 1, 2023, the Company filed suit against Curio Bioscience, Inc. ("Curio") in the U.S. District Court for the District of Delaware alleging that the Curio Seeker Spatial Mapping Kit and associated products and services infringe U.S. Patent Nos. 10,480,022, 10,662,468, 11,001,879, 11,549,138, and 11,761,030. On February 1, 2024, Curio filed a motion to dismiss alleging that the asserted claims are directed to patent ineligible subject matter. A case schedule has not yet been set.

On December 4, 2023, the Company filed a request for a preliminary injunction in the Dusseldorf Local Division of the UPC alleging that the Curio Seeker Spatial Mapping Kit and associated products and services infringe EP Patent No. 2697391 (the "EP 391 patent"). A hearing for the preliminary injunction request has been set for March 26, 2024.

8. Capital Stock

The Company's Amended and Restated Certificate of Incorporation authorizes it to issue 1,200,000,000 shares of capital stock consisting of 1,000,000,000 shares of Class A common stock, 100,000,000 shares of Class B common stock, and 100,000,000 shares of preferred stock.

Common Stock

The following table represents the number of shares of Class B common stock converted to shares of Class A common stock upon the election of the holders of such shares during the years:

	Year Ended December 31,		
	2023	2022	2021
Class B common stock converted to Class A common stock	4,610,422	979,210	3,035,000

The Company's Class A common stock and Class B common stock have a par value of $0.00001 per share. Each share of Class B common stock has the right to ten votes and each share of Class A common stock has the right to one vote per share. All other rights and privileges of Class A and Class B common stock are equivalent. Class B common shares are convertible to Class A common shares at any time upon written notification and all Class B common shares will convert upon the date specified by vote or written consent of the holders of a majority of the then outstanding Class B common stock, voting together as a single class. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to the prior rights of holders of all classes of stock outstanding having priority rights as to dividends.

9. Equity Incentive Plans

Amended and Restated 2012 Stock Plan

Following the adoption of the 2019 Omnibus Incentive Plan in September 2019, any awards outstanding under the Amended and Restated 2012 Stock Plan continue to be governed by their existing terms but no further awards may be granted under the Amended and Restated 2012 Stock Plan. As of December 31, 2023, the number of shares of Class A common stock issuable under the Amended and Restated 2012 Stock Plan which includes shares issuable upon the exercise of outstanding awards was 2,563,328.

2019 Omnibus Incentive Plan

The Omnibus Incentive Plan allows for the issuance of incentive stock options ("ISOs"), non-statutory stock options ("NSOs") or restricted shares. ISOs may be granted only to the Company's employees (including officers and directors who are also considered employees). NSOs and restricted shares may be granted to the Company's employees and service providers. As of December 31, 2023, the number of shares of Class A common stock available for issuance under the 2019 Omnibus Incentive Plan was 5,334,134 shares issuable in connection with outstanding awards and 16,300,671 shares reserved for issuance in connection with grants of future awards.

The number of shares of Class A common stock reserved for issuance under the 2019 Omnibus Incentive Plan at the time the 2019 Omnibus Incentive Plan was adopted in 2019 was 11,000,000. The Omnibus Incentive Plan provides that the total number of shares of the Company's Class A common stock that may be issued under the Omnibus Incentive Plan, including options authorized and options outstanding, is 11,000,000 (such share limit as increased from time to time, the "Absolute Share Limit"). However, the Absolute Share Limit shall be increased on the first day of each calendar year commencing on January 1, 2021 and ending on January 1, 2029 in an amount equal to the lesser of (i) 5% of the total number of shares of common stock outstanding on the last day of the immediately preceding fiscal year and (ii) such number of shares of the Company's Class A common stock as determined by the Company's board of directors. However, if on January 1 of a calendar year, the Company's board of directors has not either confirmed the 5% increase described in clause (i) or approved a lesser number of shares of the Company's Class A common stock for such calendar year, then the Company's board of directors will be deemed to have waived the automatic increase, and no such increase will occur for such calendar year. Of the Absolute Share Limit, no more than 11,000,000 shares of Class A common stock may be issued in the aggregate pursuant to the exercise of incentive stock options granted under the Omnibus Incentive Plan.

Options under the Omnibus Incentive Plan have a contractual term of 10 years. The exercise price of an ISO and NSO shall not be less than 100% of the fair market value of the shares on the date of grant.

A summary of the Company's stock option activity under the Plans is as follows:

	Outstanding Options	Weighted-Average Exercise Price	Weighted-Average Remaining Term (Years)	Aggregate Intrinsic Value
Balance as of December 31, 2022	7,964,557	$ 37.10	6.4	$ 128,069,003
Granted	387,757	51.31		
Exercised	(1,782,196)	6.76		
Cancelled and forfeited	(623,332)	84.31		
Balance as of December 31, 2023	5,946,786	$ 42.17	6.3	$ 144,350,070
Vested and exercisable as of December 31, 2023	4,460,855	$ 36.82	5.5	$ 129,774,778

The weighted-average grant date fair value of options granted during the years ended December 31, 2023, 2022 and 2021 was $33.67, $32.95, and $108.05 per share, respectively. The total intrinsic value of stock options exercised was $78.0 million, $89.5 million and $572.2 million during the years ended December 31, 2023, 2022, and 2021, respectively. As of December 31, 2023, the total unrecognized stock-based compensation related to stock options was $48.5 million, which will be recognized over a weighted-average period of approximately two years.

Stock Option Valuation Assumptions

The fair value of each employee option grant was estimated on the date of grant using the Black-Scholes option pricing model and the following assumptions for the periods indicated:

	Year Ended December 31,		
	2023	2022	2021
Expected volatility	70% – 71%	65% – 71%	67% – 69%
Risk-free interest rate	3.7% – 4.6%	1.6% – 4.1%	1.0% – 1.1%
Expected term	5.3 – 6.1 years	5.3 – 6.1 years	6.0 – 6.1 years
Expected dividend	—%	—%	—%

Restricted Stock Units

Restricted stock units ("RSUs") activity for the year ended December 31, 2023 is as follows:

	Restricted Stock Units	Weighted-Average Grant Date Fair Value (per share)
Balance as of December 31, 2022	5,836,192	$ 52.21
Granted	2,320,714	50.08
Vested	(1,900,620)	59.60
Cancelled	(922,152)	54.42
Outstanding as of December 31, 2023	5,334,134	$ 48.26

As of December 31, 2023, the total unrecognized stock-based compensation related to RSUs was $224.6 million, which will be recognized over a weighted-average period of approximately two years.

Market-based Performance Stock Awards (PSAs)

In March 2023, the Company granted 172,842 performance restricted stock unit awards (PSAs) under the 2019 Plan to certain members of management, which are subject to the achievement of certain escalating stock price thresholds established by the Company's Compensation Committee of the Board of Directors.

The PSAs each vest in equal installments upon the achievement of escalating stock price thresholds of $72.14, $96.19 and $120.24 respectively, calculated based on the volume-weighted average price per share of the Company's Class A common stock over the immediately trailing 20 trading day period for each respective threshold. The escalating stock price thresholds can be met any time prior to the fifth anniversary of the date of grant. The vesting of the PSAs can also be triggered upon certain change in control events and achievement of certain change in control price thresholds, or in the event of death or disability. The weighted-average grant date fair value of the PSAs was $43.13. Stock-based compensation expense recognized for these market-based awards was approximately $5.1 million for the year ended December 31, 2023.

The Company estimates the fair values of shares granted under the PSAs using a Monte Carlo simulation model with the following assumptions:

	Year Ended December 31, 2023
Expected volatility	71%
Risk-free interest rate	3.7%
Expected dividend	—%

In September 2022, the Company granted 709,025 PSAs including RSUs and a performance stock option under the 2019 Plan to certain members of management, which are subject to the achievement of certain stock price thresholds established by the Company's Compensation Committee of the Board of Directors.

The PSAs consist of three separate tranches and the vesting of each tranche is subject to the Class A common stock closing price being maintained at or above the predetermined share price goals of $60, $80 and $105 for each tranche, respectively, for a period of 20 consecutive trading days. The share price goals can be met any time prior to the fourth anniversary of the date of grant. The vesting of the PSAs can also be triggered upon certain change in control events and achievement of certain change in control price goals, or in the event of death or disability. The weighted-average grant date fair value of the PSAs was $22.55. Stock-based compensation expense recognized for these market-based awards was approximately $10.0 million and $3.3 million for the years ended December 31, 2023 and 2022, respectively.

The Company estimates the fair values of shares under the Performance stock options using a Monte Carlo simulation model with the following assumptions:

	Year Ended December 31, 2022
Expected volatility	68%
Risk-free interest rate	3.4%
Expected dividend	—%

As of December 31, 2023, none of the escalating stock price thresholds had been met for any of the PSAs, resulting in no shares vesting or becoming exercisable.

2019 Employee Stock Purchase Plan

In July 2019, the Company's board of directors adopted the 10x Genomics, Inc. 2019 Employee Stock Purchase Plan (the "ESPP"), which was subsequently approved by the Company's stockholders. The ESPP went into effect on September 11, 2019. Subject to any limitations contained therein, the ESPP allows eligible employees to contribute, through payroll deductions, up to 15% of their eligible compensation to purchase the Company's Class A common stock at a discounted price per share. The ESPP generally provides for consecutive 6-month offering periods.

During the years ended December 31, 2023 and 2022, 217,537 and 151,028 shares of Class A common stock, respectively, were issued under the ESPP. The ESPP provides that the maximum number of shares of the Company's Class A common stock made available for sale thereunder will be 3,486,671, which number will be automatically increased on the first day of each

calendar year commencing on January 1, 2021 and ending on January 1, 2029 in an amount equal to the lesser of (i) 1% of the total number of shares of common stock outstanding on the last day of the immediately preceding fiscal year and (ii) such number of shares of the Company's Class A common stock as determined by the Company's board of directors. However, if on January 1 of a calendar year the Company's board of directors has not either confirmed the 1% described in clause (i) or approved a lesser number of shares of the Company's Class A common stock for such calendar year, the Company's board of directors will be deemed to have waived the automatic increase and no such increase will occur for such calendar year. The maximum number of shares available under the ESPP (and any share limitations thereunder, as applicable) will automatically be adjusted upon certain changes to the Company's capital structure. As of December 31, 2023, there were 2,891,063 shares available for issuance under the ESPP.

For the years ended December 31, 2023 and 2022, the weighted average grant date fair values of the ESPP shares purchased, using the Black-Scholes option pricing model, were $16.91 and $33.74, respectively.

The following assumptions were used in estimating the fair values of shares under the ESPP:

	Year Ended December 31,		
	2023	2022	2021
Expected volatility	49% – 58%	81% – 92%	47% – 69%
Risk-free interest rate	5.24% – 5.41%	1.54% – 4.54%	0.04% – 0.06%
Expected term (in years)	0.5	0.5	0.50 – 1.0
Expected dividend	—%	—%	0%

As of December 31, 2023, the total unrecognized stock-based compensation related to the ESPP was $1.3 million, which will be recognized over a weighted-average period of approximately 0.4 years.

Stock-based Compensation

The Company recorded stock-based compensation expense in the consolidated statement of operations for the periods presented as follows (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Cost of revenue	$ 7,068	$ 5,259	$ 3,231
Research and development	72,804	59,211	41,970
Selling, general and administrative	87,078	72,378	50,761
Total stock-based compensation expense	$ 166,950	$ 136,848	$ 95,962

10. Employee Benefit Plans

The Company has made available to all full-time United States employees a 401(k) retirement savings plan. Under this plan, employee and employer contributions and accumulated plan earnings qualify for favorable tax treatment under Section 401(k) of the Internal Revenue Code. Commencing in 2022, the Company matched 100% of the first 3% of the employee's eligible compensation, up to a maximum of two thousand dollars annually per employee. The Company contributed $1.8 million and $2.0 million for the years ended December 31, 2023 and 2022, respectively.

11. Net Loss Per Share

The following outstanding shares of common stock equivalents were excluded from the computation of diluted net loss per share for the periods presented because including them would have had an anti-dilutive effect:

	Year Ended December 31,		
	2023	2022	2021
Stock options to purchase common stock	5,946,786	7,964,557	8,212,754
Restricted stock units	5,334,134	5,836,192	1,298,244
Shares committed under ESPP	48,302	46,548	13,368
Shares subject to repurchase	—	—	18,750
Total	11,329,222	13,847,297	9,543,116

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

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act") as of the end of the period covered by this report. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of December 31, 2023.

Management's Annual Report on Internal Control over Financial Reporting

Internal control over financial reporting refers to the process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles, and includes those policies and procedures that:

(1) Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;

(2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

(3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company.

Management has used the 2013 framework set forth in the report entitled "Internal Control-Integrated Framework" published by the Committee of Sponsoring Organizations of the Treadway Commission to evaluate the effectiveness of the Company's internal control over financial reporting. Management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2023 at the reasonable assurance level. Our independent registered public accounting firm, Ernst & Young LLP, has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2023, which is included below.

Changes in Internal Control over Financial Reporting

There was not any change in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) under the Exchange Act) during the three months ended December 31, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of 10x Genomics, Inc.

Opinion on Internal Control over Financial Reporting

We have audited 10x Genomics, Inc.'s internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, 10x Genomics, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2023, and the related notes and our report dated February 15, 2024 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

San Jose, California
February 15, 2024

Item 9B. Other Information.

Rule 10b5-1 Trading Plans

None of our directors or officers adopted, modified or terminated a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement during the quarter ended December 31, 2023, as such terms are defined under Item 408(a) of Regulation S-K, except as follows:

On December 13, 2023, James L. Wilbur, our former Chief Commercial Officer, adopted a Rule 10b5-1 trading arrangement that is intended to satisfy the affirmative defense of Rule 10b5-1(c) for the sale of up to 147,095 shares of the Company's common stock. The expiration date of the trading arrangement is December 31, 2024.

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

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer, controller, or persons performing similar functions. A current copy of the code is posted on the Governance section of our investor relations website, which is located at www.investors.10xgenomics.com. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for our principal executive officer, principal financial officer, principal accounting officer, controller or persons performing similar functions, or any officer or director, we will disclose the nature of such amendment or waiver on our website or in a Current Report on Form 8-K.

The remaining information required under this item is incorporated herein by reference to our definitive proxy statement (the "Proxy Statement") pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended, which Proxy Statement is expected to be filed with Securities and Exchange Commission not later than 120 days after the close of our fiscal year ended December 31, 2023.

Item 11. Executive Compensation.

The information required by this item will be set forth in the Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be set forth in the Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be set forth in the Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information required by this item will be set forth in the Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of this Annual Report:

(1) Financial Statements

The financial statements filed as part of this Annual Report are included in Part II, Item 8 of this Annual Report.

(2) Financial Statement Schedules

Financial statement schedules have been omitted in this Annual Report because they are not applicable, not required under the instructions or the information requested is set forth in the financial statements or related notes thereto.

(3) List of Exhibits required by Item 601 of Regulation S-K

		Incorporated by Reference				
Exhibit Number	Exhibit Title	Form	File No.	Exhibit	Filing Date	Filed Herewith
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-39035	3.1	9/16/2019	
3.2	Amended and Restated Bylaws of the Registrant.	8-K	001-39035	3.2	11/3/2022	
4.1	Form of Stock Certificate for Class A common stock of the Registrant.	S-1	333-233361	4.2	8/19/2019	
4.2	Description of the Registrant's Securities.	10-K	001-39035	4.2	2/18/2022	
10.1	Agreement for Purchase and Sale, dated August 10, 2020, between the Registrant and Equity One (West Coast Portfolio) LLC.	10-Q	001-39035	10.7	8/12/2020	
10.2	Amendment to Agreement for Purchase and Sale, dated October 15, 2020, between Registrant and Equity One (West Coast Portfolio) LLC.	10-Q	001-39035	10.3	11/12/2020	
10.3	ReadCoor Merger Agreement.	10-K	333-39035	10.6	2/26/2021	
10.4+	Amended and Restated 2012 Stock Plan and forms of award agreements thereunder.	S-1/A	333-233361	10.10	9/3/2019	
10.5+	2019 Omnibus Incentive Plan and forms of award agreements thereunder.	S-1/A	333-233361	10.11	9/3/2019	
10.5.1+	Form of 2019 Omnibus Incentive Plan Stock Option Award Notice and Agreement.					X
10.5.2+	Form of 2019 Omnibus Incentive Plan Restricted Stock Unit Award Notice and Agreement.					X
10.6+	2019 Employee Stock Purchase Plan and forms of agreements.	10-Q	001-39035	10.4	11/12/2019	
10.6.1+	Form of 2019 Employee Stock Purchase Plan Subscription Agreement.					X
10.6.2+	Form of 2019 Employee Stock Purchase Plan Notice of Contribution Percentage Change or Withdrawal.	10-K	333-39035	10.6.2	2/16/2023	
10.7+	Amended and Restated Non-Employee Director Compensation Policy.	10-Q	001-39035	10.1	8/4/2023	

Exhibit Number	Exhibit Title	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.8+	Form of At-Will Employment, Confidential Information, Invention Assignment, and Arbitration Agreement.	S-l	333-233361	10.16	8/19/2019	
10.9+	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.	S-l/A	333-233361	10.17	9/3/2019	
10.10+	Employment Offer Letter by and between the Registrant and Eric S. Whitaker.	S-l	333-233361	10.14	8/19/2019	
10.11+	Employment Offer Letter by and between the Registrant and Justin McAnear.	S-l	333-233361	10.15	8/19/2019	
10.12	Lease Agreement dated August 2, 2018, between the Registrant and 6200 Stoneridge Mall Road investors LLC.	S-l	333-233361	10.3	8/19/2019	
10.12.1	First Amendment to Lease Agreement, dated May 20, 2019, between the Registrant and 6200 Stoneridge Mall Road Investors LLC.	S-l	333-233361	10.4	8/19/2019	
10.12.2	Second Amendment to Lease Agreement, dated July 24, 2020, between the Registrant and 6200 Stoneridge Mall Road Investors LLC.	10-Q	001-39035	10.6	8/12/2020	
10.12.3	Third Amendment to Lease Agreement, dated June 10, 2021, between the Registrant and 6200 Stoneridge Mall Road Investors LLC.	8-K	001-39035	10.1	6/15/2021	
10.13	Lease Agreement, dated November 6, 2020, between the Registrant and 6200 Stoneridge Mall Road Investors LLC.	10-Q	001-39035	10.4	11/12/2020	
10.14#	License Agreement, dated September 26, 2013, between the Registrant and the President and Fellows of Harvard College.	S-l	333-233361	10.5	8/19/2019	
10.14.1#	Amendment No. 1 to License Agreement, dated October 25, 2018, between the Registrant and President and Fellows of Harvard College.	S-l	333-233361	10.6	8/19/2019	
10.15#	Exclusive (Equity) Agreement dated October 15, 2015, between Epinomics, Inc, and The Board of Trustees of the Leland Stanford Junior University.	S-l	333-233361	10.7	8/19/2019	
10.15.1	Amendment No. 1 to the License Agreement, dated February 1, 2017, between Epinomics and The Board of Trustees of the Leland Stanford Junior University.	S-l	333-233361	10.8	8/19/2019	
10.15.2#	Amendment No. 2 to the License Agreement, dated July 27, 2018, between the Registrant and The Board of Trustees of the Leland Stanford Junior University.	S-l	333-233361	10.9	8/19/2019	
10.16	Settlement and Patent Cross License Agreement, dated July 26, 2021, by and between the Registrant and Bio-Rad Laboratories, Inc.	8-K	001-39035	10.1	7/27/2021	
10.27+	Employment Offer Letter by and between the Registrant and James Wilbur dated July 12, 2022.	10-Q	001-39035	10.1	8/9/2022	

Exhibit Number	Exhibit Title	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.28+	Transition and Separation Agreement between James Wilbur and 10x Genomics, Inc. dated January 15, 2024.					X
19.1	Amended and Restated Insider Trading Policy.					X
23.1	Consent of Independent Registered Public Accounting Firm.					X
24.1	Power of Attorney (included in the signature page to this Annual Report).					X
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial and Accounting Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2*	Certification of Principal Financial and Accounting Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
97.1	Policy for Recovery of Erroneously Awarded Compensation.					X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X
104	Cover Page Interactive Data File - the Cover Page Interactive Data File does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X

+ Management contract or compensatory plan or arrangement.
# Portions of this exhibit have been omitted pursuant to Item 601 of Regulation S-K promulgated under the Securities Act because the information (i) is not material and (ii) would be competitively harmful if publicly disclosed.
* This certification is deemed not filed for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

Item 16. Form 10-K Summary.

None.

Signatures

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

10x Genomics, Inc.

Date: February 15, 2024

By: /s/ Serge Saxonov

Serge Saxonov
Chief Executive Officer and Director
(Principal Executive Officer)

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Serge Saxonov and Justin J. McAnear, and each of them, his or her true and lawful agent, proxy and attorney-in-fact, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes, may lawfully do or cause to be done by virtue thereof.

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

Signature	Title	Date
/s/ Serge Saxonov Serge Saxonov	Chief Executive Officer and Director (Principal Executive Officer)	February 15, 2024
/s/ Benjamin J. Hindson Benjamin J. Hindson	President and Director	February 15, 2024
/s/ Justin J. McAnear Justin J. McAnear	Chief Financial Officer (Principal Accounting and Financial Officer)	February 15, 2024
/s/ John R. Stuelpnagel John R. Stuelpnagel	Chairman of the Board of Directors	February 15, 2024
/s/ Sridhar Kosaraju Sridhar Kosaraju	Director	February 15, 2024
/s/ Mathai Mammen Mathai Mammen	Director	February 15, 2024
/s/ Kim Popovits Kim Popovits	Director	February 15, 2024
/s/ Shehnaaz Suliman Shehnaaz Suliman	Director	February 15, 2024

Exhibit 10.5.1

10x GENOMICS, INC.
2019 OMNIBUS INCENTIVE PLAN
STOCK OPTION AWARD NOTICE

Participant has been granted an Option with the terms set forth in this Award Notice, and subject to the terms and conditions of the Plan and the Stock Option Agreement to which this Award Notice is attached. Capitalized terms used and not defined in this Award Notice will have the meanings set forth in the Stock Option Agreement and the Plan.

Participant:	%%FIRST_NAME_MIDDLE_NAME_LAST_NAME%-%
Date of Grant:	%%OPTION_DATE,'MONTH DD, YYYY'%-%
Number of Shares Subject to Option:	%%TOTAL_SHARES_GRANTED,'999,999,999'%-%
Type of Option:	%%OPTION_TYPE%-%
Exercise Price per Share:	USD $%%OPTION_PRICE%-%
Expiration Date:	%%EXPIRE_DATE_PERIOD1,'MONTH DD, YYYY'%-%
Vesting Commencement Date:	%%VEST_BASE_DATE,'MONTH DD, YYYY'%-%
Vesting Schedule:	Subject to the Participant's continued employment with, or service to, the Company Group through the applicable vesting date, 25% of the Number of Shares Subject to Option (set forth above in this Award Notice) shall vest and become exercisable on the one-year anniversary of the Vesting Commencement Date, and 1/48th of the Number of Shares Subject to Option shall vest and become exercisable in monthly installments thereafter, so as to be 100% vested on the date that is the fourth anniversary of the Vesting Commencement Date and each Option shall be subject to the Company's Change in Control Severance Policy and the Company's Death and Disability Policy in effect on the Date of Grant.

Additional Terms and Acknowledgements:

If the number of Shares is not evenly divisible, then no fractional Share will vest and the installments will be as equal as possible with the smaller installment(s) vesting first. Each such right of purchase will be cumulative and will continue, unless sooner exercised or terminated as herein provided, during the remaining period of the Option Period.

10x GENOMICS, INC.
2019 OMNIBUS INCENTIVE PLAN
STOCK OPTION AGREEMENT

(U.S. and Non-U.S. Participants)

This STOCK OPTION AGREEMENT, effective as of the Date of Grant (as defined below), is made by and between 10x Genomics, Inc., a Delaware corporation (the "**Company**"), and Participant (as defined below). Capitalized terms have the meaning set forth in Section 1 hereof, or, if not otherwise defined herein, in the 10x Genomics, Inc. 2019 Omnibus Incentive Plan (as it may be amended from time to time, the "**Plan**").

To the extent this Option is noted as an "Incentive Stock Option" in the Award Notice, then this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, this Option will not qualify as Incentive Stock Option, if, among other events, (a) Participant disposes of the Shares acquired upon exercise of this Option within two (2) years from the Date of Grant or one (1) year after such Shares were acquired pursuant to exercise of this Option; (b) except in the event of Participant's death or Disability, Participant is not employed by the Company, a parent or a Subsidiary at all times during the period beginning on the Date of Grant and ending on the day that is three (3) months before the date of exercise of any Shares; or (c) to the extent the aggregate Fair Market Value of the Shares subject to "incentive stock options" held by Participant which become exercisable for the first time in any calendar year (under all plans of the Company, a parent or a Subsidiary) exceeds US$100,000. If Participant disposes of the Shares acquired upon exercise of this Option within two (2) years from the Date of Grant or one (1) year after such Shares were acquired pursuant to exercise of this Option, Participant must deliver to the Company, within seven (7) days following such disposition, a written notice specifying the date on which such Shares were disposed of, the number of Shares so disposed, and, if such disposition was by a sale or exchange, the amount of consideration received.

For Participants residing outside of the US, for US tax purposes, to the extent applicable, this Option is intended to be a Nonstatutory Stock Option and shall not be treated as an Incentive Stock Option within the meaning of Section 422(b) of the Code.

1. Definitions.

The following terms have the following meanings for purposes of this Agreement:

(a) "**Agreement**" means this Stock Option Agreement, including (unless the context otherwise requires) the Award Notice and any special terms and conditions for Participant's country included in any appendices attached hereto.

(b) "**Award Notice**" means the award notice to Participant.

(c) "**Exercise Price**" means the "Exercise Price" listed in the Award Notice.

(d) "**Date of Grant**" means the "Date of Grant" listed in the Award Notice.

(e) "**Officer**" means "officer" as defined under Rule 16a-1(f) of the Exchange Act.

(f) "**Participant**" means the "Participant" listed in the Award Notice.

(g) "**Restrictive Covenant Violation**" means Participant's breach of any restrictive covenant or any similar provision applicable to or agreed to by Participant.

(h) "**Shares**" means the number of shares of Class A Common Stock listed in the Award Notice as "Number of Shares Subject to Option", as adjusted in accordance with the Plan.

1. Grant of the Option.

(a) Effective as of the Date of Grant but subject to Section 26 hereof, the Company hereby irrevocably grants to Participant the right and option (the "**Option**") to purchase all or any part of the Shares, subject to, and in accordance with, the terms, conditions and restrictions set forth in the Plan, the Award Notice and this Agreement. The Option will vest in accordance with the "**Vesting Schedule**" set forth on the Award Notice.

(b) The Option granted hereunder is subject to the Plan and the terms of the Plan are hereby incorporated into this Agreement. By accepting the Option, Participant acknowledges that Participant has received and read the Plan and agrees to be bound by the terms, conditions and restrictions set forth in the Plan, this Agreement and the Company's policies, as in effect from time to time, relating to the Plan. In the event of any conflict between one or more of this Agreement, the Award Notice and the Plan, the Plan will govern this Agreement and the Award Notice, and the Agreement (to the extent not in conflict with the Plan) will govern the Award Notice.

2. Exercise Price.

The price at which Participant will be entitled to purchase the Shares upon the exercise of the Option will be the Exercise Price, subject to adjustment as provided in Section 13 hereof.

3. Exercisability of Option.

The Option will become vested and exercisable in accordance with the Vesting Schedule set forth on the Award Notice.

4. Duration of Option.

The Option will be exercisable to the extent and in the manner provided herein either (i) for a period of ten (10) years from the Date of Grant (the "**Option Period**") or (ii) if the Option is an Incentive Stock Option and Participant holds more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or its parent corporation or a Subsidiary on the Date of Grant, then for a period of five (5) from the Date of Grant; provided, that the Option may be earlier terminated upon a Termination Date.

5. Manner of Exercise and Payment.

(a) Subject to the terms and conditions of this Agreement and the Plan, the Option may be exercised by delivery of written or electronic notice to the Company in the manner prescribed in Section 7(d) of the Plan and as otherwise set forth by the Committee from time to time. Such notice will set forth the number of Shares in respect of which the Option is being exercised and will be signed by the person or persons exercising the Option. In the event the Company has designated an Award Administrator (as defined below), the Option may also be exercised by giving notice (including through electronic means) in accordance with the procedures established from time to time by the Award Administrator. Any exercisable portion of the Option or the entire Option, if then wholly exercisable, may be exercised in whole or in part, provided that partial exercise will be for whole Shares only.

(b) Payment of the Exercise Price for the portion of the Option being exercised is due in full upon exercise of all or any part of the vested Option. Participant may elect to make payment of the Exercise Price: (i) in cash or by check or wire transfer (or any combination thereof), (ii) delivery of Shares having a Fair Market Value equal to the aggregate Exercise Price for the Shares being purchased that are not subject to any pledge, encumbrance or other security interest and satisfy such other requirements as may be imposed by the Committee; provided that such Shares have been held by Participant for no less than six months (or such other period as established from time to time by the Committee in order to avoid adverse accounting treatment under applicable accounting principles); (iii) to the extent permitted by applicable law, by delivery of a notice that Participant has placed a market sell order with a broker with respect to Shares then issuable upon exercise of the portion of the Option being so exercised, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company in satisfaction of the aggregate Exercise Price for such Shares; provided, that payment of such

proceeds is then made to the Company upon settlement of such sale, (iv) any combination of cash (or an approved cash equivalent) and any of the foregoing, or (v) any other payment method provided under the Plan that the Committee may approve; provided, that, if Participant is a Section 16 officer of the Company under the Exchange Act, then the Committee may establish the method of paying the Exercise Price required to be utilized by Participant from the alternatives available under the Plan prior to the exercise of any portion of the Option.

(c) Concurrently with the exercise of the Option, Participant must pay to the Company any amount that the Company determines it is required to withhold under applicable federal, state or local or foreign tax laws in respect of the exercise or the transfer of such Shares ("**Tax Obligations**"). Participant may elect to make payment (i) in cash, by check or wire transfer (or any combination thereof) or (ii) and to the extent permitted by applicable law, by delivery of a notice that Participant has placed a market sell order with a broker with respect to Shares then issuable upon exercise of the portion of the Option being so exercised, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company in satisfaction of the Tax Obligations; provided, that payment of such proceeds is then made to the Company upon settlement of such sale; and provided, further, that the Committee may, in its sole discretion, allow such withholding obligation to be satisfied by any other method described in Section 13 of the Plan and, if Participant is a Section 16 officer of the Company under the Exchange Act, then the Committee shall establish the method of withholding required to be utilized by the Participant from alternatives available under the Plan prior to the exercise of any portion of the Option.

(d) Upon receipt of the notice of exercise and any payment or other documentation as may be necessary pursuant to Sections 6(a), 6(b), 6(c) and 7 above relating to the Shares in respect of which the Option is being exercised, the Company will, subject to the Plan and this Agreement, take such action as may be necessary to effect the transfer to Participant of the number of Shares as to which such exercise was effective.

(e) Participant will not be deemed to be the holder of, or to have any of the rights and privileges of a stockholder of the Company (including the right to vote or receive dividends) in respect of, Shares purchased upon exercise of the Option until (i) the Option has been exercised pursuant to the terms of this Agreement and Participant has paid the full purchase price for the number of Shares in respect of which the Option was exercised and any applicable Tax Obligations and (ii) the Company has issued the Shares in connection with such exercise.

6. Tax Withholding.

(a) **Tax Obligations**. Regardless of any action taken by the Company or any other Subsidiary with respect to Tax Obligations, Participant acknowledges that the ultimate liability for all Tax Obligations legally due by Participant is and remains Participant's responsibility and that the Company (a) makes no representations or undertakings regarding the treatment of any Tax Obligations in connection with any aspect of the Option, including the grant, vesting or exercise of the Option, the subsequent sale of Shares acquired pursuant to such exercise, or the receipt of any dividends and (b) does not commit to structure the terms of the grant or any other aspect of the Option to reduce or eliminate Participant's liability for Tax Obligations. At the time of exercise of the Option, Participant shall pay or make adequate arrangements satisfactory to the Company to satisfy all Tax Obligations of the Company and any other Subsidiary. In this regard, at the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company or any other Subsidiary, Participant hereby authorizes withholding of all applicable Tax Obligations from payroll and any other amounts payable to Participant, and otherwise agrees to make adequate provision for withholding of all applicable Tax Obligations, if any, by each Subsidiary which arise in connection with the Option. The Company shall have no obligation to process the exercise of the Option or to deliver Shares until the Tax Obligations as described in this Section have been satisfied by Participant.

(b) **Withholding or Directed Sale of Shares**. The Company shall have the right, but not the obligation, to require Participant to satisfy all or any portion of a Subsidiary's Tax Obligations upon exercise of the Option by deducting from the Shares otherwise issuable to Participant upon such

exercise a number of whole Shares having a fair market value, as determined by the Company as of the date of exercise, not in excess of the amount of such Tax Obligations determined by the applicable minimum statutory withholding rates (unless otherwise determined by the Company). The Company may require Participant to direct a broker, upon the exercise of the Option, to sell a portion of the Shares subject to the Option determined by the Company in its discretion to be sufficient to cover the Tax Obligations of any Subsidiary and to remit an amount equal to such Tax Obligations to the Company in cash.

7. Termination of Employment or Service.

(a) Subject to Section 8(c) hereof, in the event that Participant's employment with, or service to, the Company Group terminates for any reason, any unvested portion of the Option will be forfeited and, except as otherwise specifically provided for in this Section 8, all of Participant's rights under this Agreement will terminate as of the effective date of Termination (the "**Termination Date**") (unless otherwise provided for by the Committee in accordance with the Plan).

(b) If Participant's employment or service is terminated by the Company Group for Cause or by Participant when grounds existed for Cause at the time thereof, the vested and unvested portions of the Option will terminate as of the Termination Date.

(c) In the event (i) Participant's employment with, or service to, the Company Group is terminated by the Company due to death or Disability, the vested portion of the Option will remain exercisable for one year thereafter (but in no event beyond the Option Period) and (ii) Participant's employment with, or service to, the Company Group is terminated for any other reason (subject to Section 8(b)), the vested portion of the Option will remain exercisable for ninety (90) days thereafter (but in no event beyond the Option Period); provided, that, in each case, the Option Period will expire immediately upon the occurrence of a Restrictive Covenant Violation.

(d) Participant's rights with respect to the Option will not be affected by any change in the nature of Participant's employment or service so long as Participant continues to be an employee, consultant or director of the Company Group. Whether (and the circumstances under which) employment or service has terminated and the determination of the Termination Date for the purposes of this Agreement will be determined by the Committee (or, with respect to any Participant who is not a director or Officer, its designee, whose good faith determination will be final, binding and conclusive; provided, that such designee may not make any such determination with respect to the designee's own employment for purposes of the Option).

8. Restrictions on Transfer.

(a) Participant may not assign, alienate, pledge, attach, sell or otherwise transfer or encumber the Option or Participant's right under the Option to receive Shares, other than in accordance with Section 13(b) of the Plan.

(b) Participant agrees that in the event the Company advises Participant that it plans an underwritten public offering of Shares in compliance with the Securities Act and that the underwriter(s) seek to impose restrictions under which certain shareholders may not sell or contract to sell or grant any option to buy or otherwise dispose of part or all of their stock purchase rights of the underlying Shares, Participant hereby agrees that for a period not to exceed 180 days from the prospectus, Participant will not sell or contract to sell or grant an option to buy or otherwise dispose of any Shares subject to this Agreement without the prior written consent of the underwriter(s) or its representative(s).

2. Repayment of Proceeds; Clawback Policy.

The Shares subject to the Option and all proceeds related to such Shares are subject to the clawback and repayment terms set forth in Sections 13(v) and 13(x) of the Plan and the Company's clawback policy, as in effect from time to time, to the extent Participant is a director or Officer, subject to applicable law. In addition, if a Restrictive Covenant Violation occurs or the Company discovers after a termination of employment or service that grounds existed for Cause at the time thereof, then Participant shall be required, in addition to any other remedy available (on a non-exclusive basis), to pay

to the Company, within ten (10) business days of the Company's request to Participant therefor, an amount equal to the excess, if any, of (a) the aggregate after-tax proceeds (taking into account all amounts of tax that would be recoverable upon a claim of loss for payment of such proceeds in the year of repayment) Participant received upon the sale or other disposition of, or distributions in respect of, any Shares acquired upon exercise of the Option (limited, in the case of the Company discovering after a termination of employment or service that grounds existed for Cause at the time thereof, to any such Shares acquired after the date on which grounds for a termination for Cause first existed) over (b) the aggregate Cost (if any) of such Shares. For purposes of this Agreement, "**Cost**" means, in respect of any Share, the Exercise Price, to the extent paid by Participant for such Share, as proportionately adjusted for all subsequent distributions on the Shares and other recapitalizations and less the amount of any distributions made with respect to the Share pursuant to the Company's organizational documents; provided, that Cost may not be less than zero. Any reference in this Agreement to grounds existing for a termination of employment with Cause will be determined without regard to any notice period, cure period, or other procedural delay or event required prior to finding of or termination with Cause.

3. No Right to Continued Employment or Service.

Neither the Plan nor this Agreement nor Participant's receipt of the Option hereunder shall impose any obligation on the Company or any Affiliate to continue the employment or service of Participant. Further, the Company or any Affiliate (as applicable) may at any time terminate the employment or service of Participant, free from any liability or claim under the Plan or this Agreement, except as otherwise expressly provided herein.

4. Service Conditions.

The following provisions shall only apply to Participant if Participant resides outside the United States: In accepting the Option, Participant acknowledges that:

(a) Any notice period mandated under local law shall not be treated as service for the purpose of determining the vesting of the Option; and Participant's right to exercise the Option after termination of service, if any, will be measured by the date of termination of Participant's active service and will not be extended by any notice period mandated under local law. Subject to the foregoing and the provisions of the Plan, the Company, in its sole discretion, shall determine whether Participant's service has terminated and the effective date of such termination.

(b) The vesting of the Option shall cease upon, and no Shares shall become vested following, Participant's termination of service for any reason except as may be explicitly provided by the Plan or this Agreement.

(c) The Plan is established voluntarily by the Company. It is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Agreement.

(d) The grant of the Option is voluntary and occasional and does not create any contractual or other right to receive future grants of Options, or benefits in lieu of Options, even if Options have been granted repeatedly in the past.

(e) All decisions with respect to future Option grants, if any, will be at the sole discretion of the Company.

(f) Participant's participation in the Plan shall not create a right to further service with the Company or any Subsidiary and shall not interfere with the ability of any Subsidiary to terminate Participant's service at any time, with or without cause subject to applicable law.

(g) Participant is voluntarily participating in the Plan.

(h) The Option is an extraordinary item that does not constitute compensation of any kind for service of any kind rendered to any Subsidiary, and which is outside the scope of Participant's employment contract, if any.

(i) The Option is not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or similar payments.

(j) In the event that Participant is not an employee of the Company or Subsidiary, the Option grant will not be interpreted to form an employment contract or relationship with the Company or Subsidiary; and furthermore, the Option grant will not be interpreted to form an employment contract with any other Subsidiary.

(k) The future value of the underlying Shares is unknown and cannot be predicted with certainty. If the underlying Shares do not increase in value, the Option will have no value. If Participant exercises the Option and obtains Shares, the value of those Shares acquired upon exercise may increase or decrease in value, even below the Exercise Price.

(l) No claim or entitlement to compensation or damages arises from termination of the Option or diminution in value of the Option or Shares purchased through exercise of the Option resulting from termination of Participant's service (for any reason whether or not in breach of local law) and Participant irrevocably releases the Company and each other Subsidiary from any such claim that may arise. If, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen then, by signing this Agreement, Participant shall be deemed irrevocably to have waived Participant's entitlement to pursue such a claim.

9. Adjustments.

The terms of this Agreement, including, without limitation, (a) the number of Shares subject to the Option and (b) the Exercise Price specified herein, will be subject to adjustment in accordance with Section 11 of the Plan.

10. Securities Laws; Cooperation.

Upon the vesting of any unvested portion of the Option, Participant will make or enter into such written representations, warranties and agreements as the Committee may reasonably request in order to comply with applicable securities laws, the Plan or this Agreement. Participant further agrees to cooperate with the Company in taking any action reasonably necessary or advisable to consummate the transactions contemplated by this Agreement.

11. Notices.

Any notice necessary under this Agreement shall be addressed to the Company in care of its Secretary at the principal executive office of the Company and to Participant at the address appearing in the personnel records of the Company for such Participant or to either party at such other address as either party hereto may hereafter designate in writing to the other. Any such notice shall be deemed effective upon receipt thereof by the addressee.

12. Governing Law; Venue; Jury Trial Waiver; Language.

This Agreement will be governed by and construed in accordance with the internal laws of the State of Delaware applicable to contracts made and performed wholly within the State of Delaware, without giving effect to the conflict of laws provisions thereof. For purposes of litigating any dispute that may arise directly or indirectly from this Agreement, the parties hereto hereby submit and consent to the exclusive jurisdiction of the State of California and agree that any such litigation shall be conducted only in the courts of California or the federal courts of the United States located in California and no other courts. Each of Participant, the Company and any transferees who hold a portion of the Options pursuant to a valid assignment hereby irrevocably waives any right to a jury trial. If Participant has

received a copy of this Agreement (or the Plan or any other document related hereto or thereto) translated into a language other than English, such translated copy is qualified in its entirety by reference to the English version thereof, and in the event of any conflict the English version will govern. Participant acknowledges that Participant is sufficiently proficient in English to understand the terms and conditions of this Agreement.

13. Successors in Interest.

Any successor to the Company will have the benefits of the Company under, and be entitled to enforce, this Agreement. Likewise, Participant's legal representative will have the benefits of Participant under, and be entitled to enforce, this Agreement. All obligations imposed upon Participant and all rights granted to the Company under this Agreement will be final, binding and conclusive upon Participant's heirs, executors, administrators and successors.

14. Severability.

Should any provision of this Agreement be held by a court of competent jurisdiction to be unenforceable or invalid for any reason, the remaining provisions of this Agreement will not be affected by such holding and will continue in full force in accordance with their terms.

15. Data Privacy.

The following provisions shall only apply to Participant if he or she resides outside of the US, the EU, EEA, and the UK:

(a) Participant voluntarily consents to the collection, use, disclosure and transfer to the United States and other jurisdictions, in electronic or another form, of his or her personal data as described in this Agreement and any other award materials ("***Data***") by and among, as applicable, the Company and any Affiliates or Subsidiaries for the exclusive purpose of implementing, administering, and managing his or her participation in the Plan. If Participant does not choose to participate in the Plan, his or her employment status or service with the Company and any Affiliates or Subsidiaries will not be adversely affected.

(b) Participant understands that the Company and any Affiliates or Subsidiaries may collect, maintain, process and disclose, certain personal information about him or her, including, but not limited to, his or her name, home address, email address and telephone number, date of birth, social insurance number, passport or another identification number, salary, nationality, job title, any Shares or directorships held in the Company, details of all equity awards or any other entitlement to Shares awarded, canceled, exercised, vested, unvested or outstanding in his or her favor, for the exclusive purpose of implementing, administering and, managing the Plan.

(c) Participant understands that Data will be transferred to one or more service provider(s) selected by the Company, which may assist the Company with the implementation, administration, and management of the Plan. Participant understands that the recipients of the Data may be located in the United States or elsewhere, and that the recipient's country (*e.g.*, the United States) may have different, including less stringent, data privacy laws and protections than his or her country. Participant understands that if he or she resides outside the United States, he or she may request a list with the names and addresses of any potential recipients of the Data by contacting his or her local human resources representative. Participant authorizes the Company and any other possible recipients that may assist the Company (presently or in the future) with implementing, administering, and managing the Plan to receive, possess, use, retain and transfer the Data, in electronic or another form, for the sole purpose of implementing, administering and managing his or her participation in the Plan.

(d) Participant understands that Data will be held only as long as is necessary to implement, administer and manage his or her participation in the Plan, including to maintain records regarding participation. Participant understands that if he or she resides in certain jurisdictions, to the extent required by applicable law, he or she may, at any time, request access to Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or

refuse or withdraw the consents given by accepting these Options, in any case without cost, by contacting in writing his or her local human resources representative. Further, Participant understands that he or she is providing these consents on a purely voluntary basis. If Participant does not consent or if he or she later seeks to revoke his or her consent, his or her engagement as a service provider with the Company and any Affiliates or Subsidiaries will not be adversely affected; the only consequence of refusing or withdrawing his or her consent is that the Company will not be able to grant him or her Option under the Plan or administer or maintain Option. Therefore, Participant understands that refusing or withdrawing his or her consent may affect his or her ability to participate in the Plan (including the right to retain the Option). Participant understands that he or she may contact his or her local human resources representative for more information on the consequences of his or her refusal to consent or withdrawal of consent.

The following provisions shall only apply to Participant if he or she resides in the EU or EEA, the UK, or EU privacy laws are otherwise applicable:

(e) Data Collected and Purposes of Collection. Participant understands that the Company, acting as the controller, as well as the employing Affiliate or Subsidiary or any other Affiliate or Subsidiary, will process, to the extent permissible under applicable law, certain personal information about him or her, including name, home address and telephone number, information necessary to process the Option (*e.g.*, mailing address for a check payment or bank account wire transfer information), date of birth, social insurance number or other identification number, salary, nationality, job title, employment location, details of all Options granted, canceled, vested, unvested or outstanding in his or her favor, and where applicable service termination date and reason for termination, any capital shares or directorships held in the Company (where needed for legal or tax compliance), and any other information necessary to process mandatory tax withholding and reporting (all such personal information is referred to as "***Data***"). The Data is collected from Participant, and from the Company and any Affiliates or Subsidiaries, for the purpose of implementing, administering, and managing the Plan pursuant to its terms. The legal basis (that is, the legal justification) for processing the Data is that it is necessary to perform, administer and manage the Plan pursuant to this Agreement between Participant and the Company, and in Company's legitimate interests to comply with applicable non-EU laws when performing, administering and managing the Plan, subject to his or her interest and fundamental rights. The Data must be provided in order for Participant to participate in the Plan and for the parties to this Agreement to perform their respective obligations hereunder. If Participant does not provide Data, he or she will not be able to participate in the Plan and become a party to this Agreement.

(f) Transfers and Retention of Data. Participant understands that the Data will be transferred to and among the Company and any Affiliates or Subsidiaries, as well as service providers (such as stock administration providers, brokers, transfer agents, accounting firms, payroll processing firms or tax firms), for the purposes explained above, which are necessary to allow the Company to perform this Agreement. Participant understands that the recipients of the Data may be located in the United States and in other jurisdictions outside of the European Economic Area where the Company and any Affiliates or Subsidiaries or its service providers have operations. The United States and some of these other jurisdictions have not been found by the European Commission to have adequate data protection safeguards. If the Company and any Affiliates or Subsidiaries make transfers of Data outside of the European Economic Area, those transfers will be made solely to the extent necessary to perform this Agreement and take necessary actions in connection with such performance. In addition, service providers may commit to providing adequate safeguards for the transferred Data, such as the EU-U.S. Data Privacy Framework or standard contractual clauses approved by the European Commission. In that case, Participant may obtain details of the transfers by contacting gc@10xgenomics.com.

(g) Participant's Rights in Respect of Data. Participant has the right to access his or her Data being processed by the Company or any Affiliate or Subsidiary as well as understand why the Company or any Affiliate or Subsidiary is processing such Data. Additionally, subject to applicable law, Participant is entitled to have any inadequate, incomplete, or incorrect Data corrected (that is, rectified). Further, subject to applicable law, and under certain circumstances, Participant may be entitled to the following rights in regard to his or her Data: (i) to object to the processing of Data; (ii) to have his or her Data erased, such as where it is no longer necessary in relation to the purposes for which it was processed; (iii) to restrict the processing of his or her Data so that it is stored but not actively processed (*e.g.*, while

the Company assesses whether Participant is entitled to have Data erased); and (iv) to port a copy of the Data provided pursuant to this Agreement or generated by him or her, in a common machine-readable format. To exercise his or her rights, Participant may contact gc@10xgenomics.com. Participant may also contact the relevant data protection supervisory authority, as he or she has the right to lodge a complaint.

5. Limitation on Rights; No Right to Future Grants; Extraordinary Item of Compensation.

By accepting this Agreement and the grant of the Option evidenced hereby, Participant expressly acknowledges that (a) the Plan is established voluntarily by the Company, it is discretionary in nature and may be suspended or terminated by the Company at any time to the extent permitted by the Plan; (b) the grant of the Option is exceptional, voluntary and occasional and it does not create any contractual or other right to receive future grants of options, or benefits in lieu of options, even if options have been granted in the past; (c) all determinations with respect to future option grants, if any, including the grant date, the number of Shares granted, the exercise price and the exercise date or dates, will be at the sole discretion of the Company; (d) Participant's participation in the Plan is voluntary and not a condition of employment, and Participant may decline to accept the Option without adverse consequences to Participant's continued employment relationship with the Company Group; (e) the value of the Option is an extraordinary item that is outside the scope of Participant's employment contract, if any, and nothing can or must automatically be inferred from such employment contract or its consequences; (f) the Option and any Shares acquired under the Plan, and the income from and value of same, are not part of normal or expected compensation for any purpose and are not to be used for calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments, Participant waives any claim on such basis and, for the avoidance of doubt, the Option will not constitute an "acquired right" under the applicable law of any jurisdiction; (g) if the underlying Shares do not increase in value, the Option will have no value; (h) if Participant exercises the Option and acquires Shares, the value of such Shares may increase or decrease in value, even below the Exercise Price; (i) the future value of the underlying Shares is unknown and cannot be predicted with certainty and (j) the Option constitutes full and complete satisfaction of any promises of equity awards in Participant's written service agreement (including an offer letter) between Participant and the Company (or any of its subsidiaries), and upon Participant's acceptance of the Option any promises of equity awards in Participant's written service agreement (including an offer letter) between Participant and the Company (or any of its subsidiaries) shall be of no further effect. In addition, Participant understands, acknowledges and agrees that Participant will have no rights to compensation or damages related to Option proceeds in consequence of the termination of Participant's employment for any reason whatsoever and whether or not in breach of contract.

6. Award Administrator.

The Company may from time to time designate a third party (an "**Award Administrator**") to assist the Company in the implementation, administration and management of the Plan and any Option granted thereunder, including by sending award notices on behalf of the Company to Participants, and by facilitating through electronic means acceptance of Agreement by Participants and Option exercises by Participants.

7. Book Entry Delivery of Shares.

Whenever reference in this Agreement is made to the issuance or delivery of certificates representing one or more Shares, the Company may elect to issue or deliver such Shares in book entry form in lieu of certificates.

8. Amendment.

The Committee may waive any conditions or rights under, amend any terms of, or alter, suspend, discontinue, cancel or terminate this Agreement, but no such waiver, amendment, alteration, suspension, discontinuance, cancellation or termination shall materially adversely affect the rights of Participant hereunder without the consent of Participant.

9. Section 409A.

It is not intended that the Option granted hereunder be subject to Section 409A of the Code.

10. Electronic Delivery and Acceptance.

This Agreement may be executed electronically and in counterparts. The Company may, in its sole discretion, decide to deliver any documents related to the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. Participant agrees that the foregoing online or electronic participation in the Plan shall have the same force and effect as documentation executed in hardcopy written form.

11. Acceptance and Agreement by Participant; Forfeiture upon Failure to Accept.

Participant's rights under the Option will lapse ninety (90) days from the Date of Grant, and the Option will be forfeited on such date if Participant has not accepted this Agreement by such date. For the avoidance of doubt, Participant's failure to accept this Agreement will not affect Participant's continuing obligations under any other agreement between the Company and Participant.

12. No Advice Regarding Grant.

Notwithstanding anything herein to the contrary, Participant acknowledges and agrees that the Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan or Participant's acquisition or sale of the underlying Shares. Participant is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

13. Imposition of Other Requirements.

The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the Option and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

.4. Language.

If Participant has received this Agreement, or any other document related to the Option and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

15. Country-Specific Terms and Conditions.

The following provisions shall only apply to Participant if Participant resides outside the United States: Notwithstanding any provisions of this Agreement to the contrary, the Option grant shall be subject to any special terms and conditions applicable for Participant's country of residence (and country of employment, if different) as respectively set forth in an appendix to this Agreement (an "**Appendix**"). Further, if Participant transfers his or her residence and/or employment to another country reflected in an Appendix to this Agreement at the time of transfer, the special terms and conditions for such country will apply to Participant to the extent the Company determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local law, rules and regulations or to facilitate the operation and administration of the Option and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate Participant's transfer). In all circumstances, any applicable section(s) of the Appendix shall constitute part of this Agreement.

16. Waiver.

Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement will not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by Participant or any other participant in the Plan.

17. Foreign Asset/Account and Tax Reporting.

There may be certain foreign tax, asset and/or account reporting requirements which may affect Participant's ability to acquire or hold Shares or cash received from participating in the Plan in a brokerage or bank account outside Participant's country. Participant may be required to report such accounts, assets or related transactions to the tax or other authorities in Participant's country. Participant also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to Participant's country within a certain time after receipt. Participant acknowledges that it is Participant's responsibility to comply with such regulations, and is advised to speak to a personal advisor on this matter.

18. Insider Trading/Market Abuse Laws.

Participant may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, including, but not limited to, Participant's country, which may affect Participant's ability to accept, acquire, sell, or otherwise dispose of Shares, rights to Shares (*e.g.*, the Option) or rights linked to the value of Shares under the Plan during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws in the applicable jurisdictions). Insider trading laws and regulations may prohibit the cancellation or amendment of orders Participant placed before Participant possessed inside information. Furthermore, Participant could be prohibited from (a) disclosing the inside information to any third party, and (b) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Neither the Company nor any Affiliate or Subsidiary will be responsible for such restrictions or liable for the failure on Participant's part to know and abide by such restrictions. Participant should consult with his or her own personal legal advisers to ensure compliance with local laws.

[*Signatures follow*]

10x GENOMICS, INC.

_____

By: Serge Saxonov
Title: Chief Executive Officer

PARTICIPANT

Acknowledged and Agreed
as of the date first written above:

_____

[*Signature page to Stock Option Agreement*]

APPENDIX TO

10x GENOMICS, INC.
2019 OMNIBUS INCENTIVE PLAN
STOCK OPTION AGREEMENT

Terms and Conditions

This Appendix includes additional terms and conditions that govern the Options granted to Participant under the Plan if he or she resides in one of the countries listed below. Certain capitalized terms used but not defined in this Appendix have the meanings set forth in the Plan and/or the main body of the Agreement.

Notifications

This Appendix also includes information regarding exchange controls and certain other issues of which Participant should be aware with respect to his or her participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of January 2024. Such laws are often complex and change frequently. As a result, the Company strongly recommends that Participant not rely on the information in this Appendix as the only source of information relating to the consequences of Participant's participation in the Plan because the information may be out of date at the time Participant vests in the Shares or sells the Shares acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to Participant's particular situation and the Company is not in a position to assure Participant of any particular result. Accordingly, Participant is advised to seek appropriate professional advice as to how the relevant laws of Participant's country may apply to his or her situation.

Finally, if Participant is a citizen or resident of a country other than the one in which Participant is currently working or transfers to another country after the grant of the Options, or is considered a resident of another country for local law purposes, the information contained herein may not be applicable to Participant in the same manner. In addition, the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall apply to Participant under these circumstances.

AUSTRALIA

Terms and Conditions

Tax Deferred Treatment.

The offer is intended to receive tax-deferred treatment under Subdivision 83A-C of the Income Tax Assessment Act 1997(Cth). The conditions to receive such treatment are contained in this Appendix.

Ordinary shares. Stock awards issued to Participant under this Appendix must relate to ordinary shares. For the purpose of this Appendix, ordinary shares shall be defined in accordance with their ordinary meaning under Australian law.

Predominant business of the Company. Stock swards must not be issued to Participant where those stock awards relate to options or shares in a company that has a predominant business of the acquisition, sale or holding of shares, securities or other investments.

Real risk of forfeiture. Stock awards that are options issued to Participant under this Appendix must have a real risk of forfeiture, the vesting conditions by which this risk is achieved is to be determined by the Board in its absolute discretion.

10% limit on shareholding and voting power. Immediately after Participant acquires the stock awards, Participant must not: (i) hold a beneficial interest in more than 10% of the shares in the Company; or (ii) be in a position to cast, or control the casting of, more than 10% of the maximum number of votes that might be cast at a general meeting of the Company. For the purposes of these thresholds, stock awards that are options are treated as if they have been exercised and converted into Shares.

Notifications

Securities Law Information.

The offering and resale of Shares acquired under the Plan to a person or entity resident in Australia may be subject to disclosure requirements under Australian law. Participant should obtain legal advice regarding any applicable disclosure requirements prior to making any such offer.

Exchange Control Information.

Australian residents must report inbound and/or outbound cash transactions exceeding A$10,000 and inbound and/or outbound international fund transfers of any value if the transfers do not involve an Australian bank.

AUSTRIA

Notifications

Securities Law Information.

The grant of Options under the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Austria.

Consumer Protection Information.

Participant may be entitled to revoke this Agreement on the basis of the Austrian Consumer Protection Act (the "***Act***") under the conditions listed below, if the Act is considered to be applicable to this Agreement and the Plan:

(i) The revocation must be made within one week after the acceptance of this Agreement.

(ii) The revocation must be in written form to be valid. It is sufficient if Participant returns this Agreement to the Company or the Company's representative with language that can be understood as Participant's refusal to conclude or honor this Agreement, provided the revocation is sent within the period discussed above.

Exchange Control Information.

If Participant holds securities (including Shares acquired under the Plan) or cash (including proceeds from the sale of Shares and any cash dividends) outside of Austria (even if Participant holds them outside of Austria at a branch of an Austrian bank), Participant may be required to report certain information to the Austrian National Bank if certain thresholds are exceeded. Participant is encouraged to consult his/her personal legal or tax advisor to understand how these rules apply to Participant's particular situation.

BELGIUM

Notifications

Securities Law Information.

The grant of the Options under the Plan is exempt from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Belgium.

Foreign Asset/Account Reporting Information.

Belgian residents are required to report any securities (*i.e.*, Shares acquired under the Plan) or bank accounts opened and maintained outside Belgium on their annual tax returns. Belgian residents are also required to complete a separate report providing the National Bank of Belgium with details regarding any such account. This report, as well as additional information on how to complete it, can be found on the website of the National Bank of Belgium, www.nbb.be, under the *Kredietcentrales / Centrales des crédits* caption.

Terms and Conditions

Taxation and Terms of Acceptance.

Participant agrees and acknowledges that the Company will only accept a countersigned agreement after the 60th day following Participant's receipt of this Agreement.

By formally accepting in writing this Agreement through signature and by returning it to the Company within 60 days from receipt of this Agreement and the Plan, Participant would normally become subject to income tax on a lump-sum benefit in kind on the 60th day following receipt of this Agreement (being the "grant date" for Belgian tax purposes). In that case, no taxation should be triggered upon vesting or exercise. However, if written acceptance and return of this Agreement would take place after the 60th day following receipt of this Agreement, as required by the Company, taxation will normally be delayed to the date of exercise of the Option. In that case, grant date or vesting should not trigger taxation.

CANADA

Terms and Conditions

Termination of Service.

Notwithstanding any provision of the Plan or this Agreement, the following provision shall apply to Participants engaged in Canada on the date on which notification of termination (for any reason, with or without cause) or resignation from service is delivered:

For purposes of this Agreement, Participant's termination date shall mean the later of (i) the date upon which Participant ceases to perform services for the Company following the provision of such notification of termination or resignation from service and (ii) the end of any minimum period of notice of termination (if any) required by applicable employment or labor standards legislation. For clarity, unless otherwise expressly provided in this Agreement or determined by the Company, no Option will vest under the Plan following Participant's termination date, and the termination date will not be extended by any period of deemed notice of termination under contract or at common or civil law in respect of which Participant may receive pay in lieu of notice of termination or damages in lieu of such notice. Participant will not be entitled to any further payments in respect of the value of any Option that has not yet vested as of Participant's termination date and no Option or any pro-rated portion thereof shall be included in any entitlement to any pay in lieu of notice of termination or damages in lieu of such notice.

The following provision applies if Participant is a resident of Quebec:

Language Consent.

The parties acknowledge that it is their express wish that this Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

*Les parties reconnaissent avoir expressement souhaité que la convention ["**Agreement**"], ainsi que tous les documents, avis et procédures judiciaries, éxecutés, donnés ou intentés en vertu de, ou lié, directement ou indirectement à la présente convention, soient rédigés en langue anglaise.*

Authorization of Release and Transfer Necessary Personal Information.

This provision supplements Section 19 of the Agreement:

Participant hereby authorizes the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. Participant further authorizes the Company, any Subsidiary and the Award Administrator of the Plan to disclose and discuss the Plan with his or her advisors. Participant further authorizes the Company, any Subsidiary to record such information and to keep such information in the employee file.

Notifications

Securities Law Information.

Participant is permitted to sell Shares acquired through the Plan through the designated broker appointed by the Company, provided the resale of Shares acquired under the Plan takes place outside of Canada through the facilities of a stock exchange on which the Shares are listed.

Foreign Asset/Account Reporting Information.

Canadian residents are required to report any foreign property (e.g., Shares acquired under the Plan and possibly unvested Options) on form T1135 (Foreign Income Verification Statement) if the total cost of their foreign property exceeds C$100,000 at any time in the year. It is Participant's responsibility to comply with these reporting obligations, and Participant should consult his or her own personal tax advisor in this regard.

Share Settlement of Options.

Notwithstanding anything to the contrary in the Plan or this Agreement, Options granted to Canadian Participants shall only be settled in Shares and shall not be settled in cash.

CHINA

Terms and Conditions

State Administration of Foreign Exchange (SAFE) Compliance.

The grant of the Option, Participant's ability to exercise the Option and sale of the Shares shall all be contingent upon the Company or its Subsidiaries obtaining approval from SAFE for the related foreign exchange transaction and the establishment of a SAFE-approved bank account. The receipt of funds by Participant from the sale of the Shares and the conversion of those funds to the local currency must be approved by SAFE. In order to comply with the SAFE regulations, the proceeds from the sale of the Shares must be repatriated into China through a SAFE-approved bank account set up and monitored by the Company. Participant may contact his or her local HR office for more details about the SAFE-approved bank account.

Participant hereby acknowledges and agrees that such proceeds (net of applicable China tax) will be transferred to the SAFE-approved account prior to being delivered to China Participant's personal account and that neither the China Affiliate or Subsidiary, the Company nor any Affiliate or Subsidiary shall be liable for any delays or foreign exchange rate fluctuation that may happen in this process.

Foreign Asset/Account Reporting Information.

Participant may be required to report to SAFE all details of his or her foreign financial assets and liabilities, as well as details of any economic transactions conducted with non-PRC residents. Under these rules, Participant may be subject to reporting obligations for the Options, Shares acquired under the Plan, the receipt of any dividends and the sale of Shares.

Limited Method of Exercise and Same Day Sale of Shares.

In accordance with Section 6 of the Agreement, the method of payment of the aggregate exercise price of the Option shall, unless otherwise determined by the Award Administrator at its discretion, be limited to the consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan. Consequently, no funds will flow out of China.

Further, any Shares issued in settlement of the exercise of the Option shall be sold immediately on the same day of the exercise and no Participant will hold Shares in connection with the Option.

Post-Termination Exercise of Option and Same Day Sale of Shares.

In accordance with Section 8 of the Agreement, if Participant's employment with, or service to, the Company Group terminates for any reason other than Cause, the Participant may exercise any vested but unexercised Option within ninety (90) days from the termination of the Participant's employment prior to the Expiration Date using a cashless exercise method, and all Shares issued in settlement of exercise of Options shall be sold immediately on the same day of the exercise and no Participant will hold Shares in connection with the Option.

DENMARK

Terms and Conditions

This provision substitutes Section 7 of the Agreement:

Tax Withholding.

The Company or any Subsidiary (as determined by the Award Administrator shall have the power and right to deduct, withhold or collect any tax, social security contribution, payroll tax or other amount other tax-related withholding obligations required by law or regulation to be withheld with respect to any taxable event arising with respect to the granting or exercise of the Options (collectively, the "**Withholding Amount**"). This Withholding Amount may be: (a) withheld from other amounts due to Participant; (b) withheld from the value of any vested Options being settled; or (iii) collected directly from Participant. The Withholding Amount may relate to amounts due in more than one jurisdiction and in all cases shall be as determined by the Company or the applicable Subsidiary in its discretion.

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under EU Prospectus Regulation as implemented in Denmark.

Stock Option Act.

By accepting this Option, Participant acknowledges that he or she received an Employer Statement, translated into Danish, which is being provided to comply with the Danish Stock Option Act (the "Act"), to the extent that the Act applies to the Option. If applicable, to the extent more favorable and required to comply with the Act, the terms set forth in the Employer Statement will apply to Participant's participation in the Plan.

Please be aware that as set forth in Section 1 of the Act, the Act only applies to "employees" as that term is defined in Section 2 of the Act. If Participant is a member of the registered management of an Affiliate or Subsidiary or affiliate in Denmark or otherwise does not satisfy the definition of employee, Participant will not be subject to the Act and the Employer Statement will not apply to him or her.

Further, the Act has been revised with effect from 1 January 2019. As a result of the amendments, the termination provisions under the Plan and this Agreement will apply for any Awards granted after 1 January 2019. The relevant termination provisions are detailed in the Plan, this Agreement and the Employer Statement.

Notifications

Exchange Control Information.

If Participant establishes an account holding cash outside Denmark, Participant must report the account to the Danish Tax Administration. The form which should be used in this respect can be obtained from a local bank. (Please note that these obligations are separate from and in addition to the obligations described below.)

Foreign Asset/Account Reporting Information.

If Participant establishes an account holding Shares or cash outside of Denmark, Participant shall report the account to the Danish Tax Administration. The form which shall be used to make the report can be obtained from a local bank. (Please note that these obligations are separate from and in addition to the obligations described above.)

FINLAND

Notifications

Securities Law Information.

The grant of Options under the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Finland.

FRANCE

Terms and Conditions

Language Consent.

By accepting the Option, Participant confirms having read and understood the Plan and the Agreement which were provided in the English language. Participant accepts the terms of those documents accordingly.

Consentement Relatif à la Langue Utilisée.

En acceptant l'attribution, le Optionee confirme avoir lu et compris le Plan et le Contrat, qui ont été communiqués en langue anglaise. Le Optionee accepte les termes de ces documents en connaissance de cause.

Notifications

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in France.

Awards Not Tax-Qualified.

The Option is **not** intended to be a tax-qualified or tax-preferred award, including without limitation, under Sections L. 225-197-1 to L. 225-197-6 of the French Commercial Code. Participant is encouraged to consult with a personal tax advisor to understand the tax and social insurance implications of the Option.

Foreign Asset / Account Reporting Information.

Participant may hold Shares acquired upon exercise of the Option, any proceeds resulting from the sale of Shares or any dividends paid on such Shares outside of France, provided Participant declares all foreign bank and brokerage accounts (including any accounts that were opened or closed during the tax year) on his or her annual income tax return. Failure to complete this reporting may trigger penalties.

GERMANY

Notifications

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Germany.

Exchange Control Information.

If Participant remits proceeds in excess of the legally designated amount out of or into Germany, such cross-border payment shall be reported monthly to the State Central Bank. In the event that Participant makes or receives payment in excess of this amount, Participant is responsible for obtaining the appropriate form from a German bank and complying with applicable reporting requirements. In addition, Participant may be required to report the acquisition of securities (e.g., Shares) to the Bundesbank via email or telephone if the value of the securities exceeds a certain threshold. *Participant is responsible for complying with applicable reporting requirements and should consult with a personal legal advisor to ensure compliance.*

Terms and Conditions

Prohibition on Insider Dealing.

Participant should be aware that the insider dealing rules of the Regulation (EU) No 596/2014 of the European Parliament and Council (Market Abuse Regulation) apply in Germany, which may affect transactions under the Plan such as the subscription or participation, the suspension, the cancellation or an amending order, the acquisition or sale of Shares acquired under the Plan, if Participant has inside information regarding the Company or any of its Subsidiaries. Participant is advised to determine carefully whether he or she has inside information in respect of the Company and whether and to what extent insider dealing rules can apply to him or her. In case of uncertainty, the Company recommends that Participant consult with a legal advisor.

Limitation of Liability.

Participant is responsible for compliance with any laws to be observed by Participant in person in conjunction with participation in the Plan. The Company cannot be held liable if Participant violates German law or any other applicable rules to be complied with by Participant in conjunction with participation in the Plan including, but not limited to, insider dealing restrictions under the Market Abuse Regulation.

HONG KONG

Notifications

Securities Law Notice.

WARNING: The Options and the Shares covered by the Options do not constitute a public offering of securities under Hong Kong law and are available only to employees of the Company or the Subsidiary participating in the Plan. Participant should be aware that the contents of this Agreement have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong. Nor have the documents been reviewed by any regulatory authority in Hong Kong. The Options are intended only for Participant's personal use and may not be distributed to any other person. Participant is advised to exercise caution in relation to the offer. If Participant is in any doubt about any of the contents of this Agreement, including this provision, or the Plan, Participant should obtain independent professional advice.

Occupational Retirement Schemes Ordinance Alert.

The Company specifically intends that neither the Options nor the Plan will be considered or deemed an occupational retirement scheme for purposes of the Occupational Retirement Schemes Ordinance ("**ORSO**").

INDIA

Terms and Conditions

Cashless Exercise.

Participant acknowledges and agrees that the considerations for the exercise of the Option shall be limited to cashless forms.

Notifications

Exchange Control Information.

Participant understands and agrees that he or she must repatriate any proceeds from the sale of Shares acquired under the Plan to India and convert the proceeds into local currency within 90 days of receipt. Participant will receive a foreign inward remittance certificate ("**FIRC**") from the bank where he or she deposits the foreign currency. Participant should maintain the FIRC as evidence of the repatriation of funds in the event the Reserve Bank of India or his or her employer requests proof of repatriation.

Foreign Asset/Account Reporting Information.

Indian residents are required to declare the following items in their annual tax return: (i) any foreign assets held by them (including Shares acquired under the Plan), and (ii) any foreign bank accounts for which they have signing authority. It is Participant's responsibility to comply with applicable foreign asset tax laws in India and Participant should consult with his or her personal tax advisor to ensure that Participant is properly reporting his or her foreign assets and bank accounts. Participant's local employer will issue a Form 16 to Participant and report perquisites in Form 12BA after the end of the Financial Year.

ITALY

Terms and Conditions

Form of Option Price Payment Limited.

In accordance with Section 6 of the Agreement, unless otherwise determined by the Company and informed to Participant, payment of the option prices shall be limited to cashless exercise in a form and manner authorized by the Company. For clarity, Participant shall not be entitled to pay the option price in cash and, accordingly, no funds will be transferred out of Italy in connection with the exercise of the Option.

Plan Document Acknowledgment.

In accepting the grant of the Option, Participant acknowledges that he or she has received a copy of the Plan and the Agreement and has reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Appendix.

Notifications

Foreign Asset/Account Reporting Information.

If Participant is an Italian resident who, at any time during the fiscal year, holds foreign financial assets (including cash and Shares) which may generate taxable income in Italy, Participant is required to report these assets on his or her annual tax return for the year during which the assets are held, or on a special form if no tax return is due. These reporting obligations also apply if Participant is the beneficial owner of foreign financial assets under Italian money laundering provisions.

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Italy.

Foreign Asset Tax Information.

The value of financial assets held outside of Italy by Italian residents is subject to a foreign asset tax, subject to an exemption. The taxable amount will be the fair market value of the financial assets (*e.g.*, Shares) assessed at the end of the calendar year.

JAPAN

Terms and Conditions

Tax Consultation.

Participant understands that the Options are not intended to be tax-qualified or tax-preferred under current tax laws of Japan and Participant may need to submit a certain form to the tax office and may suffer adverse tax consequences as a result of your acquisition, holding, or disposition of the Shares. Participant represents that he or she will consult with any tax advisors that he or she deems appropriate in connection with the acquisition, holding, or disposition of the Shares and that Participant is not relying on the Company or any Subsidiary for any tax advice.

Notifications

Foreign Assets Reporting.

Japanese residents holding assets outside of Japan (e.g., Shares acquired under the Plan) with a value exceeding ¥50,000,000 (as of December 31 each year) are required to comply with annual tax reporting obligations with respect to such assets. Participant is encouraged to consult with a personal tax advisor in Japan to ensure that Participant is properly complying with these obligations.

Foreign Exchange.

Under certain circumstances, Participant may be required to file a report with the Ministry of Finance if Participant intends to acquire Shares whose value exceeds ¥100,000,000. The reporting, if required, is due within 20 days from the acquisition of the Shares (however, if Participant acquires such Shares through a securities company in Japan, such requirement will not be imposed). The reporting requirements vary depending on whether the relevant payment is made through a bank in Japan.

Participant is advised to seek appropriate professional advice as to how the exchange control regulations, tax, or other laws in Participant's country apply to his or her specific situation. Laws and regulations change frequently and occasionally on a retroactive basis.

Securities Law Information.

The Option and the Shares have not been registered under the Financial Instruments and Exchange Act of Japan (Law No. 25 of 1948), as amended (the "FIEA"). The Option and the Shares issuable upon the exercise of Option may not be offered or sold in Japan or to, or for the benefit of, any resident of Japan or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan. As used herein, the term "resident of Japan" means any natural person having his place of domicile or residence in Japan, or any corporation or other entity organized under the laws of Japan or having its main office in Japan.

LUXEMBOURG

Notifications

Exchange Control Information.

Participant is required to report any inward remittances of funds to the *Banque Central de Luxembourg* and/or the *Service Central de La Statistique et des Études Économiques* within 15 working days following the month during which the transaction occurred. If a Luxembourg financial institution is involved in the transaction, it generally will fulfill the reporting obligation on Participant's behalf. However, as long as the Company is not a Luxembourg-resident financial company, the statistical reporting obligation shall not apply.

Securities Law Information.

The grant of Option under the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Luxembourg.

NETHERLANDS

Notifications

Prohibition Against Insider Trading.

Participant should be aware of the Dutch insider trading rules, which may affect the sale of Shares acquired under the Plan. In particular, Participant may be prohibited from effecting certain share transactions if Participant has insider information regarding the Company. Below is a discussion of the applicable restrictions. Participant is advised to read the discussion carefully to determine whether the insider rules could apply to him or her. If it is uncertain whether the insider rules apply, the Company recommends that Participant consults with a legal advisor. The Company cannot be held liable if Participant violates the Dutch insider trading rules. Participant is responsible for ensuring his or her compliance with these rules.

Dutch securities laws prohibit insider trading. As of 3 July 2016, the European Market Abuse Regulation ("**MAR**"), is applicable in the Netherlands. For further information, Participant is referred to the website of the Authority for the Financial Markets ("**AFM**"): https://www.afm.nl/en/sector/effectenuitgevende-ondernemingen.

Given the broad scope of the definition of inside information, certain employees of the Company working at its Dutch affiliate may have inside information and thus are prohibited from making a transaction in securities in the Netherlands at a time when they have such inside information. By entering into this Agreement and participating in the Plan, Participant acknowledges having read and understood the notification above and acknowledges that it is Participant's responsibility to comply with the Dutch insider trading rules, as discussed herein.

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in the Netherlands.

POLAND

Notifications

Foreign Exchange Notice.

Participant understands and acknowledges that Participant must notify the National Bank of Poland of the value of all foreign share ownership, including but not limited to Shares acquired under the Plan, if such ownership exceeds a designated threshold. Participant is strongly encouraged to consult with an appropriate legal advisor regarding these requirements.

Securities Disclosure.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Poland.

Employment.

In order to meet the requirements of the Plan Participant authorize the Polish Subsidiary (his or her employer):

a) to make relevant deductions from his or her remuneration,

b) to notify the Company about events relevant to his or her right to continue to participate in the Plan.

RUSSIA

Terms and Conditions

U.S. Transactions.

Participant understands that the acceptance of the Options results in an agreement between Participant and the Company that is completed in the United States and that this Agreement is governed by the laws of the State of Delaware. Upon vesting and settlement of the Options, any Shares to be issued to Participant shall be held or delivered to Participant in the United States and in no event will such Shares be delivered to Participant in Russia. Participant acknowledges that Participant is not permitted to sell or otherwise transfer Shares directly to other individuals in Russia, nor is Participant permitted to bring any certificates representing the Shares into Russia (if such certificates are actually issued).

Sale Restrictions.

Depending on the development of local regulatory requirements, the Company reserves the right to require the immediate sale of any Shares to be issued to Participant upon exercise of the Options. By accepting the Options, Participant acknowledges that Participant understands and agrees that the Company is authorized to, and may, in its sole discretion, instruct its designated broker to assist with the mandatory sale of Shares issued to Participant upon exercise of the Options (on Participant's behalf pursuant to this authorization) and Participant expressly authorizes the Company's designated broker to complete the sale of such Shares. Participant acknowledges that the Company's designated broker is under no obligation to arrange for the sale of the Shares at any particular price. Upon the sale of the Shares, Participant will receive the cash proceeds, less any Tax Obligations and brokerage fees or commissions.

Cashless Exercise.

Participant acknowledges and agrees that the considerations for the exercise of the Option shall be limited to cashless forms.

Notifications

Securities Law Notification.

This Agreement, the Plan, and all other materials Participant may receive regarding participation in the Plan do not constitute advertising or an offering of securities in Russia. Any issuance of Shares under the Plan has not and will not be registered in Russia and hence the Shares described in any Plan-related documents may not be offered or placed in public circulation in Russia.

Exchange Control Information.

Participant is responsible for complying with any and all Russian foreign exchange requirements in connection with the Options, and Shares acquired and funds remitted out of or into Russia in connection with the Plan. This may include, in certain circumstances, reporting and repatriation requirements. Participant should contact his or her personal advisor regarding any such requirements resulting from participation in the Plan.

Foreign Asset/Account Reporting Information.

Russian residents will be required to notify the Russian tax authorities within one month of opening or closing a foreign bank account or changing any account details. Russian residents are also required to file reports of the transactions in their foreign bank accounts with the Russian tax authorities on an annual basis. In addition, Russian residents are required to report any cash transactions with respect to foreign bank accounts to the Russian tax authorities. The tax authorities can require any supporting

documents related to the transactions in a Russian resident's foreign bank account. *Participant should consult his or her personal tax advisor to ensure compliance with applicable requirements*.

Foreign Asset/Account Restrictions.

Certain individuals who hold public office in Russia, as well as their spouses and dependent children, are prohibited from opening or maintaining foreign brokerage or bank accounts and holding any securities, whether acquired directly or indirectly, in a foreign company (including Shares acquired under the Plan).

SINGAPORE

Notifications

Securities Law Information.

The grant of the Option is being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the Singapore Securities and Futures Act (Chapter 289, 2006 Ed.) ("**SFA**"). The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore. Participant should note that the Options are subject to section 257 of the SFA and Participant will not be able to make any subsequent sale in Singapore of the Shares acquired through the exercise of the Options or any offer of such sale in Singapore unless such sale or offer is made pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA.

SOUTH KOREA

Terms and Conditions

Foreign Assets Reporting Information.

Participant understands and agrees that Korean residents shall declare all foreign financial accounts (e.g., non-Korean bank accounts, brokerage accounts, etc.) to the Korean tax authority and file a report with respect to such accounts if the value of such accounts exceeds certain thresholds. Participant is encouraged to consult with his or her personal tax advisor to determine how to value his or her foreign accounts for purposes of this reporting requirement and whether he is she is required to file a report with respect to such accounts.

Restrictions on Sale of Shares.

The Korean financial regulator, the Financial Supervisory Service (***FSS***), issued a public notice mandating that after June 19, 2023, Korean citizens and residents are no longer allowed to: (i) sell shares of foreign-listed companies through an overseas broker; or (ii) deposit funds, resulting from the sale of such shares, into an overseas financial institution.

To comply with the new FSS requirements, if Participant is a Korean citizen or resident and wishes to sell the Shares obtained from his or her Option, Participant shall open an account with a Korean broker, sell such Shares through the Korean broker, and deposit the resulting proceeds in a Korean financial institution or bank. These rules are applicable to any Shares of the Company that Participant has received from Participant's Option. Korean banks may refuse funds remitted from foreign brokers. Participant is advised to transfer his or her Shares to a Korean broker prior to trading.

As a reminder, there have not been any changes to Participant's responsibility to satisfy any tax obligations arising from the exercise of Option or the subsequent sale of Shares.

The relevant rules may be subject to change, including without advance prior notice, and with retroactive effect. Participant is strongly encouraged to consult his or her own legal or tax advisors. Neither the Company nor Participant's employer is responsible for any related non-compliance.

SPAIN

Terms and Conditions

Service Conditions.

This provision supplements Section 12 of this Agreement:

In accepting the Options, Participant consents to participate in the Plan and acknowledges that he or she has received a copy of the Plan.

Participant understands that the Company has unilaterally, gratuitously, and discretionally decided to grant Options under the Plan to individuals who may be employees of the Company or any Subsidiary throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any Subsidiary, over and above the specific terms of the Plan. Consequently, Participant understands that the Options are granted on the assumption and condition that the Options and any Shares acquired upon exercise of the Options are not part of any employment contract (either with the Company or any Subsidiary) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. In addition, Participant understands that the Options would not be granted to Participant but for the assumptions and conditions referred to herein; thus, Participant acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the grant of the Options shall be null and void.

The Options are conditional rights to Shares and will be forfeited in the case of Participant's termination of employment. This will be the case even if (1) Participant is considered to be unfairly dismissed without cause (*despido improcedente*); (2) Participant is dismissed for disciplinary or objective reasons or due to a collective dismissal, whether adjudged or recognized to be with or without cause; (3) Participant terminates employment due to a change of work location, duties or any other material modification of the terms of employment; (4) Participant terminates employment due to unilateral breach of contract of the Company or any of its Subsidiaries; or (5) Participant's employment terminates for any other reason whatsoever (including, but not limited to, mutual agreement, resignation, retirement, death, permanent disability, causes included in the employment contract, expiry of the temporary contract, force majeure and under Article 10.3 of the Royal Decree Law 1382/1985). Consequently, upon termination of Participant's employment for any of the reasons set forth above, Participant will automatically lose any rights to the unvested Options granted to him or her as of the date of Participant's termination of employment, as described in the Plan and this Agreement.

Notifications

Securities Law Notice.

The grant of Option under the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Spain.

The Option does not qualify under Spanish Law as securities. No "offer to the public," as defined under Spanish Law, has taken place or will take place in the Spanish territory. Neither the Plan nor this Agreement have been registered with the *Comisión Nacronal del Mercado de Valores* and do not constitute a public offering prospectus.

Foreign Asset/Account Reporting Information. To the extent that Participant holds Shares and/or has bank accounts outside Spain with a value in excess of a certain legally designated amount (for each type of asset) as of December 31 each year, Participant will be required to report information on such assets through tax form 720. After such Shares and/or accounts are initially reported, the reporting obligation will apply for subsequent years only if the value of any previously-reported Shares or accounts increases by more than a certain legally designated amount. Participant shall consult his or her personal advisor in this regard. Further, Participant is required to declare electronically to the Bank of Spain any securities accounts (including brokerage accounts held abroad), as well as the Shares held in such accounts, if the value of the transactions during the prior tax year or the balances in such accounts as of December 31 of

the prior tax year exceed a certain legally designated amount. The thresholds for foreign asset/account reporting are subject to change. Therefore, Participant shall consult his or her personal advisor in this regard.

Foreign Currency Payments.

When receiving foreign currency payments exceeding €50,000 derived from the ownership of Shares (i.e., dividends or proceeds from the sale of the Shares), Participant must inform the financial institution receiving the payment of the basis upon which such payment is made. Participant will need to provide the following information: (i) Participant's name, address, and fiscal identification number; (ii) the name and corporate domicile of the Company; (iii) the amount of the payment and the currency used; (iv) the country of origin; (v) the reasons for the payment; and (vi) further information that may be required.

SWEDEN

Notifications

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Sweden.

Terms and Conditions

Exchange Control.

Participant understands and agrees that foreign and local banks or financial institutions (including brokers) engaged in cross-border transactions generally may be required to report any payments to or from a foreign country exceeding a certain amount to The National Tax Board, which receives the information on behalf of the Swedish Central Bank (Sw.Riksbanken). This requirement may apply even if Participant has a brokerage account with a foreign broker.

SWITZERLAND

Notifications

Securities Law Notification.

The grant of the Option is considered a private offering in Switzerland and is, therefore, not subject to registration in Switzerland. Neither this Agreement nor any other materials relating to the Option constitutes a prospectus as such term is understood pursuant to article 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), and neither this Agreement nor any other materials relating to the Option may be publicly distributed or otherwise made publicly available in Switzerland. Finally, neither this Agreement nor any other offering or marketing materials relating to the Option have been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority (in particular, the Swiss Financial Market Supervisory Authority (FINMA)).

TAIWAN

Terms and Conditions

Data Privacy Acknowledgement.

Participant hereby acknowledges that Participant has read and understood the terms regarding the collection, processing, and transfer of Data contained in the Data Privacy section of this Agreement and, by participating in the Plan, Participant agrees to such terms. In this regard, upon request of the Company or any Subsidiary retaining Participant's service, Participant agrees to provide an executed data privacy consent form to the Company or any Subsidiary retaining Participant's service (or any other agreements or consents that may be required by the Company or any Subsidiary retaining Participant's service) that the Company or any Subsidiary retaining Participant's service may deem necessary to obtain under the data privacy laws in Participant's country, either now or in the future. Participant understands that Participant will not be able to participate in the Plan if Participant fails to execute any such consent or agreement.

Notifications

Securities Disclaimer.

Neither the Plan nor the Option are registered in Taiwan with the Securities and Futures Bureau or subject to the securities laws of Taiwan.

Exchange Control Information.

If the transaction amount exceeds a legally designated amount in a single transaction, Taiwanese residents must submit a Foreign Exchange Transaction Form and provide supporting documentation to the satisfaction of the remitting bank. In addition, if the transaction amount exceeds a legally designated amount, Participant may be required to provide additional supporting documentation to the satisfaction of the bank involved in the transaction. Participant should consult with his or her personal advisor to ensure compliance with applicable exchange control laws in Taiwan.

UNITED ARAB EMIRATES

Notifications

Securities Law Information.

Participation in the Plan is being offered only to selected Participants and is in the nature of providing equity incentives to Participants in the United Arab Emirates. The Plan and this Agreement are intended for distribution only to such Participants and shall not be delivered to, or relied on by, any other person. Prospective acquirers of the securities offered, including Participant, shall conduct their own due diligence on the securities.

If Participant does not understand the contents of the Plan and this Agreement, Participant shall consult an authorized financial adviser. The Emirates Securities and Commodities Authority and the Dubai Financial Services Authority have no responsibility for reviewing or verifying any documents in connection with the Plan. Neither the Ministry of Economy nor the Dubai Department of Economic Development has approved the Plan or this Agreement nor taken steps to verify the information set out therein and has no responsibility for such documents.

UNITED KINGDOM

Terms and Conditions

Responsibility for Taxes.

The following provisions supplement Section 7 of the Agreement:

Without limitation to Section 7 of the Agreement, Participant agrees that Participant is liable for all Tax Obligations and hereby covenants to pay all such Tax Obligations as and when requested by the Company and/or the employer by HM Revenue and Customs ("**HMRC**") (or any other relevant authority). Participant also agrees to indemnify and keep indemnified the Company and the employer against any taxes that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax or relevant authority) on Participant's behalf.

Notwithstanding the foregoing, if Participant is a director or an executive officer (as within the meaning of Section 13(k) of the U.S. Securities Exchange Act of 1934, as amended), Participant will not be eligible for such a loan to cover the uncollected income tax. In the event that Participant is a director or executive officer and the income tax is not collected from or paid by Participant within ninety (90) days of the end of the tax year in which the income tax liability arises, or such other period specified in Section 222(1)(c) of the U.K. Income Tax (Earnings and Pensions) Act 2003, Participant understands that the amount of any uncollected income tax may constitute a benefit to Participant on which additional income tax and national insurance contributions ("**NICs**") may be payable. Participant will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for reimbursing the Company or the employer (as appropriate) for the value of any employee NICs due on this additional benefit, which the Company and/or the employer may recover from Participant by any of the means referred to in Section 7 of the Agreement.

Notifications

Securities Disclosure.

Neither this Agreement nor Appendix is an approved prospectus for the purposes of section 85(1) of the Financial Services and Markets Act 2000 ("**FSMA**") and no offer of transferable securities to the public (for the purposes of section 102B of FSMA) is being made in connection with the Plan. The Plan and the Option are exclusively available in the UK to bona fide employees and former employees and any other UK Subsidiary.

Non-Qualification.

The Option is not intended to be tax-qualified or tax-preferred for purposes of tax rules in the United Kingdom.

Tax Consultation.

Participant understands that he or she may suffer adverse tax consequences as a result of Participant's acquisition or disposition of the Shares. Participant represents that he or she will consult with any tax advisors Participant deems appropriate in connection with the acquisition or disposition of the Shares and that Participant is not relying on the Company or any Subsidiary for any tax advice.

Prohibition Against Insider Dealing.

Participant should be aware of:

1. the insider dealing rules of the Regulation (EU) No 596/2014 of the European Parliament and Council (Market Abuse Regulation) which apply in the UK; and

2. the UK's insider dealing rules under the Criminal Justice Act 1993, each of which may affect transactions under the Plan such as the acquisition or sale of Shares acquired under the Plan, if Participant has inside information regarding the Company. If Participant is uncertain whether the insider dealing rules apply, the Company recommends that Participant consult with a legal advisor. The Company cannot be held liable if Participant violates the UK's insider dealing rules. Participant is responsible for ensuring his or her compliance with these rules.

Exhibit 10.5.2

10x GENOMICS, INC.
2019 OMNIBUS INCENTIVE PLAN RESTRICTED STOCK UNIT AWARD
NOTICE

Participant has been granted Restricted Stock Units with the terms set forth in this Award Notice, and subject to the terms and conditions of the Plan and the Restricted Stock Unit Agreement to which this Award Notice is attached. Capitalized terms used and not defined in this Award Notice will have the meanings set forth in the Restricted Stock Unit Agreement and the Plan.

Participant:	%%FIRST_NAME_MIDDLE_NAME_LAST_NAME%-%
Date of Grant:	%%OPTION_DATE,'MONTH DD, YYYY'%-%
Number of Restricted Stock Units Granted:	%%TOTAL_SHARES_GRANTED,'999,999,999'%-%
Vesting Commencement Date:	%%VEST_BASE_DATE,'MONTH DD, YYYY'%-%
Vesting Schedule:	Subject to the Participant's continued employment with, or service to, the Company Group through the applicable vesting date, 1/16th of the RSU Award shall vest in quarterly installments following the Vesting Commencement Date, so as to be 100% vested on the date that is the fourth anniversary of the Vesting Commencement Date and each RSU Award shall be subject to the Company's Change in Control Severance Policy and the Company's Death and Disability Policy in effect on the Date of Grant.

Additional Terms and Acknowledgements:

If the number of Shares is not evenly divisible, then no fractional Share will vest and the installments will be as equal as possible with the smaller installment(s) vesting first. Each such right of issuance will be cumulative and will continue, unless sooner terminated as herein provided.

The following provisions shall only apply to Participant if Participant resides in the United States:

Participant understands that the terms of this award of RSUs explicitly include the following (a "**Sell to Cover**"): Upon vesting of the RSUs and issuance of the resulting Shares, the Company, on Participant's behalf, will instruct the Company's transfer agent (together with any other party the Company determines necessary to execute the Sell to Cover, the "**Agent**") to sell that number of Shares determined in accordance with Section 4 of the Restricted Stock Unit Agreement as may be necessary to satisfy any resulting withholding tax obligations on the Company, and the Agent will remit the cash proceeds of such sale to the Company. The Company shall then make a cash payment equal to the required tax withholding from the cash proceeds of such sale directly to the appropriate taxing authorities.

10x GENOMICS, INC.
2019 OMNIBUS INCENTIVE PLAN RESTRICTED STOCK UNIT AGREEMENT

(U.S. and Non-U.S. Participants)

This RESTRICTED STOCK UNIT AGREEMENT, effective as of the Date of Grant (as defined below), is made by and between 10x Genomics, Inc., a Delaware corporation (the "**Company**"), and Participant (as defined below). Capitalized terms have the meaning set forth in Section 1 hereof, or, if not otherwise defined herein, in the 10x Genomics, Inc. 2019 Omnibus Incentive Plan (as it may be amended from time to time, the "**Plan**").

1. Definitions.

The following terms have the following meanings for purposes of this Agreement:

(a) "**Agreement**" means this Restricted Stock Unit Agreement, including (unless the context otherwise requires) the Award Notice and any special terms and conditions for Participant's country included in any appendices attached hereto.

(b) "**Award Notice**" means the award notice to Participant.

(c) "**Date of Grant**" means the "Date of Grant" listed in the Award Notice.

(d) "**Officer**" means "officer" as defined under Rule 16a-1(f) of the Exchange Act.

(e) "**Participant**" means the "Participant" listed in the Award Notice.

(f) "**Restrictive Covenant Violation**" means Participant's breach of any restrictive covenant or any similar provision applicable to or agreed to by Participant.

(g) "**Shares**" means the underlying shares of Class A Common Stock received upon settlement of a Restricted Stock Unit, as adjusted in accordance with the Plan.

1. Grant of Restricted Stock Units.

(a) Effective as of the Date of Grant but subject to Section 24 hereof, the Company hereby irrevocably grants to Participant the number of Restricted Stock Units listed in the Award Notice as "Number of Restricted Stock Units Granted" (the "**RSU Award**"), which represents the right to receive Shares upon the settlement of Restricted Stock Units, subject to, and in accordance with, the terms, conditions and restrictions set forth in the Plan, the Award Notice and this Agreement. The RSU Award shall vest and become nonforfeitable in accordance with the "Vesting Schedule" set forth on the Award Notice.

(b) The RSU Award granted hereunder is subject to the Plan and the terms of the Plan are hereby incorporated into this Agreement. By accepting the RSU Award, Participant acknowledges that Participant has received and read the Plan and agrees to be bound by the terms, conditions and restrictions set forth in the Plan, this Agreement and the Company's policies, as in effect from time to time, relating to the Plan. In the event of any conflict between one or more of this Agreement, the Award Notice and the Plan, the Plan will govern this Agreement and the Award Notice, and the Agreement (to the extent not in conflict with the Plan) will govern the Award Notice.

2. Settlement of Restricted Stock Units.

(a) Any Restricted Stock Unit which has become vested in accordance with this Agreement shall be settled as soon as reasonably practicable following the vesting of such Restricted Stock Unit (and, in any event, no later than the date which is two and one-half months following the end of the calendar year in which the Restricted Stock Unit vested).

(b) Upon the settlement of a vested Restricted Stock Unit, the Company shall pay to Participant an amount equal to one (1) Share. As determined by the Committee, the Company shall pay such amount in (x) cash, (y) Shares or (z) any combination thereof. Any fractional Shares may be settled in cash, at the Committee's election.

(c) Notwithstanding anything in this Agreement to the contrary, the Company shall not have any obligation to issue or transfer any Shares as contemplated by this Agreement unless and until such issuance or transfer complies with all relevant provisions of law. As a condition to the settlement of any portion of the RSU Award evidenced by this Agreement, Participant may be required to deliver certain documentation to the Company.

(d) Participant will not be deemed to be the holder of, or to have any of the rights and privileges of a stockholder of the Company (including the right to vote or receive dividends) in respect of, Shares received upon the settlement of Restricted Stock Units until (i) the Company has issued the Shares in connection with such settlement pursuant to the terms of this Agreement and (ii) Participant has paid any applicable withholding taxes in accordance with Section 4 below.

3. Withholding.

(a) **The following provisions shall only apply to Participant if Participant resides in the United States:** The Company shall have the right and is hereby authorized to withhold, any applicable withholding taxes in respect of the Restricted Stock Units, their vesting or settlement or any payment or transfer with respect to the Restricted Stock Units at the minimum applicable statutory rates, and to take such action as may be necessary in the opinion of the Committee to satisfy all obligations for the payment of such withholding taxes. Regardless of any action taken by the Company or any other Subsidiary with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related withholding (the *"**Tax Obligations**"*), Participant acknowledges that the ultimate liability for all Tax Obligations legally due by Participant is and remains Participant's responsibility and that the Company (i) makes no representations or undertakings regarding the treatment of any Tax Obligations in connection with any aspect of the Restricted Stock Unit, including the grant, vesting and settlement of the Restricted Stock Unit, the subsequent sale of Shares acquired pursuant to such vesting, or the receipt of any dividends and (ii) does not commit to structure the terms of the grant or any other aspect of the Restricted Stock Unit to reduce or eliminate Participant's liability for Tax Obligations. Tax obligations upon vesting and/or settlement of the Shares shall be satisfied by using a Sell to Cover pursuant to the Grant Notice. The Company shall not be obligated to deliver any Shares to Participant or Participant's legal representative unless and until Participant or Participant's legal representative shall have paid or otherwise satisfied in full the amount of all Tax Obligations applicable to the taxable income of Participant resulting from the grant or vesting of the RSUs or the issuance of Shares. By accepting this award of RSUs, Participant has agreed to a Sell to Cover to satisfy any Tax Obligations calculated at up to the maximum statutory tax rate, as determined by the Company, and Participant hereby acknowledges and agrees:

- Participant hereby appoints the Agent as Participant's agent and authorizes the Agent to (1) sell on the open market at the then prevailing market price(s), on Participant's behalf, as soon as practicable on or after the date the Shares are issued upon vesting of the RSUs, that number (rounded up to the next whole number) of the Shares so issued necessary to generate proceeds to cover (x) any Tax Obligations incurred with respect to such vesting or issuance based on up to the maximum statutory tax rates, as determined by the Company, and (y) all applicable fees and commissions due to, or required to be collected by, the Agent with respect thereto and (2) in the Company's discretion, apply any remaining funds to Participant's federal tax withholding or remit such remaining funds to Participant.

- Participant hereby authorizes the Company and the Agent to cooperate and communicate with one another to determine the number of Shares that must be sold pursuant to the first subsection above.

- Participant understands that the Agent may effect sales as provided in subsection (i) above in one or more sales and that the average price for executions resulting from bunched orders will be assigned to Participant's account. In addition, Participant acknowledges that it may not be possible to sell Shares as provided in the first subsection above due to (1) a legal or contractual restriction applicable to the Participant or the Agent, (2) a market disruption or (3) rules governing order execution priority on the national exchange where the Shares may be traded. In the event of the Agent's inability to sell Shares, Participant will continue to be responsible for the timely payment to the Company and/or its affiliates of all Tax Obligations that are required by applicable laws and regulations to be withheld.

- Participant acknowledges that regardless of any other term or condition of this Section 4, the Agent will not be liable to Participant for (1) special, indirect, punitive, exemplary or consequential damages, or incidental losses or damages of any kind or (2) any failure to perform or for any delay in performance that results from a cause or circumstance that is beyond its reasonable control.

- Participant hereby agrees to execute and deliver to the Agent any other agreements or documents as the Agent reasonably deems necessary or appropriate to carry out the purposes and intent of this Section 4. The Agent is a third-party beneficiary of this Section 4.

- This Section 4(a) shall terminate not later than the date on which all tax withholding and obligations arising in connection with the vesting and issuance of the RSUs have been satisfied.

(b) **The following provisions shall only apply to Participant if Participant resides outside the United States:**

(i) **In General**. Regardless of any action taken by the Company or any other Subsidiary with respect to Tax Obligations, Participant acknowledges that the ultimate liability for all Tax Obligations legally due by Participant is and remains Participant's responsibility and that the Company (a) makes no representations or undertakings regarding the treatment of any Tax Obligations in connection with any aspect of the Restricted Stock Unit, including the grant, vesting and settlement of the Restricted Stock Unit, the subsequent sale of Shares acquired pursuant to such vesting, or the receipt of any dividends and (b) does not commit to structure the terms of the grant or any other aspect of the Restricted Stock Unit to reduce or eliminate Participant's liability for Tax Obligations. At the time of settlement of the Restricted Stock Unit, Participant shall pay or make adequate arrangements satisfactory to the Company to satisfy all withholding obligations of the Company and any other Subsidiary. In this regard, at the time the Restricted Stock Unit is vested, in whole or in part, or at any time thereafter as requested by the Company or any other Subsidiary, Participant hereby authorizes withholding of all applicable Tax Obligations from payroll and any other amounts payable to Participant, and otherwise agrees to make adequate provision for withholding of all applicable Tax Obligations, if any, by each Subsidiary which arise in connection with the Restricted Stock Unit. The Company shall have no obligation to deliver Shares until the Tax Obligations as described in this Section have been satisfied by Participant.

(ii) **Withholding or Directed Sale of Shares**. The Company shall have the right, but not the obligation, to require Participant to satisfy all or any portion of a Subsidiary's Tax Obligations upon settlement of the Restricted Stock Unit by deducting from the Shares otherwise issuable to Participant a number of whole Shares having a Fair Market Value, as determined by the Company as of the date of vesting, not in excess of the amount of such Tax Obligations determined by the applicable minimum statutory withholding rates. The Company may require Participant to direct a broker, upon the vesting of the Restricted Stock Unit, to sell a portion of the Shares subject to the Restricted Stock Units determined by the Company in its discretion to be sufficient to cover the Tax Obligations of any Subsidiary and to remit an amount equal to such Tax Obligations to the Company in cash.

4. Termination of Employment or Service.

(a) In the event that Participant's employment with, or service to, the Company Group terminates for any reason, any unvested portion of the RSU Award will be forfeited and all of Participant's rights under this Agreement will terminate as of the effective date of Termination (the "**Termination Date**") (unless otherwise provided for by the Committee in accordance with the Plan).

(b) Participant's rights with respect to the RSU Award will not be affected by any change in the nature of Participant's employment or service so long as Participant continues to be an employee, consultant or director of the Company Group. Whether (and the circumstances under which) employment or service has terminated and the determination of the Termination Date for the purposes of this Agreement will be determined by the Committee (or, with respect to any Participant who is not a director or Officer, its designee, whose good faith determination will be final, binding and conclusive; provided, that such designee may not make any such determination with respect to the designee's own employment for purposes of the RSU Award).

5. Restrictions on Transfer.

(a) Participant may not assign, alienate, pledge, attach, sell or otherwise transfer or encumber the Restricted Stock Units or Participant's right under the RSU Award to receive Shares, other than in accordance with Section 13(b) of the Plan.

(b) Participant agrees that in the event the Company advises Participant that it plans an underwritten public offering of Shares in compliance with the Securities Act and that the underwriter(s) seek to impose restrictions under which certain shareholders may not sell or contract to sell or grant any option to buy or otherwise dispose of part or all of their stock purchase rights of the underlying Shares, Participant hereby agrees that for a period not to exceed 180 days from the prospectus, Participant will not sell or contract to sell or grant an option to buy or otherwise dispose of any Shares subject to this Agreement without the prior written consent of the underwriter(s) or its representative(s).

2. Repayment of Proceeds; Clawback Policy.

The Shares underlying the RSU Award and all proceeds related to such Shares are subject to the clawback and repayment terms set forth in Sections 13(v) and 13(x) of the Plan and the Company's clawback policy, as in effect from time to time, to the extent Participant is a director or Officer, subject to applicable law. In addition, if a Restrictive Covenant Violation occurs, Participant shall be required, in addition to any other remedy available (on a non-exclusive basis), to pay to the Company, within ten (10) business days of the Company's request to Participant therefor, an amount equal to the aggregate after-tax proceeds (taking into account all amounts of tax that would be recoverable upon a claim of loss for payment of such proceeds in the year of repayment) Participant received either in cash in respect of the settlement of Restricted Stock Units, or upon the sale or other disposition of, or dividends or distributions in respect of, Shares received upon the settlement of Restricted Stock Units.

3. No Right to Continued Employment or Service.

Neither the Plan nor this Agreement nor Participant's receipt of the Restricted Stock Units hereunder shall impose any obligation on the Company or any Affiliate to continue the employment or service of Participant. Further, the Company or any Affiliate (as applicable) may at any time terminate the employment or service of Participant, free from any liability or claim under the Plan or this Agreement, except as otherwise expressly provided herein.

4. Service Conditions.

The following provisions shall only apply to Participant if Participant resides outside the United States: In accepting the Restricted Stock Units hereunder, Participant acknowledges that:

(a) Any notice period mandated under local law shall not be treated as service for the purpose of determining the vesting of the Restricted Stock Units; and Participant's right to vest the

Restricted Stock Units after termination of service, if any, will be measured by the date of termination of Participant's active service and will not be extended by any notice period mandated under local law. Subject to the foregoing and the provisions of the Plan, the Company, in its sole discretion, shall determine whether Participant's service has terminated and the effective date of such termination.

(b) The vesting of the Restricted Stock Units shall cease upon, and no Shares shall become vested following, Participant's termination of service for any reason except as may be explicitly provided by the Plan or this Agreement.

(c) The Plan is established voluntarily by the Company. It is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Agreement.

(d) The grant of the Restricted Stock Units is voluntary and occasional and does not create any contractual or other right to receive future grants of Restricted Stock Units, or benefits in lieu of Restricted Stock Units, even if Restricted Stock Units have been granted repeatedly in the past.

(e) All decisions with respect to future Restricted Stock Units grants, if any, will be at the sole discretion of the Company.

(f) Participant's participation in the Plan shall not create a right to further service with the Company or any Subsidiary and shall not interfere with the ability of any Subsidiary to terminate Participant's service at any time, with or without cause subject to applicable law.

(g) Participant is voluntarily participating in the Plan.

(h) The Restricted Stock Units grant is an extraordinary item that does not constitute compensation of any kind for service of any kind rendered to any Subsidiary, and which is outside the scope of Participant's employment contract, if any.

(i) The Restricted Stock Unit is not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or similar payments.

(j) In the event that Participant is not an employee of the Company or Subsidiary, the Restricted Stock Units grant will not be interpreted to form an employment contract or relationship with the Company or Subsidiary; and furthermore, the Restricted Stock Units grant will not be interpreted to form an employment contract with any other Subsidiary.

(k) The future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty. If the underlying Shares do not increase in value, the Restricted Stock Units will have no value. If Participant obtains Shares after vesting of Restricted Stock Units, the value of those Shares acquired may increase or decrease in value.

(l) No claim or entitlement to compensation or damages arises from termination of the Restricted Stock Units or diminution in value of the Restricted Stock Units or Shares granted after the Restricted Stock Units vesting resulting from termination of Participant's service (for any reason whether or not in breach of local law) and Participant irrevocably releases the Company and each other Subsidiary from any such claim that may arise. If, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen then, by signing this Agreement, Participant shall be deemed irrevocably to have waived Participant's entitlement to pursue such a claim.

5. Adjustments.

The terms of this Agreement, including, without limitation, the number of Shares underlying the Restricted Stock Units, will be subject to adjustment in accordance with Section 11 of the Plan.

6. Securities Laws; Cooperation.

Upon the vesting of any unvested Restricted Stock Units, Participant will make or enter into such written representations, warranties and agreements as the Committee may reasonably request in order to comply with applicable securities laws, the Plan or this Agreement. Participant further agrees to cooperate with the Company in taking any action reasonably necessary or advisable to consummate the transactions contemplated by this Agreement.

7. Notices.

Any notice necessary under this Agreement shall be addressed to the Company in care of its Secretary at the principal executive office of the Company and to Participant at the address appearing in the personnel records of the Company for such Participant or to either party at such other address as either party hereto may hereafter designate in writing to the other. Any such notice shall be deemed effective upon receipt thereof by the addressee.

8. Governing Law; Venue; Jury Trial Waiver; Language.

This Agreement will be governed by and construed in accordance with the internal laws of the State of Delaware applicable to contracts made and performed wholly within the State of Delaware, without giving effect to the conflict of laws provisions thereof. For purposes of litigating any dispute that may arise directly or indirectly from this Agreement, the parties hereto hereby submit and consent to the exclusive jurisdiction of the State of California and agree that any such litigation shall be conducted only in the courts of California or the federal courts of the United States located in California and no other courts. Each of Participant, the Company and any transferees who hold a portion of the RSU Award pursuant to a valid assignment hereby irrevocably waives any right to a jury trial. If Participant has received a copy of this Agreement (or the Plan or any other document related hereto or thereto) translated into a language other than English, such translated copy is qualified in its entirety by reference to the English version thereof, and in the event of any conflict the English version will govern. Participant acknowledges that Participant is sufficiently proficient in English to understand the terms and conditions of this Agreement.

9. Severability.

Should any provision of this Agreement be held by a court of competent jurisdiction to be unenforceable or invalid for any reason, the remaining provisions of this Agreement will not be affected by such holding and will continue in full force in accordance with their terms.

10. Successors in Interest.

Any successor to the Company will have the benefits of the Company under, and be entitled to enforce, this Agreement. Likewise, Participant's legal representative will have the benefits of Participant under, and be entitled to enforce, this Agreement. All obligations imposed upon Participant and all rights granted to the Company under this Agreement will be final, binding and conclusive upon Participant's heirs, executors, administrators and successors.

11. Data Privacy Acknowledgement.

The following provisions shall only apply to Participant if he or she resides outside of the US, the EU, EEA, and the UK:

(a) Participant voluntarily consents to the collection, use, disclosure and transfer to the United States and other jurisdictions, in electronic or another form, of his or her personal data as described in this Agreement and any other award materials ("***Data***") by and among, as applicable, the Company Group for the exclusive purpose of implementing, administering, and managing his or her participation in the Plan. If Participant does not choose to participate in the Plan, his or her employment status or service with the Company Group will not be adversely affected.

(b) Participant understands that the Company Group may collect, maintain, process and disclose, certain personal information about him or her, including, but not limited to, his or her name,

home address, email address and telephone number, date of birth, social insurance number, passport or another identification number, salary, nationality, job title, any Shares or directorships held in the Company, details of all equity awards or any other entitlement to Shares awarded, canceled, exercised, vested, unvested or outstanding in his or her favor, for the exclusive purpose of implementing, administering and, managing the Plan.

(c) Participant understands that Data will be transferred to one or more service provider(s) selected by the Company, which may assist the Company with the implementation, administration, and management of the Plan. Participant understands that the recipients of the Data may be located in the United States or elsewhere, and that the recipient's country (*e.g.*, the United States) may have different, including less stringent, data privacy laws and protections than his or her country. Participant understands that if he or she resides outside the United States, he or she may request a list with the names and addresses of any potential recipients of the Data by contacting his or her local human resources representative. Participant authorizes the Company and any other possible recipients that may assist the Company (presently or in the future) with implementing, administering, and managing the Plan to receive, possess, use, retain and transfer the Data, in electronic or another form, for the sole purpose of implementing, administering and managing his or her participation in the Plan.

(d) Participant understands that Data will be held only as long as is necessary to implement, administer and manage his or her participation in the Plan, including to maintain records regarding participation. Participant understands that if he or she resides in certain jurisdictions, to the extent required by applicable law, he or she may, at any time, request access to Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents given by accepting these Restricted Stock Units, in any case without cost, by contacting in writing his or her local human resources representative. Further, Participant understands that he or she is providing these consents on a purely voluntary basis. If Participant does not consent or if he or she later seeks to revoke his or her consent, his or her engagement as a service provider with the Company Group will not be adversely affected; the only consequence of refusing or withdrawing his or her consent is that the Company will not be able to grant him or her Restricted Stock Units under the Plan or administer or maintain Restricted Stock Units. Therefore, Participant understands that refusing or withdrawing his or her consent may affect his or her ability to participate in the Plan (including the right to retain the Restricted Stock Units). Participant understands that he or she may contact his or her local human resources representative for more information on the consequences of his or her refusal to consent or withdrawal of consent.

The following provisions shall only apply to Participant if he or she resides in the EU or EEA, the UK, or EU privacy laws are otherwise applicable:

(e) Data Collected and Purposes of Collection. Participant understands that the Company, acting as controller, as well as the employing Affiliate or Subsidiary or any other Affiliate or Subsidiary, will process, to the extent permissible under applicable law, certain personal information about him or her, including name, home address and telephone number, information necessary to process the Restricted Stock Units (*e.g.*, mailing address for a check payment or bank account wire transfer information), date of birth, social insurance number or other identification number, salary, nationality, job title, employment location, details of all Restricted Stock Units granted, canceled, vested, unvested or outstanding in his or her favor, and where applicable service termination date and reason for termination, any capital shares or directorships held in the Company (where needed for legal or tax compliance), and any other information necessary to process mandatory tax withholding and reporting (all such personal information is referred to as "***Data***"). The Data is collected from Participant, and from the Company Group, for the purpose of implementing, administering, and managing the Plan pursuant to its terms. The legal basis (that is, the legal justification) for processing the Data is that it is necessary to perform, administer and manage the Plan pursuant to this Agreement between Participant and the Company, and in Company's legitimate interests to comply with applicable non-EU laws when performing, administering and managing the Plan, subject to his or her interest and fundamental rights. The Data must be provided in order for Participant to participate in the Plan and for the parties to this Agreement to perform their respective obligations hereunder. If Participant does not provide Data, he or she will not be able to participate in the Plan and become a party to this Agreement.

(f) Transfers and Retention of Data. Participant understands that the Data will be transferred to and among the Company Group, as well as service providers (such as stock administration providers, brokers, transfer agents, accounting firms, payroll processing firms or tax firms), for the purposes explained above, which are necessary to allow the Company to perform this Agreement. Participant understands that the recipients of the Data may be located in the United States and in other jurisdictions outside of the European Economic Area where the Company Group or its service providers have operations. The United States and some of these other jurisdictions have not been found by the European Commission to have adequate data protection safeguards. If the Company Group makes transfers of Data outside of the European Economic Area, those transfers will be made solely to the extent necessary to perform this Agreement and take necessary actions in connection with such performance. In addition, service providers may commit to providing adequate safeguards for the transferred Data, such as the EU-U.S. Data Privacy Framework or standard contractual clauses approved by the European Commission. In that case, Participant may obtain details of the transfers by contacting gc@10xgenomics.com.

(g) Participant's Rights in Respect of Data. Participant has the right to access his or her Data being processed by the Company or any Affiliate or Subsidiary as well as understand why the Company or any Affiliate or Subsidiary is processing such Data. Additionally, subject to applicable law, Participant is entitled to have any inadequate, incomplete, or incorrect Data corrected (that is, rectified). Further, subject to applicable law, and under certain circumstances, Participant may be entitled to the following rights in regard to his or her Data: (i) to object to the processing of Data; (ii) to have his or her Data erased, such as where it is no longer necessary in relation to the purposes for which it was processed; (iii) to restrict the processing of his or her Data so that it is stored but not actively processed (*e.g.*, while the Company assesses whether Participant is entitled to have Data erased); and (iv) to port a copy of the Data provided pursuant to this Agreement or generated by him or her, in a common machine-readable format. To exercise his or her rights, Participant may contact gc@10xgenomics.com. Participant may also contact the relevant data protection supervisory authority, as he or she has the right to lodge a complaint.

12. Limitation on Rights; No Right to Future Grants; Extraordinary Item of Compensation.

By accepting this Agreement and the grant of the Restricted Stock Units evidenced hereby, Participant expressly acknowledges that (a) the Plan is established voluntarily by the Company, it is discretionary in nature and may be suspended or terminated by the Company at any time to the extent permitted by the Plan; (b) the grant of the Restricted Stock Units is exceptional, voluntary and occasional and it does not create any contractual or other right to receive future grants of restricted stock units, or benefits in lieu of restricted stock units, even if restricted stock units have been granted in the past; (c) all determinations with respect to future restricted stock unit grants, if any, including the grant date and the number of restricted stock units granted, will be at the sole discretion of the Company; (d) Participant's participation in the Plan is voluntary and not a condition of employment, and Participant may decline to accept the RSU Award without adverse consequences to Participant's continued employment relationship with the Company Group; (e) the value of the Restricted Stock Unit is an extraordinary item that is outside the scope of Participant's employment contract, if any, and nothing can or must automatically be inferred from such employment contract or its consequences; (f) Restricted Stock Units and any Shares acquired under the Plan, and the income from and value of same, are not part of normal or expected compensation for any purpose and are not to be used for calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments, Participant waives any claim on such basis and, for the avoidance of doubt, the Restricted Stock Units will not constitute an "acquired right" under the applicable law of any jurisdiction; (g) if the underlying Shares do not increase in value, the Restricted Stock Units will have no value; (h) if Participant settles the Restricted Stock Units and acquires Shares, the value of such Shares may increase or decrease in value; (i) the future value of the underlying Shares is unknown and cannot be predicted with certainty and (j) the RSU Award constitutes full and complete satisfaction of any promises of equity awards in Participant's written service agreement (including an offer letter) between Participant and the Company (or any of its subsidiaries), and upon Participant's acceptance of the RSU Award any promises of equity awards in Participant's written service agreement (including an offer letter) between Participant and the Company (or any of its subsidiaries) shall be of no further or effect. In addition, Participant understands, acknowledges and agrees that Participant will have no rights to compensation or damages related to Restricted Stock Unit proceeds in consequence of the termination of Participant's employment for any reason whatsoever and whether or not in breach of contract.

13. Book Entry; Certificates.

Upon the settlement of any portion of the RSU Award in Shares pursuant to this Agreement, the Company shall recognize Participant's ownership of such Shares through uncertificated book entry. If elected by the Company, certificates evidencing the Shares may be issued by the Company and any such certificates shall be registered in Participant's name on the stock transfer books of the Company promptly after the date hereof, but shall remain in the physical custody of the Company or its designee at all times prior to the later of (a) the settlement of any portion of the RSU Award pursuant to this Agreement and (b) the expiration of any transfer restrictions set forth in this Agreement or otherwise applicable to the Shares. As soon as practicable following such time, any certificates for the Shares shall be delivered to Participant or to Participant's legal guardian or representative along with the stock powers relating thereto. However, the Company shall not be liable to Participant for damages relating to any delays in issuing the certificates (if any) to Participant, any loss by Participant of the certificates, or any mistakes or errors in the issuance of the certificates or in the certificates themselves.

14. Legend.

To the extent applicable, all book entries (or certificates, if any) representing the Shares delivered to Participant as contemplated by Section 3 above shall be subject to the rules, regulations and other requirements of the U.S. Securities and Exchange Commission, any stock exchange upon which such Shares are listed, and any applicable Federal or state laws, and the Company may cause notations to be made next to the book entries (or a legend or legends put on certificates, if any) to make appropriate reference to such restrictions. Any such book entry notations (or legends on certificates, if any) shall include a description to the effect of the restrictions set forth in Sections 2 and 6 hereof.

15. Award Administrator.

The Company may from time to time designate a third party administrator to assist the Company in the implementation, administration and management of the Plan and any Restricted Stock Units granted thereunder, including by sending award notices on behalf of the Company to Participants, and by facilitating through electronic means acceptance of Agreement by Participants and settlements of Restricted Stock Units.

16. Amendment.

The Committee may waive any conditions or rights under, amend any terms of, or alter, suspend, discontinue, cancel or terminate this Agreement, but no such waiver, amendment, alteration, suspension, discontinuance, cancellation or termination shall materially adversely affect the rights of Participant hereunder without the consent of Participant.

17. Section 409A.

It is intended that the Restricted Stock Units granted hereunder shall be exempt from Section 409A of the Code pursuant to the "short-term deferral" rule applicable to such section, as set forth in the regulations or other guidance published by the Internal Revenue Service thereunder.

18. Electronic Delivery and Acceptance.

This Agreement may be executed electronically and in counterparts. The Company may, in its sole discretion, decide to deliver any documents related to the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. Participant agrees that the foregoing online or electronic participation in the Plan shall have the same force and effect as documentation executed in hardcopy written form.

19. Acceptance and Agreement by Participant; Forfeiture upon Failure to Accept.

The grant of Restricted Stock Units hereunder will lapse ninety (90) days from the Date of Grant, and the RSU Award granted hereunder will be forfeited on such date if Participant has not accepted this Agreement by such date. For the avoidance of doubt, Participant's failure to accept this Agreement will not affect Participant's continuing obligations under any other agreement between the Company and Participant. If the attempted electronic delivery of such documents fails, Participant will be provided with a paper copy of the documents. Participant acknowledges that he or she may receive from the Company a paper copy of any documents that were delivered electronically at no cost to him or her by contacting the Company by telephone or in writing. Participant may revoke his or her consent to the electronic delivery of documents or may change the electronic mail address to which such documents are to be delivered (if Participant has provided an electronic mail address) at any time by notifying the Company of such revoked consent or revised e-mail address by telephone, postal service or electronic mail. Participant agrees that the foregoing online or electronic participation in the Plan shall have the same force and effect as documentation executed in hardcopy written form. Finally, Participant understands that he or she is not required to consent to electronic delivery of documents.

20. Imposition of Other Requirements.

The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the Restricted Stock Units and on any Shares received upon settlement of Restricted Stock Units under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

21. Language.

If Participant has received this Agreement, or any other document related to the Restricted Stock Units and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

22. No Advice Regarding Grant.

The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the Shares. Participant is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding Participant's participation in the Plan before taking any action related to the Plan.

23. Imposition of Other Requirements.

The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the Restricted Stock Units and on any Shares, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

24. Country-Specific Terms and Conditions.

The following provisions shall only apply to Participant if Participant resides outside the United States: Notwithstanding any provisions of this Agreement to the contrary, the Restricted Stock Units grant shall be subject to any special terms and conditions applicable for Participant's country of residence (and country of employment, if different) as respectively set forth in an appendix to this Agreement (an "**Appendix**"). Further, if Participant transfers his or her residence and/or employment to another country reflected in an Appendix to this Agreement at the time of transfer, the special terms and conditions for such country will apply to Participant to the extent the Company determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local law, rules and regulations or to facilitate the operation and administration of the Restricted Stock Units and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate Participant's transfer). In all circumstances, any applicable section(s) of the Appendix shall constitute part of this Agreement.

25. Waiver.

Participant acknowledges that a waiver by the Company of breach of any provision of this Agreement will not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by Participant or any other participant in the Plan.

26. Foreign Asset/Account and Tax Reporting.

There may be certain foreign tax, asset and/or account reporting requirements which may affect Participant's ability to acquire or hold Shares or cash received from participating in the Plan in a brokerage or bank account outside Participant's country. Participant may be required to report such accounts, assets or related transactions to the tax or other authorities in Participant's country. Participant also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to Participant's country within a certain time after receipt. Participant acknowledges that it is Participant's responsibility to comply with such regulations, and is advised to speak to a personal advisor on this matter.

27. Insider Trading/Market Abuse Laws.

Participant may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, including, but not limited to, Participant's country, which may affect Participant's ability to accept, acquire, sell, or otherwise dispose of Shares, rights to Shares (*e.g.*, the Restricted Stock Units) or rights linked to the value of Shares under the Plan during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws in the applicable jurisdictions). Insider trading laws and regulations may prohibit the cancellation or amendment of orders Participant placed before Participant possessed inside information. Furthermore, Participant could be prohibited from (a) disclosing the inside information to any third party, and (b) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Neither the Company nor any Affiliate or Subsidiary will be responsible for such restrictions or liable for the failure on Participant's part to know and abide by such restrictions. Participant should consult with his or her own personal legal advisers to ensure compliance with local laws.

APPENDIX TO

10x GENOMICS, INC.
2019 OMNIBUS INCENTIVE PLAN RESTRICTED STOCK UNIT AGREEMENT

FOR NON-UNITED STATES PARTICIPANTS

Terms and Conditions

This Appendix includes additional terms and conditions that govern the Restricted Stock Units granted to Participant under the Plan if he or she resides in one of the countries listed below. Certain capitalized terms used but not defined in this Appendix have the meanings set forth in the Plan and/or the main body of the Agreement.

Notifications

This Appendix also includes information regarding exchange controls and certain other issues of which Participant should be aware with respect to his or her participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of January 2024. Such laws are often complex and change frequently. As a result, the Company strongly recommends that Participant not rely on the information in this Appendix as the only source of information relating to the consequences of Participant's participation in the Plan because the information may be out of date at the time Participant vests in the Shares or sells the Shares acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to Participant's particular situation and the Company is not in a position to assure Participant of any particular result. Accordingly, Participant is advised to seek appropriate professional advice as to how the relevant laws of Participant's country may apply to his or her situation.

Finally, if Participant is a citizen or resident of a country other than the one in which Participant is currently working or transfers to another country after the grant of the Restricted Stock Units, or is considered a resident of another country for local law purposes, the information contained herein may not be applicable to Participant in the same manner. In addition, the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall apply to Participant under these circumstances.

AUSTRALIA

Terms and Conditions

Tax Deferred Treatment.

The offer is intended to receive tax-deferred treatment under Subdivision 83A-C of the Income Tax Assessment Act 1997(Cth).

Ordinary Shares. Restricted Stock Units issued to Participant under this Appendix must relate to ordinary shares. For the purpose of this Appendix, ordinary shares shall be defined in accordance with their ordinary meaning under Australian law.

Predominant business of the Company. Restricted Stock Units must not be issued where those Restricted Stock Units relate to shares in a company that has a predominant business of the acquisition, sale or holding of shares, securities or other investments.

Real risk of forfeiture. Stock awards that are Restricted Stock Units issued to Participant must have a real risk of forfeiture, the vesting conditions by which this risk is achieved are to be determined by the Board in its absolute discretion.

10% limit on shareholding and voting power. Immediately after Participant acquires the RSU, Participant must not: (i) hold a beneficial interest in more than 10% of the shares in the Company; or (ii) be in a position to cast, or control the casting of, more than 10% of the maximum number of votes that might be cast at a general meeting of the Company. For the purposes of these thresholds, stock awards that are Restricted Stock Units are treated as if they have been vested and converted into common stock.

Notifications

Securities Law Information.

The offering and resale of Shares acquired under the Plan to a person or entity resident in Australia may be subject to disclosure requirements under Australian law. Participant should obtain legal advice regarding any applicable disclosure requirements prior to making any such offer.

Exchange Control Information.

Australian residents must report inbound and/or outbound cash transactions exceeding A$10,000 and inbound and/or outbound international fund transfers of any value if the transfers do not involve an Australian bank.

AUSTRIA

Notifications

Securities Law Information.

The grant of Restricted Stock Units under the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Austria.

Consumer Protection Information.

Participant may be entitled to revoke this Agreement on the basis of the Austrian Consumer Protection Act (the "***Act***") under the conditions listed below, if the Act is considered to be applicable to this Agreement and the Plan:

(i) The revocation must be made within one week after the acceptance of this Agreement.

(ii) The revocation must be in written form to be valid. It is sufficient if Participant returns this Agreement to the Company or the Company's representative with language that can be understood as Participant's refusal to conclude or honor this Agreement, provided the revocation is sent within the period discussed above.

Exchange Control Information.

If Participant holds securities (including Shares acquired under the Plan) or cash (including proceeds from the sale of Shares and any cash dividends) outside of Austria (even if Participant holds them outside of Austria at a branch of an Austrian bank), Participant may be required to report certain information to the Austrian National Bank if certain thresholds are exceeded. Participant is encouraged to consult his/her personal legal or tax advisor to understand how these rules apply to Participant's particular situation.

BELGIUM

Notifications

Securities Law Information.

The grant of the Restricted Stock Units under the Plan is exempt from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Belgium.

Foreign Asset/Account Reporting Information.

Belgian residents are required to report any securities (*i.e.*, Shares acquired under the Plan) or bank accounts opened and maintained outside Belgium on their annual tax returns. Belgian residents are also required to complete a separate report providing the National Bank of Belgium with details regarding any such account. This report, as well as additional information on how to complete it, can be found on the website of the National Bank of Belgium, www.nbb.be, under the *Kredietcentrales / Centrales des crédits* caption.

CANADA

Terms and Conditions

Termination of Service. Notwithstanding any provision of the Plan or this Agreement, the following provision shall apply to Participants engaged in Canada on the date on which notification of termination (for any reason, with or without cause) or resignation from service is delivered:

For purposes of this Agreement, Participant's termination date shall mean the later of (i) the date upon which Participant ceases to perform services for the Company following the provision of such notification of termination or resignation from service and (ii) the end of any minimum period of notice of termination (if any) required by applicable employment or labor standards legislation. For clarity, unless otherwise expressly provided in this Agreement or determined by the Company, no Restricted Stock Units will vest under the Plan following Participant's termination date, and the termination date will not be extended by any period of deemed notice of termination under contract or at common or civil law in respect of which Participant may receive pay in lieu of notice of termination or damages in lieu of such notice. Participant will not be entitled to any further payments in respect of the value of any Restricted Stock Units that have not yet vested as of Participant's termination date and no Restricted Stock Units or any pro-rated portion thereof shall be included in any entitlement to any pay in lieu of notice of termination or damages in lieu of such notice.

Settlement of Award.

Notwithstanding anything in this Agreement or the Plan to the contrary, the Restricted Stock Units will only be settled in shares and not in cash.

The following provision applies if Participant is a resident of Quebec:

Language Consent.

The parties acknowledge that it is their express wish that this Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

*Les parties reconnaissent avoir expressement souhaité que la convention ["**Agreement**"], ainsi que tous les documents, avis et procédures judiciaries, éxecutés, donnés ou intentés en vertu de, ou lié, directement ou indirectement à la présente convention, soient rédigés en langue anglaise.*

Authorization of Release and Transfer Necessary Personal Information.

This provision supplements Section 16 of the Agreement:

Participant hereby authorizes the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. Participant further authorizes the Company, any Subsidiary and the Award Administrator of the Plan to disclose and discuss the Plan with his or her advisors. Participant further authorizes the Company, any Subsidiary to record such information and to keep such information in the employee file.

Non-Qualified Securities.

All Restricted Stock Units granted under this agreement shall be designated as "non-qualified securities" under subsection 110(1.4) of the Income Tax Act (the "**Act**"). For greater certainty, all designated Restricted Stock Units will be considered to be non-qualified securities for the purposes of section 110 of the Act, including the calculation of the "annual vesting limit" under subsection 110(1.31). The employer

will provide notice of this designation to the employee and the Canada Revenue Agency as required by subsection 110(1.9) of the Tax Act.

Notifications

Securities Law Information.

Participant is permitted to sell Shares acquired through the Plan through the designated broker appointed by the Company, provided the resale of Shares acquired under the Plan takes place outside of Canada through the facilities of a stock exchange on which the Shares are listed.

Foreign Asset/Account Reporting Information.

Canadian residents are required to report any foreign property (e.g., Shares acquired under the Plan and possibly unvested Restricted Stock Units) on form T1135 (Foreign Income Verification Statement) if the total cost of their foreign property exceeds C$100,000 at any time in the year. It is Participant's responsibility to comply with these reporting obligations, and Participant should consult his or her own personal tax advisor in this regard.

Share Settlement of Restricted Stock Units.

Notwithstanding anything to the contrary in the Plan or this Agreement, Restricted Stock Units granted to Canadian Participants shall only be settled in Shares and shall not be settled in cash.

CHINA

Terms and Conditions

State Administration of Foreign Exchange (SAFE) Compliance.

The grant of the Restricted Stock Units and Participant's ability to sell the Shares shall all be contingent upon the Company or its Subsidiaries obtaining approval from SAFE for the related foreign exchange transaction and the establishment of a SAFE-approved bank account. The receipt of funds by Participant from the sale of the Shares and the conversion of those funds to the local currency must be approved by SAFE. In order to comply with the SAFE regulations, the proceeds from the sale of the Shares must be repatriated into China through a SAFE-approved bank account set up and monitored by the Company. Participant may contact his or her local HR office for more details about the SAFE approved bank account.

Foreign Asset/Account Reporting Information.

Participant may be required to report to SAFE all details of his or her foreign financial assets and liabilities, as well as details of any economic transactions conducted with non-PRC residents. Under these rules, Participant may be subject to reporting obligations for the Restricted Stock Units, Shares acquired under the Plan, the receipt of any dividends and the sale of Shares.

Compulsory Post-Termination Sale.

In accordance with Section 5 of the Agreement, if Participant's employment with, or service to, the Company Group terminates for any reason, all vested Restricted Stock Units shall be settled and all Shares issued in settlement of vested Restricted Stock Units shall be sold within three months from the termination of Participant's employment subject to the following:

- Upon the end of the aforesaid three-month period, if there are any unsettled Restricted Stock Units, on the first trading day following the expiry of the three-month period, all such Restricted Stock Units will automatically be settled and all Shares subject to such Restricted Stock Units will automatically be sold on behalf of Participant.

- Upon the end of the aforesaid three-month period, if there are any remaining Shares issued to Participant in settlement of the vested Restricted Stock Units, all such Shares will automatically be sold on behalf of Participant on the first trading day after the expiry of the three-month period.

10x Genomics, Inc. reserves the right to shorten or eliminate the aforesaid post-termination settlement/sale period if required by local law or otherwise as it deems appropriate at its sole discretion.

DENMARK

Terms and Conditions

This provision substitutes Section 4 of the Agreement:

Tax Withholding.

The Company or any Subsidiary (as determined by the Award Administrator) shall have the power and right to deduct, withhold or collect any tax, social security contribution, payroll tax or other amount other tax-related withholding obligations required by law or regulation to be withheld with respect to any taxable event arising with respect to the granting or vesting of Restricted Stock Units (collectively, the "**Withholding Amount**"). This Withholding Amount may be: (a) withheld from other amounts due to Participant; (b) withheld from the value of any vested Restricted Stock Units being settled; or (iii) collected directly from Participant. The Withholding Amount may relate to amounts due in more than one jurisdiction and in all cases shall be as determined by the Company or the applicable Subsidiary in its discretion.

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Denmark.

Stock Option Act.

By accepting these Restricted Stock Units, Participant acknowledges that he or she received an Employer Statement, translated into Danish, which is being provided to comply with the Danish Stock Option Act (the "Act"), to the extent that the Act applies to the Restricted Stock Units. If applicable, to the extent more favorable and required to comply with the Act, the terms set forth in the Employer Statement will apply to Participant's participation in the Plan.

Please be aware that as set forth in Section 1 of the Act, the Act only applies to "employees" as that term is defined in Section 2 of the Act. If Participant is a member of the registered management of an Affiliate or Subsidiary or affiliate in Denmark or otherwise does not satisfy the definition of employee, Participant will not be subject to the Act and the Employer Statement will not apply to him or her.

Further, the Act has been revised with effect from 1 January 2019. As a result of the amendments, the termination provisions under the Plan and this Agreement will apply for any Awards granted after 1 January 2019. The relevant termination provisions are detailed in the Plan, this Agreement and the Employer Statement.

Notifications

Exchange Control Information.

If Participant establishes an account holding cash outside Denmark, Participant must report the account to the Danish Tax Administration. The form which should be used in this respect can be obtained from a local bank. (Please note that these obligations are separate from and in addition to the obligations described below.)

Foreign Asset/Account Reporting Information.

If Participant establishes an account holding Shares or cash outside of Denmark, Participant shall report the account to the Danish Tax Administration. The form which shall be used to make the report can be obtained from a local bank. (Please note that these obligations are separate from and in addition to the obligations described above.)

FINLAND

Notifications

Securities Law Information.

The grant of Restricted Stock Units under the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Finland.

FRANCE

Terms and Conditions

Language Consent.

In accepting the grant of the Restricted Stock Units and this Agreement which provides for the terms and conditions of the Restricted Stock Units, Participant confirms that he or she has read and understood the documents relating to the Restricted Stock Units (the Plan and this Agreement), which were provided in the English language. Participant accepts the terms of these documents accordingly.

Consentement Relatif à la Langue Utilisée.

En acceptant cette attribution gratuite d'actions et ce contrat qui contient les termes et conditions de cette attribution gratuite d'actions, l'employé confirme ainsi avoir lu et compris les documents relatifs à cette attribution (le Plan et le Contrat d'Attribution) qui lui ont été communiqués en langue anglaise. L'employé en accepte les termes en connaissance de cause.

Notifications

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in France.

Awards Not Tax-Qualified.

The Restricted Stock Unit is **not** intended to be a tax-qualified or tax-preferred award, including without limitation, under Sections L. 225-197-1 to L. 225-197-6 of the French Commercial Code. Participant is encouraged to consult with a personal tax advisor to understand the tax and social insurance implications of the Restricted Stock Units.

Foreign Asset / Account Reporting Information.

Participant may hold Shares acquired upon vesting/settlement of the Restricted Stock Units, any proceeds resulting from the sale of Shares or any dividends paid on such Shares outside of France, provided Participant declares all foreign bank and brokerage accounts (including any accounts that were opened or closed during the tax year) on his or her annual income tax return. Failure to complete this reporting may trigger penalties.

GERMANY

Terms and Conditions

Prohibition on Insider Dealing.

Participant should be aware of the insider dealing rules of the Regulation (EU) No 596/2014 of the European Parliament and Council (Market Abuse Regulation) apply in Germany, which may affect transactions under the Plan such as e.g., the subscription or participation, the suspension, the cancellation or an amending order, the acquisition or sale of Shares acquired under the Plan, if Participant has inside information regarding the Company. Participant is advised to determine carefully whether he or she has inside information in respect of the Company and whether and to what extent insider dealing rules can apply to him or her. In case of uncertainty, the Company recommends that Participant consult with a legal advisor.

Limitation of Liability.

Participant is responsible for compliance with any laws to be observed by Participant in person in conjunction with the participation in the Plan. The Company cannot be held liable if Participant violates German law or any other applicable rules to be complied with by Participant in conjunction with the participation in the Plan including but not limited to insider dealing restrictions under the Market Abuse Regulation.

Notifications

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Germany.

Exchange Control Information. If Participant remits proceeds in excess of the legally designated amount out of or into Germany, such cross-border payment shall be reported monthly to the State Central Bank. In the event that Participant makes or receives payment in excess of this amount, Participant is responsible for obtaining the appropriate form from a German bank and complying with applicable reporting requirements. In addition, Participant may be required to report the acquisition of securities (e.g., Shares) to the Bundesbank via email or telephone if the value of the securities exceeds a certain threshold. *Participant is responsible for complying with applicable reporting requirements and should consult with a personal legal advisor to ensure compliance.*

HONG KONG

Terms and Conditions

Sale of Shares.

Any Shares received at vesting are accepted as a personal investment. In the event that any portion of these Restricted Stock Units vest within six months of the grant date, Participant agrees that he or she will not offer to the public or otherwise dispose of the Shares acquired prior to the six-month anniversary of the grant date.

Notifications

Securities Law Notice.

WARNING: The Restricted Stock Units and the Shares covered by the Restricted Stock Units do not constitute a public offering of securities under Hong Kong law and are available only to employees of the Company or the Affiliate participating in the Plan. Participant should be aware that the contents of this Agreement have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong. Nor have the documents been reviewed by any regulatory authority in Hong Kong. The Restricted Stock Units are intended only for Participant's personal use and may not be distributed to any other person. Participant is advised to exercise caution in relation to the offer. If Participant is in any doubt about any of the contents of this Agreement, including this provision, or the Plan, Participant should obtain independent professional advice.

Occupational Retirement Schemes Ordinance Alert.

The Company specifically intends that neither the Restricted Stock Units nor the Plan will be considered or deemed an occupational retirement scheme for purposes of the Occupational Retirement Schemes Ordinance ("**ORSO**").

INDIA

Notifications

Exchange Control Information.

Participant understands and agrees that he or she must repatriate any proceeds from the sale of Shares acquired under the Plan to India and convert the proceeds into local currency within 90 days of receipt. Participant will receive a foreign inward remittance certificate ("**FIRC**") from the bank where he or she deposits the foreign currency. Participant should maintain the FIRC as evidence of the repatriation of funds in the event the Reserve Bank of India or his or her employer requests proof of repatriation.

Foreign Asset/Account Reporting Information.

Indian residents are required to declare the following items in their annual tax return: (i) any foreign assets held by them (including Shares acquired under the Plan), and (ii) any foreign bank accounts for which they have signing authority. It is Participant's responsibility to comply with applicable foreign asset tax laws in India and Participant should consult with his or her personal tax advisor to ensure that Participant is properly reporting his or her foreign assets and bank accounts. Participant's local employer will issue a Form 16 to Participant and report perquisites in Form 12BA after the end of Financial Year.

ITALY

Terms and Conditions

Plan Document Acknowledgment.

In accepting the grant of the Restricted Stock Units, Participant acknowledges that he or she has received a copy of the Plan and the Agreement and has reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Appendix.

Notifications

Foreign Asset/Account Reporting Information.

If Participant is an Italian resident who, at any time during the fiscal year, holds foreign financial assets (including cash and Shares) which may generate taxable income in Italy, Participant is required to report these assets on his or her annual tax return for the year during which the assets are held, or on a special form if no tax return is due. These reporting obligations also apply if Participant is the beneficial owner of foreign financial assets under Italian money laundering provisions.

Foreign Asset Tax Information.

The value of financial assets held outside of Italy by Italian residents is subject to a foreign asset tax, subject to an exemption. The taxable amount will be the fair market value of the financial assets (*e.g.*, Shares) assessed at the end of the calendar year.

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Italy.

Foreign Asset Tax Information.

The value of financial assets held outside of Italy by Italian residents is subject to a foreign asset tax, subject to an exemption. The taxable amount will be the fair market value of the financial assets (*e.g.*, Shares) assessed at the end of the calendar year.

JAPAN

Notifications

Foreign Assets Reporting.

Japanese residents holding assets outside of Japan (e.g., Shares acquired under the Plan) with a value exceeding ¥50,000,000 (as of December 31 each year) are required to comply with annual tax reporting obligations with respect to such assets. Participant is encouraged to consult with a personal tax advisor in Japan to ensure that Participant is properly complying with these obligations.

Foreign Exchange.

Under certain circumstances, Participant may be required to file a report with the Ministry of Finance if Participant intends to acquire Shares whose value exceeds ¥100,000,000. The reporting, if required, is due within 20 days from the acquisition of the Shares (however, if Participant acquires such Shares through a securities company in Japan, such requirement will not be imposed). The reporting requirements vary depending on whether the relevant payment is made through a bank in Japan.

Participant is advised to seek appropriate professional advice as to how the exchange control regulations, tax, or other laws in Participant's country apply to his or her specific situation. Laws and regulations change frequently and occasionally on a retroactive basis.

Securities Disclaimer.

The Restricted Stock Units and the Shares have not been registered under the Financial Instruments and Exchange Act of Japan (Law No. 25 of 1948), as amended (the "**FIEA**"). The Restricted Stock Units and the Shares issuable upon the vesting of Restricted Stock Units may not be offered or sold in Japan or to, or for the benefit of, any resident of Japan or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan. As used herein, the term "resident of Japan" means any natural person having his place of domicile or residence in Japan, or any corporation or other entity organized under the laws of Japan or having its main office in Japan.

LUXEMBOURG

Notifications

Exchange Control Information.

Participant is required to report any inward remittances of funds to the *Banque Central de Luxembourg* and/or the *Service Central de La Statistique et des Études Économiques* within 15 working days following the month during which the transaction occurred. If a Luxembourg financial institution is involved in the transaction, it generally will fulfill the reporting obligation on Participant's behalf. However, as long as the Company is not a Luxembourg resident financial company, the statistical reporting obligation should not apply.

Securities Law Information.

The grant of Restricted Stock Units under the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Luxembourg.

NETHERLANDS

Notifications

Prohibition Against Insider Trading.

Participant should be aware of the Dutch insider trading rules, which may affect the sale of Shares acquired under the Plan. In particular, Participant may be prohibited from effecting certain share transactions if Participant has insider information regarding the Company. Below is a discussion of the applicable restrictions. Participant is advised to read the discussion carefully to determine whether the insider rules could apply to him or her. If it is uncertain whether the insider rules apply, the Company recommends that Participant consults with a legal advisor. The Company cannot be held liable if Participant violates the Dutch insider trading rules. Participant is responsible for ensuring his or her compliance with these rules.

Dutch securities laws prohibit insider trading. As of 3 July 2016, the European Market Abuse Regulation ("**MAR**"), is applicable in the Netherlands. For further information, Participant is referred to the website of the Authority for the Financial Markets ("**AFM**"): https://www.afm.nl/en/sector/effectenuitgevende-ondernemingen.

Given the broad scope of the definition of inside information, certain employees of the Company working at its Dutch affiliate may have inside information and thus are prohibited from making a transaction in securities in the Netherlands at a time when they have such inside information. By entering into this Agreement and participating in the Plan, Participant acknowledges having read and understood the notification above and acknowledges that it is Participant's responsibility to comply with the Dutch insider trading rules, as discussed herein.

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in the Netherlands.

POLAND

Notifications

Foreign Exchange Notice.

Participant understands and acknowledges that Participant must notify the National Bank of Poland of the value of all foreign share ownership, including but not limited to Shares acquired under the Plan, if such ownership exceeds a designated threshold. Participant is strongly encouraged to consult with an appropriate legal advisor regarding these requirements.

Securities Disclosure.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Poland.

Employment.

In order to meet the requirements of the Plan Participant authorize the Polish Subsidiary (his or her employer):

a) to make relevant deductions from his or her remuneration,

b) to notify the Company about events relevant to his or her right to continue to participate in the Plan.

RUSSIA

Terms and Conditions

U.S. Transactions.

Participant understands that the acceptance of the Restricted Stock Units results in an agreement between Participant and the Company that is completed in the United States and that this Agreement is governed by the laws of the State of Delaware. Upon vesting and settlement of the Restricted Stock Units, any Shares to be issued to Participant shall be held or delivered to Participant in the United States and in no event will such Shares be delivered to Participant in Russia. Participant acknowledges that Participant is not permitted to sell or otherwise transfer Shares directly to other individuals in Russia, nor is Participant permitted to bring any certificates representing the Shares into Russia (if such certificates are actually issued).

Sale Restrictions.

Depending on the development of local regulatory requirements, the Company reserves the right to require the immediate sale of any Shares to be issued to Participant upon vesting of the Restricted Stock Units. By accepting the Restricted Stock Units, Participant acknowledges that Participant understands and agrees that the Company is authorized to, and may, in its sole discretion, instruct its designated broker to assist with the mandatory sale of Shares issued to Participant upon vesting of the Restricted Stock Units (on Participant's behalf pursuant to this authorization) and Participant expressly authorizes the Company's designated broker to complete the sale of such Shares. Participant acknowledges that the Company's designated broker is under no obligation to arrange for the sale of the Shares at any particular price. Upon the sale of the Shares, Participant will receive the cash proceeds, less any Tax Obligations and brokerage fees or commissions.

Notifications

Securities Law Notification.

This Agreement, the Plan, and all other materials Participant may receive regarding participation in the Plan do not constitute advertising or an offering of securities in Russia. Any issuance of Shares under the Plan has not and will not be registered in Russia and hence the Shares described in any Plan-related documents may not be offered or placed in public circulation in Russia.

Exchange Control Information.

Participant is responsible for complying with any and all Russian foreign exchange requirements in connection with the Restricted Stock Units, and Shares acquired and funds remitted out of or into Russia in connection with the Plan. This may include, in certain circumstances, reporting and repatriation requirements. Participant should contact his or her personal advisor regarding any such requirements resulting from participation in the Plan.

Foreign Asset/Account Reporting Information.

Russian residents will be required to notify the Russian tax authorities within one month of opening or closing a foreign bank account or of changing any account details. Russian residents are also required to file reports of the transactions in their foreign bank accounts with the Russian tax authorities on an annual basis. In addition, Russian residents are required to report any cash transactions with respect to foreign bank accounts to the Russian tax authorities. The tax authorities can require any supporting documents related to the transactions in a Russian resident's foreign bank account. *Participant should consult his or her personal tax advisor to ensure compliance with applicable requirements*.

Foreign Asset/Account Restrictions.

Certain individuals who hold public office in Russia, as well as their spouses and dependent children, are prohibited from opening or maintaining foreign brokerage or bank accounts and holding any securities, whether acquired directly or indirectly, in a foreign company (including Shares acquired under the Plan).

SINGAPORE

Notifications

Securities Law Information.

The grant of the Restricted Stock Units is being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the Singapore Securities and Futures Act (Chapter 289, 2006 Ed.) ("**SFA**"). The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore. Participant should note that the Restricted Stock Units are subject to section 257 of the SFA and Participant will not be able to make any subsequent sale in Singapore of the Shares acquired through the vesting/settlement of the Restricted Stock Units or any offer of such sale in Singapore unless such sale or offer is made pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA.

SOUTH KOREA

Terms and Conditions

Foreign Assets Reporting Information.

Participant understands and agrees that Korean residents must declare all foreign financial accounts (e.g., non-Korean bank accounts, brokerage accounts, etc.) to the Korean tax authority and file a report with respect to such accounts if the value of such accounts exceeds certain thresholds. Participant is encouraged to consult with his or her personal tax advisor to determine how to value his or her foreign accounts for purposes of this reporting requirement and whether he is she is required to file a report with respect to such accounts.

Restrictions on Sale of Shares.

The Korean financial regulator, the Financial Supervisory Service (***FSS***), issued a public notice mandating that after June 19, 2023, Korean citizens and residents are no longer allowed to: (i) sell shares of foreign-listed companies through an overseas broker; or (ii) deposit funds, resulting from the sale of such shares, into an overseas financial institution.

To comply with the new FSS requirements, if Participant is a Korean citizen or resident and wishes to sell the Shares obtained from his or her Restricted Stock Units, Participant shall open an account with a Korean broker, sell such Shares through the Korean broker, and deposit the resulting proceeds in a Korean financial institution or bank. These rules are applicable to any Shares of the Company that Participant has received from Participant's Restricted Stock Units. Korean banks may refuse funds remitted from foreign brokers. Participant is advised to transfer his or her Shares to a Korean broker prior to trading.

As a reminder, there have not been any changes to Participant's responsibility to satisfy any tax obligations arising from the vesting of Restricted Stock Units or the subsequent sale of Shares.

The relevant rules may be subject to change, including without advance prior notice, and with retroactive effect. Participant is strongly encouraged to consult his or her own legal or tax advisors. Neither the Company nor Participant's employer is responsible for any related non-compliance.

SPAIN

Terms and Conditions
Service Conditions.

This provision supplements Section 9 of this Agreement:

In accepting the Restricted Stock Units, Participant consents to participate in the Plan and acknowledges that he or she has received a copy of the Plan.

Participant understands that the Company has unilaterally, gratuitously, and discretionally decided to grant Restricted Stock Units under the Plan to individuals who may be employees of the Company or any Subsidiary throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any Subsidiary, over and above the specific terms of the Plan. Consequently, Participant understands that the Restricted Stock Units are granted on the assumption and condition that the Restricted Stock Units and any Shares acquired upon vesting of the Restricted Stock Units are not part of any employment contract (either with the Company or any Subsidiary) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. In addition, Participant understands that the Restricted Stock Units would not be granted to Participant but for the assumptions and conditions referred to herein; thus, Participant acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the grant of the Restricted Stock Units shall be null and void.

The Restricted Stock Units are conditional rights to Shares and will be forfeited in the case of Participant's termination of employment. This will be the case even if (1) Participant is considered to be unfairly dismissed without cause (*despido improcedente*); (2) Participant is dismissed for disciplinary or objective reasons or due to a collective dismissal, whether adjudged or recognized to be with or without cause; (3) Participant terminates employment due to a change of work location, duties or any other material modification of the terms of employment; (4) Participant terminates employment due to unilateral breach of contract of the Company or any of its Subsidiaries; or (5) Participant's employment terminates for any other reason whatsoever (including, but not limited to, mutual agreement, resignation, retirement, death, permanent disability, causes included in the employment contract, expiry of the temporary contract, force majeure and under Article 10.3 of the Royal Decree Law 1382/1985). Consequently, upon termination of Participant's employment for any of the reasons set forth above, Participant will automatically lose any rights to the unvested Restricted Stock Units granted to him or her as of the date of Participant's termination of employment, as described in the Plan and this Agreement.

Notifications

Securities Law Notice.

The grant of Restricted Stock Units under the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Spain.

The Restricted Stock Unit does not qualify under Spanish Law as securities. No "offer to the public," as defined under Spanish Law, has taken place or will take place in the Spanish territory. Neither the Plan nor this Agreement have been registered with the *Comisión Nacronal del Mercado de Valores* and do not constitute a public offering prospectus.

Foreign Asset/Account Reporting Information.
To the extent that Participant holds Shares and/or has bank accounts outside Spain with a value in excess of a certain legally designated amount (for each type of asset) as of December 31 each year, Participant will be required to report information on such assets through tax form 720. After such Shares and/or accounts are initially reported, the reporting obligation will apply for subsequent years only if the value of any previously reported Shares or accounts increases by more than a certain legally designated amount. Further, Participant is required to declare electronically to the Bank of Spain any securities accounts (including brokerage accounts held abroad), as well as the Shares held in such accounts, if the value of the

transactions during the prior tax year or the balances in such accounts as of December 31 of the prior tax year exceed a certain legally designated amount. The thresholds for foreign asset/account reporting are subject to change. Therefore, Participant shall consult his or her personal advisor in this regard.

Foreign Currency Payments.

When receiving foreign currency payments exceeding €50,000 derived from the ownership of Shares (i.e., dividends or proceeds from the sale of the Shares), Participant must inform the financial institution receiving the payment of the basis upon which such payment is made. Participant will need to provide the following information: (i) Participant's name, address, and fiscal identification number; (ii) the name and corporate domicile of the Company; (iii) the amount of the payment and the currency used; (iv) the country of origin; (v) the reasons for the payment; and (vi) further information that may be required.

SWEDEN

Notifications

Securities Disclaimer.

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Sweden.

Terms and Conditions

Exchange Control.

Participant understands and agrees that foreign and local banks or financial institutions (including brokers) engaged in cross-border transactions generally may be required to report any payments to or from a foreign country exceeding a certain amount to The National Tax Board, which receives the information on behalf of the Swedish Central Bank (Sw.Riksbanken). This requirement may apply even if Participant has a brokerage account with a foreign broker.

SWITZERLAND

Notifications

Securities Law Notification.

The grant of the Restricted Stock Units is considered a private offering in Switzerland and is, therefore, not subject to registration in Switzerland. Neither this Agreement nor any other materials relating to the Restricted Stock Units constitute a prospectus as such term is understood pursuant article 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), and neither this Agreement nor any other materials relating to the Restricted Stock Units may be publicly distributed or otherwise made publicly available in Switzerland. Finally, neither this Agreement nor any other offering or marketing materials relating to the Restricted Stock Units have been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority (in particular, the Swiss Financial Market Supervisory Authority (FINMA)).

TAIWAN

Notifications

Securities Disclaimer.

Neither the Plan nor the Restricted Stock Units are registered in Taiwan with the Securities and Futures Bureau or subject to the securities laws of Taiwan.

Exchange Control Information.

Participant may remit and acquire up to a legally designated amount (currently US$5,000,000) per year in foreign currency (including proceeds from the sale of Shares or the receipt of any dividends) without justification.

If the transaction amount exceeds a legally designated amount (currently TWD500,000) in a single transaction, Taiwanese residents must submit a Foreign Exchange Transaction Form and provide supporting documentation to the satisfaction of the remitting bank. In addition, if the transaction amount exceeds a legally designated amount (currently US$500,000), Participant may be required to provide additional supporting documentation to the satisfaction of the bank involved in the transaction. Participant should consult with Participant's personal advisor to ensure compliance with applicable exchange control laws in Taiwan.

Data Privacy Acknowledgement.

Participant hereby acknowledges that Participant has read and understood the terms regarding the collection, processing, and transfer of Data contained in the Data Privacy section of this Agreement and, by participating in the Plan, Participant agrees to such terms. In this regard, upon request of the Company or any other Subsidiary retaining Participant's service, Participant agrees to provide an executed data privacy consent form to the Company or any other Subsidiary retaining Participant's service (or any other agreements or consents that may be required by the Company or any other Subsidiary retaining Participant's service) that the Company or any other Subsidiary retaining Participant's service may deem necessary to obtain under the data privacy laws in Participant's country, either now or in the future. Participant understands that Participant will not be able to participate in the Plan if Participant fails to execute any such consent or agreement.

UNITED ARAB EMIRATES

Notifications

Securities Law Information.

Participation in the Plan is being offered only to selected Participants and is in the nature of providing equity incentives to Participants in the United Arab Emirates. The Plan and this Agreement are intended for distribution only to such Participants and must not be delivered to, or relied on by, any other person. Prospective acquirers of the securities offered, including Participant, should conduct their own due diligence on the securities.

If Participant does not understand the contents of the Plan and this Agreement, Participant should consult an authorized financial adviser. The Emirates Securities and Commodities Authority and the Dubai Financial Services Authority have no responsibility for reviewing or verifying any documents in connection with the Plan. Neither the Ministry of Economy nor the Dubai Department of Economic Development has approved the Plan or this Agreement nor taken steps to verify the information set out therein and has no responsibility for such documents.

UNITED KINGDOM

Terms and Conditions

Responsibility for Taxes.

The following provisions supplement Section 4 of the Agreement:

Without limitation to Section 4 of the Agreement, Participant agrees that Participant is liable for all Tax Obligations and hereby covenants to pay all such Tax Obligations as and when requested by the Company and/or the employer by HM Revenue and Customs ("**HMRC**") (or any other relevant authority). Participant also agrees to indemnify and keep indemnified the Company and the employer against any taxes that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax or relevant authority) on the Participant's behalf.

Notwithstanding the foregoing, if Participant is a director or an executive officer (as within the meaning of Section 13(k) of the U.S. Securities Exchange Act of 1934, as amended), Participant will not be eligible for such a loan to cover the uncollected income tax. In the event that Participant is a director or executive officer and the income tax is not collected from or paid by Participant within ninety (90) days of the end of the tax year in which the income tax liability arises, or such other period specified in Section 222(1)(c) of the U.K. Income Tax (Earnings and Pensions) Act 2003, Participant understands that the amount of any uncollected income tax may constitute a benefit to Participant on which additional income tax and national insurance contributions ("**NICs**") may be payable. Participant will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for reimbursing the Company or the employer (as appropriate) for the value of any employee NICs due on this additional benefit, which the Company and/or the employer may recover from Participant by any of the means referred to in Section 4 of the Agreement.

Notifications

Securities Disclosure.

Neither this Agreement nor Appendix is an approved prospectus for the purposes of section 85(1) of the Financial Services and Markets Act 2000 ("**FSMA**") and no offer of transferable securities to the public (for the purposes of section 102B of FSMA) is being made in connection with the Plan. The Plan and the Restricted Stock Units are exclusively available in the UK to bona fide employees and former employees and any other UK Subsidiary.

Non-Qualification.

The Restricted Stock Unit is not intended to be tax-qualified or tax-preferred for purposes of tax rules in the United Kingdom.

Tax Consultation.

Participant understands that he or she may suffer adverse tax consequences as a result of Participant's acquisition or disposition of the Shares. Participant represents that he or she will consult with any tax advisors Participant deems appropriate in connection with the acquisition or disposition of the Shares and that Participant is not relying on the Company or any Subsidiary for any tax advice.

Prohibition Against Insider Dealing.

Participant should be aware of:

1. the insider dealing rules of the Regulation (EU) No 596/2014 of the European Parliament and Council (Market Abuse Regulation) which apply in the UK; and

2. the UK's insider dealing rules under the Criminal Justice Act 1993, each of which may affect transactions under the Plan such as the acquisition or sale of Shares acquired under the Plan, if Participant has inside information regarding the Company. If Participant is uncertain whether the insider dealing rules apply, the Company recommends that Participant consult with a legal advisor. The Company cannot be held liable if Participant violates the UK's insider dealing rules. Participant is responsible for ensuring his or her compliance with these rules.

Exhibit 10.6.1

10X GENOMICS, INC.

2019 EMPLOYEE STOCK PURCHASE PLAN SUBSCRIPTION AGREEMENT

(U.S. and Non-U.S. Participants)

Capitalized terms used but not otherwise defined herein shall have the respective meanings given to such terms in the 10x Genomics, Inc. (the "Company") 2019 Employee Stock Purchase Plan (the "Plan").

1. By electronically accepting this 2019 Employee Stock Purchase Plan Subscription Agreement (this "Subscription Agreement") and the Appendix to this Subscription Agreement, I hereby elect to participate in the Plan and subscribe to purchase shares of Class A Common Stock in accordance with the terms of the Plan and this Subscription Agreement. If I reside outside of the United States, I acknowledge and agree that I participate in the Non-423 Component of the Plan.

2. I hereby authorize payroll deductions from each payroll at the percentage of my Compensation (from 1% to 15%) as indicated on the online enrollment on each pay day during the Offering Period in accordance with the Plan (please note that no fractional percentages are permitted). I acknowledge that a lesser percentage of my Compensation than indicated by me may be contributed if necessary to comply with applicable law (in particular, applicable law related to minimum salary requirements).

3. I understand that, if my payroll deductions under the Plan are made in any currency other than U.S. dollars, such payroll deductions will be converted to U.S. dollars on or prior to Exercise Date using a prevailing exchange rate in effect at the time such conversion is performed, as determined by the Committee. I understand and agree that neither the Company nor any Parent or Subsidiary shall be liable for any foreign exchange rate fluctuation between my local currency and the U.S. Dollar that may affect the value of the Purchase Right granted to me under the Plan, or of any amounts due to me under the Plan or as a result of the subsequent sale of any shares of Class A Common Stock acquired under the Plan.

4. ***Payroll Deductions.***

   a. ***The following provisions shall only apply to me if I reside in the United States:*** I understand that the payroll deductions will be accumulated for the purchase of shares of Class A Common Stock at the applicable Purchase Price for each Purchase Period ending during the Offering Period determined in accordance with the Plan. I understand that if I do not withdraw from an Offering Period, any accumulated payroll deductions will be used to automatically exercise my option and purchase shares of Class A Common Stock under the Plan on the Exercise Date for each Purchase Period ending during the Offering Period. Notwithstanding the foregoing, and notwithstanding anything in the Plan to the contrary, to the extent that my accumulated payroll deductions would result in my ability to purchase more than 2,000 shares of Class A Common Stock during any Offering Period (the "Offering Period Maximum"), I understand and agree that I will only be permitted to purchase a number of shares of Class A Common Stock equal to the Offering Period Maximum, and that any excess payroll deductions remaining after such purchase will be returned to me as soon as practicable following the expiration of such Offering Period.

   b. ***The following provisions shall only apply to me if I reside outside the United States:*** I understand that the payroll deductions will be accumulated for the purchase of shares of Class A Common Stock at the applicable Purchase Price for each Purchase Period ending during the Offering Period determined in accordance with the Plan. I understand that if I do not withdraw from an Offering Period, any accumulated payroll deductions will be used to automatically exercise the Purchase Right (as defined below) and purchase shares of Class A Common Stock under the Plan on the Exercise Date for each Purchase Period ending during the Offering Period. Notwithstanding the foregoing, and notwithstanding anything in the Plan to the contrary, to the extent that my accumulated payroll deductions would result in my ability to purchase more than 2,000 shares of Class A

Common Stock during any Offering Period (the "Offering Period Maximum"), I understand and agree that I will only be permitted to purchase a number of shares of Class A Common Stock equal to the Offering Period Maximum, and that any excess payroll deductions remaining after such purchase will be returned to me as soon as practicable following the expiration of such Offering Period.

Regardless of any action the Company or, if applicable, any Parent or Subsidiary takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to the participation in the Plan and legally applicable to me ("Tax-Related Items"), I acknowledge that the ultimate liability for all Tax-Related Items is and remains my responsibility and may exceed the amount actually withheld by the Company or, if applicable, any Parent or Subsidiary. I further acknowledge that the Company or, if applicable, any Parent or Subsidiary (1) makes no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Purchase Right (as defined below) to purchase a number of shares of Class A Common Stock determined by dividing such Eligible Employee's Contributions accumulated prior to such Exercise Date and retained in the Eligible Employee's account as of the Exercise Date by the applicable Purchase Price (the "Purchase Right"), including, but not limited to, the grant or exercise of the Purchase Right, purchase of shares of Class A Common Stock upon exercise of the Purchase Right, the subsequent sale of shares of Class A Common Stock acquired pursuant to such exercise and the receipt of any dividends and/or any dividend equivalents; and (2) does not commit to and are under no obligation to structure the terms of the Purchase Right or any aspect of the Purchase Right to reduce or eliminate the my liability for Tax-Related Items or achieve any particular tax result. Further, if I am subject to tax in more than one jurisdiction, I acknowledge that the Company or, if applicable, any Parent or Subsidiary may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable or tax withholding event, as applicable, I will pay or make adequate arrangements satisfactory to the Company or, if applicable, any Parent or Subsidiary to satisfy all Tax-Related Items. In this regard, I authorize the Company or, if applicable, any Parent or Subsidiary, or their respective agents, at their discretion, to satisfy their withholding obligations with regard to all Tax-Related Items by one or a combination of the following:

(i) withholding from my wages or other cash compensation paid to me by the Company or, if applicable, any Parent or Subsidiary;

(ii) withholding from proceeds of the sale of shares of Class A Common Stock acquired upon exercise of the Purchase Right either through a voluntary sale or through a mandatory sale arranged by the Company (on my behalf pursuant to this authorization without further consent); or

(iii) withholding in shares of Class A Common Stock to be purchased upon exercise of the Purchase Right.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates, in which case I will receive a refund of any over-withheld amount in cash and will have no entitlement to the shares of Class A Common Stock equivalent. If the obligation for Tax-Related Items is satisfied by withholding in shares of Class A Common Stock, for tax purposes, I am deemed to have purchased the full number of shares of Class A Common Stock subject to the Purchase Right, notwithstanding that a number of the shares of Class A Common Stock are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of the participation in the Plan. Finally, I must pay to the Company or, if applicable, any Parent or Subsidiary any amount of Tax-Related Items that the Company or, if applicable, any Parent or Subsidiary may be required to withhold or account for as a result of my participation in the Plan that cannot be satisfied by the means previously

described. The Company may refuse to sell or deliver the shares of Class A Common Stock or the proceeds of the sale of shares of Class A Common Stock, if I fail to comply with my obligations in connection with the Tax-Related Items.

5. I have received a copy of the complete Plan and its accompanying prospectus. I understand that my participation in the Plan is in all respects subject to the terms of the Plan, including this Subscription Agreement. Any conflict between this Subscription Agreement and the Plan will be resolved in favor of the Plan. The Company reserves the right to modify the Plan and to impose other requirements on my participation in the Plan, on the option and on any shares of Common Stock purchased under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons. I agree to be bound by such modifications regardless of whether notice is given to me of such event, subject, in any case, to my right to withdraw from participation in the Plan. I further agree to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

6. I understand that if I sell or otherwise dispose of any shares of Class A Common Stock received by me pursuant to an Offering within two (2) years after the applicable Enrollment Date (generally the first Trading Day of the applicable Offering Period) or one (1) year after the applicable Exercise Date (generally the last Trading Day of the applicable Purchase Period), I will be treated for U.S. federal income tax purposes as having received ordinary income at the time of such disposition in an amount equal to the excess of the Fair Market Value of the shares of Class A Common Stock at the time such shares of Class A Common Stock were purchased by me over the Purchase Price. I hereby agree to notify the Company in writing within thirty (30) days after the date of any disposition of my shares of Class A Common Stock and I will make adequate provision for U.S. federal, state or other tax withholding obligations, if any, which arise upon the disposition of the shares of Class A Common Stock. The Company may, but will not be obligated to, withhold from my compensation the amount necessary to meet any applicable withholding obligation including any withholding necessary to make available to the Company any tax deductions or benefits attributable to the sale or early disposition of shares of Class A Common Stock by me. If I dispose of such shares of Class A Common Stock at any time after the expiration of the two (2)-year and one (1)-year holding periods described above, I understand that I will be treated for U.S. federal income tax purposes as having received income only at the time of such disposition, and that such income will be taxed as ordinary income only to the extent of an amount equal to the lesser of: (a) the amount by which the Fair Market Value of the shares of Class A Common Stock on the date of the disposition exceeds the Purchase Price paid for the shares of Class A Common Stock (generally 85% of the Fair Market Value of the shares of Class A Common Stock on the Enrollment Date or on the Exercise Date, whichever is lower), or (b) 15% of the Fair Market Value of the shares of Class A Common Stock on the Enrollment Date. The remainder of the gain, if any, recognized on such disposition will be taxed as capital gain.

7. ***The following provisions shall only apply to me if I reside outside the United States:*** By electing to participate in the Plan, I hereby acknowledge and agree that:

(a) The Plan is established voluntarily by the Company. It is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Subscription Agreement.

(b) The grant of the Purchase Right is voluntary and occasional and does not create any contractual or other right to receive future grants of the Purchase Right, or benefits in lieu of the Purchase Right, even if the Purchase Rights have been granted repeatedly in the past.

(c) All decisions with respect to future Purchase Right grants, if any, will be at the sole discretion of the Company.

(d) The Purchase Right grant and my participation in the Plan shall not create a right to further employment or service or be interpreted as forming an employment or service contract with the Company or, if applicable, any Parent or Subsidiary and shall not interfere with the ability of with the Company or, if applicable, any Parent or Subsidiary to terminate my service or employment, subject to applicable law.

(e) I am voluntarily participating in the Plan.

(f) The Purchase Rights, any shares of Class A Common Stock acquired under the Plan and the income and value of the same are an extraordinary item that does not constitute compensation of any kind for service of any kind rendered to the Company or, if applicable, any Parent or Subsidiary, and which is outside the scope of my employment contract, if any.

(g) The Purchase Rights are not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or similar payments.

(h) The Purchase Rights, the shares of Class A Common Stock and the value and income of same are not part of normal or expected compensation or salary for any purpose.

(i) In the event that I am not an employee of the Company or, if applicable any Parent or Subsidiary, the Purchase Rights grant will not be interpreted to form an employment contract or relationship with the Company or, if applicable, any Parent or Subsidiary.

(j) The future value of the underlying shares of Class A Common Stock is unknown, indeterminable and cannot be predicted with certainty. The value of the shares of Class A Common Stock may increase or decrease even below the Purchase Price.

(k) No claim or entitlement to compensation or damages will arise from forfeiture of the Purchase Rights resulting from my termination as an employee or service provider, as applicable (for any reason whatsoever and whether or not in breach of applicable laws), and in consideration of the grant of the Purchase Right to which I am otherwise not entitled, I irrevocably agree never to institute any claim against the Company, any Parent or Subsidiary, waive my ability, if any, to bring such claim against the Company, any Parent or Subsidiary, and release the Company, any Parent or Subsidiary from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, I shall be deemed irrevocably to have agreed not to pursue such claim and agree to execute any and all documents necessary, or reasonably requested by the Company, to request dismissal or withdrawal of such claims.

(l) None of the Company, any Parent or Subsidiary will be liable for any foreign exchange rate fluctuation between any local currency and the United States Dollar that may affect the value of the Purchase Right, any amounts due to me pursuant to the exercise of the Purchase Rights or the subsequent sale of any purchased shares of Class A Common Stock.

8. *Data Privacy*.

The following provisions shall only apply to me if I reside outside the United States, the United Kingdom, or the European Economic Area:

(a) I voluntarily consent to the collection, use, disclosure and transfer to the United States and other jurisdictions, in electronic or other form, of my personal data as described in this Subscription Agreement and any other award materials ("Data") by and among, as applicable, the Company and any Parent or Subsidiary for the exclusive purpose of implementing, administering, and managing my participation in the Plan.

(b) I understand that the Company and any Parent or Subsidiary may collect, maintain, process and disclose, certain personal information about me, including, but not limited to, my name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of Class A Common Stock or directorships held in the Company, details of all equity awards or any other entitlement to stock awarded, canceled, exercised, vested, unvested or outstanding in my favor, for the exclusive purpose of implementing, administering and, managing the Plan.

(c) I understand that Data will be transferred to one or more stock plan service provider(s) selected by the Company, which may assist the Company with the implementation, administration and management of the Plan. I understand that the recipients of the Data may be located in the United States

or elsewhere, and that the recipient's country (e.g., the United States) may have different, including less stringent, data privacy laws and protections than my country. I understand that if I reside outside the United States, I may request a list with the names and addresses of any potential recipients of the Data by contacting my local human resources representative. I authorize the Company and any other possible recipients that may assist the Company (presently or in the future) with implementing, administering and managing the Plan to receive, possess, use, retain and transfer the Data, in electronic or other form, for the sole purposes of implementing, administering and managing my participation in the Plan.

(d) I understand that Data will be held only as long as is necessary to implement, administer and manage my participation in the Plan, including to maintain records regarding participation. I understand that if I reside in certain jurisdictions, to the extent required by applicable laws, I may, at any time, request access to Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents given by accepting these Purchase Rights, in any case without cost, by contacting in writing my local human resources representative. Further, I understand that I am providing these consents on a purely voluntary basis. If I do not consent or if I later seek to revoke my consent, my engagement as a service provider with the Company or any Parent or Subsidiary will not be adversely affected; the only consequence of refusing or withdrawing my consent is that the Company will not be able to grant me awards under the Plan or administer or maintain awards. Therefore, I understand that refusing or withdrawing my consent may affect my ability to participate in the Plan (including the right to retain these Purchase Rights). I understand that I may contact my local human resources representative for more information on the consequences of my refusal to consent or withdrawal of consent.

The following provisions shall only apply to me if I reside in the European Economic Area or the United Kingdom:

(a) Data Collected and Purposes of Collection. I understand that the Company, acting as the controller, as well as the employer, may collect, to the extent permissible under applicable law, certain personal information about my, including name, home address and telephone number, information necessary to process the Purchase Right (e.g., mailing address for a check payment or bank account wire transfer information), date of birth, social insurance number or other identification number, salary, nationality, job title, employment location, any capital shares or directorships held in the Company (but only where needed for legal or tax compliance), any other information necessary to process mandatory tax withholding and reporting, details of all Purchase Rights granted, canceled, vested, unvested or outstanding in my favor, and where applicable service termination date and reason for termination (all such personal information is referred to as "Data"). The Data is collected from me, any Parent or Subsidiary, and from the Company, for the exclusive purpose of implementing, administering and managing the Plan pursuant to the terms of this Subscription Agreement. The legal basis (that is, the legal justification) for processing the Data is to perform this Subscription Agreement. The Data must be provided in order for me to participate in the Plan and for the parties to this Subscription Agreement to perform their respective obligations thereunder. If I do not provide Data, I will not be able to participate in the Plan and become a party to this Subscription Agreement.

(b) Transfers and Retention of Data. I understand that my employer will transfer Data to the Company for purposes of plan administration. The Company and the employer or any Parent or Subsidiary may also transfer my Data to other service providers (such as accounting firms, payroll processing firms or tax firms), as may be selected by the Company in the future, to assist the Company with the implementation, administration and management of this Subscription Agreement. I understand that the recipients of the Data may be located in the United States, a country that does not benefit from an adequacy decision issued by the European Commission. Where a recipient is located in a country that does not benefit from an adequacy decision, the transfer of the Data to that recipient will be made pursuant to the EU-U.S. Data Privacy Framework or standard contractual clauses approved by the European Commission, a copy of which may be obtained at gc@10xgenomics.com. I understand that Data will be held only as long as is necessary to implement, administer and manage my rights and obligations under this Subscription Agreement, and for the duration of the relevant statutes of limitations, which may be longer than the term of this Subscription Agreement.

(c) Participant's Rights in Respect of Data. The Company will take steps in accordance with applicable legislation to keep Data accurate, complete and up-to-date. I am entitled to have any inadequate, incomplete or incorrect Data corrected (that is, rectified). I also have the right to request access to my Data as well as additional information about the processing of that Data. Further, I am entitled to object to the processing of Data or have my Data erased, under certain circumstances. As from May 25, 2018, and subject to conditions set forth in applicable law, I also am entitled to (i) restrict the processing of my Data so that it is stored but not actively processed (e.g., while the Company assesses whether I am entitled to have Data erased) and (ii) receive a copy of the Data provided pursuant to this Subscription Agreement or generated by me, in a common machine-readable format. To exercise my rights, I may contact the local human resources representative. I may also contact the relevant data protection supervisory authority, as I have the right to lodge a complaint. The data protection officer may be contacted at gc@10xgenomics.com.

9. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. I hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an online or electronic system established and maintained by the Company or another third party designated by the Company. I agree that the foregoing online or electronic participation in the Plan shall have the same force and effect as documentation executed in hardcopy written form.

10. I acknowledge that the Company is neither providing any tax, legal or financial advice, nor is the Company making any recommendations regarding my participation in the Plan or my acquisition or sale of the underlying shares of Class A Common Stock. I understand that I am hereby advised to consult with my own personal tax, legal and financial advisors regarding my participation in the Plan before taking any action related to the Plan.

11. This Subscription Agreement shall be governed by and construed in accordance with the internal laws of the State of Delaware applicable to contracts made and performed wholly within the State of Delaware, without giving effect to the conflict of laws provisions thereof.

12. I hereby agree to be bound by the terms of the Plan, including this Subscription Agreement which is incorporated and made a part thereof. The effectiveness of this Subscription Agreement is dependent upon my eligibility to participate in the Plan.

13. If I have received the Subscription Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control, subject to applicable laws.

14. I acknowledge and agree that it is my sole responsibility to investigate and comply with any applicable exchange control laws in connection with the issuance and delivery of shares of Class A Common Stock pursuant to the exercise of the Purchase Right and that [I shall be responsible for any reporting of inbound and/or outbound international fund transfers required under applicable law. I am advised to seek appropriate professional advice as to how the exchange control regulations apply to my specific situation.

15. The Company reserves the right to impose other requirements on my participation in the Plan, on the Purchase Right and on any shares of Class A Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require me to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

16. There may be certain foreign tax, asset and/or account reporting requirements which may affect my ability to acquire or hold shares of Class A Common Stock or cash received from participating in the Plan in a brokerage or bank account outside my country. I may be required to report such accounts, assets or related transactions to the tax or other authorities in my country. I also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to my country within a certain time after receipt. I acknowledge that it is my responsibility to comply with such regulations, and is advised to speak to a personal advisor on this matter.

17. I may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, including, but not limited to, my country, which may affect my ability to accept, acquire, sell, or otherwise dispose of shares of Class A Common Stock, rights to shares of Class A Common Stock (*e.g.*, the Purchase Right) or rights linked to the value of shares of Class A Common Stock under the Plan during such times as I am considered to have "inside information" regarding the Company (as defined by the laws in the applicable jurisdictions). Insider trading laws and regulations may prohibit the cancellation or amendment of orders I placed before I possessed inside information. Furthermore, I could be prohibited from (a) disclosing the inside information to any third party, and (b) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Neither the Company nor any Parent or Subsidiary will be responsible for such restrictions or liable for the failure on my part to know and abide by such restrictions. I should consult with my own personal legal advisers to ensure compliance with local laws.

18. ***The following provisions shall only apply to me if I reside outside the United States:*** I understand and agree that notwithstanding any provisions in the Plan and this Subscription Agreement, the grant of the Purchase Right shall be subject to any special terms and conditions set forth in the Appendix to this Subscription Agreement for my country. Moreover, if I relocate to one of the countries included in the Appendix, the special terms and conditions for such country will apply to me, to the extent the Company determines that the application of such provisions is necessary or advisable in order to comply with laws of the country where I reside or to facilitate the administration of the Plan. The Appendix constitutes part of this Subscription Agreement.

I HEREBY AGREE TO BE BOUND BY THE TERMS OF THE PLAN AND I UNDERSTAND THAT THIS SUBSCRIPTION AGREEMENT AND MY PARTICIPATION IN THE PLAN WILL REMAIN IN EFFECT THROUGHOUT SUCCESSIVE OFFERING PERIODS UNLESS AFFIRMATIVELY TERMINATED BY ME.

[Signature page to Subscription Agreement (Non-U.S.)]

APPENDIX

ADDITIONAL TERMS AND CONDITIONS OF THE 10x GENOMICS, INC.

2019 EMPLOYEE STOCK PURCHASE PLAN SUBSCRIPTION AGREEMENT

FOR NON-UNITED STATES PARTICIPANTS

This Appendix includes additional terms and conditions that govern the Purchase Right granted to me under the Plan if I reside in one of the countries listed below. Capitalized terms used but not defined in this Appendix have the meanings set forth in the Plan and/or the Subscription Agreement.

This Appendix also includes information regarding securities, exchange controls and/or certain other issues of which I should be aware with respect to participation in the Plan. Such laws are often complex and change frequently. As a result, the Company strongly recommends that I do not rely on the information in this Appendix as the only source of information relating to the consequences of participation in the Plan because the information may be out of date at the time I exercise the Purchase Right and purchase the shares of Class A Common Stock or I sell shares of Class A Common Stock purchased under the Plan. In addition, the information contained herein is general in nature and may not apply to my particular situation and the Company is not in a position to assure a particular result. Accordingly, I am advised to seek appropriate professional advice as to how the relevant laws in my country may apply to my situation. Finally, if I am a citizen or resident of a country other than the one in which I am currently working, the information contained herein may not be applicable to me.

GERMANY

Notifications

Exchange Control Information

If I remit proceeds in excess of the legally designated amount out of or into Germany, such cross-border payment shall be reported monthly to the State Central Bank. In the event that I make or receive payment in excess of this amount, I am responsible for obtaining the appropriate form from a German bank and complying with applicable reporting requirements. In addition, I may be required to report the acquisition of securities (e.g., shares of Class A Common Stock) to the Bundesbank via email or telephone if the value of the securities exceeds a certain threshold. *I am responsible for complying with applicable reporting requirements and should consult with a personal legal advisor to ensure compliance.*

Securities Disclaimer

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Germany.

Terms and Conditions

Prohibition on Insider Dealing
I should be aware that the insider dealing rules of the Regulation (EU) No 596/2014 of the European Parliament and Council (Market Abuse Regulation) apply in Germany, which may affect transactions under the Plan such as the subscription or participation, the suspension, the cancellation or an amending order, the acquisition or sale of shares of Class A Common Stock acquired under the Plan, if I have inside information regarding the Company or any of its Parent or Subsidiaries. I am advised to determine carefully whether I have inside information in respect of the Company and whether and to what extent insider dealing rules can apply to me. In case of uncertainty, the Company recommends that I consult with a legal advisor.

Limitation of Liability

I am responsible for compliance with any laws to be observed by me in person in conjunction with participation in the Plan. The Company cannot be held liable if I violate German law or any other applicable rules to be complied with by me in conjunction with participation in the Plan including, but not limited to, insider dealing restrictions under the Market Abuse Regulation.

NETHERLANDS

Notifications

Prohibition Against Insider Trading

I should be aware of the Dutch insider trading rules, which may affect the sale of shares of Class A Common Stock acquired under the Plan. In particular, I may be prohibited from effecting certain share transactions if I have insider information regarding the Company. Below is a discussion of the applicable restrictions. I am advised to read the discussion carefully to determine whether the insider rules could apply to me. If it is uncertain whether the insider rules apply, the Company recommends that I consult with a legal advisor. The Company cannot be held liable if I violate the Dutch insider trading rules. I am responsible for ensuring my compliance with these rules.

Dutch securities laws prohibit insider trading. As of 3 July 2016, the European Market Abuse Regulation (MAR), is applicable in the Netherlands. For further information, I am referred to the website of the Authority for the Financial Markets (*AFM*): https://www.afm.nl/en/sector/effectenuitgevende-ondernemingen.

Given the broad scope of the definition of inside information, certain employees of the Company working at its Dutch Subsidiary may have inside information and thus are prohibited from making a transaction in securities in the Netherlands at a time when they have such inside information. By entering into the Subscription Agreement and participating in the Plan, I acknowledge having read and understood the notification above and acknowledge that it is my responsibility to comply with the Dutch insider trading rules, as discussed herein.

Securities Disclaimer

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in the Netherlands.

SINGAPORE

Notifications

Securities Law Information

The grant of the Purchase Right under the Plan is being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the Singapore Securities and Futures Act (Chapter 289, 2006 Ed.) ("SFA"). The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore. Further, the Purchase Rights granted under the Plan are subject to section 257 of the SFA and I am not permitted to sell, or offer to sell, any shares of Class A Common Stock in Singapore unless such sale or offer is made pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA.

Insider Trading Notification

I should be aware of the Singapore insider-trading rules as these rules may impact my ability to acquire or dispose of shares of Class A Common Stock or rights to acquire shares (*e.g.*, the Purchase Rights granted under the Plan). Under the Singapore insider-trading rules, I am prohibited from selling shares of Class A Common Stock when I am in possession of information concerning the Company which is not generally available and which I know or should know will have a material effect on the price of such shares once such information is generally available.

SWEDEN

Notifications

Exchange Control

I understand and agree that foreign and local banks or financial institutions (including brokers) engaged in cross-border transactions generally may be required to report any payments to or from a foreign country exceeding a certain amount to The National Tax Board, which receives the information on behalf of the Swedish Central Bank (Sw.Riksbanken). This requirement may apply even if I have a brokerage account with a foreign broker.

Securities Disclaimer

Participation in the Plan is exempt or excluded from the requirement to publish a prospectus under the EU Prospectus Regulation as implemented in Sweden.

UNITED KINGDOM

Notification

Securities Disclaimer

Neither this Subscription Agreement nor Appendices are an approved prospectus for the purposes of section 85(1) of the Financial Services and Markets Act 2000 ("FSMA") and no offer of transferable securities to the public (for the purposes of section 102B of FSMA) is being made in connection with the Plan. The Plan is exclusively available in the UK to bona fide employees and former employees and any other UK Subsidiary.

Non-Qualification

The Purchase Rights are not intended to be tax-qualified or tax-preferred for purposes of tax rules in the United Kingdom.

Tax Consultation

I understand that I may suffer adverse tax consequences as a result of my acquisition or disposition of the shares of Class A Common Stock. I represent that I will consult with any tax advisors I deem appropriate in connection with the acquisition or disposition of the shares of Class A Common Stock and that I am not relying on the Company or any Subsidiary for any tax advice.

Prohibition Against Insider Dealing

I should be aware of the UK's insider dealing rules under the Criminal Justice Act 1993, which may affect transactions under the Plan such as the acquisition or sale of shares of Class A Common Stock acquired under the Plan, if I have inside information regarding the Company. If I am uncertain whether the insider dealing rules apply, the Company recommends that I consult with a legal advisor. The Company cannot be held liable if I violate the UK's insider dealing rules. I am responsible for ensuring his or her compliance with these rules.

Terms and Conditions

Tax Withholding

I acknowledge that, regardless of any action taken by the Company or the employer, the ultimate liability for all Tax-Related Items is and remains the responsibility of mine and may exceed the amount actually withheld by the Company or the employer.

Tax Indemnity. To the extent permitted by law, I hereby agree to indemnify and keep indemnified the Company, and the Company as trustee for and on behalf of any related corporation, for any Tax-Related Items and Secondary NIC Liability. The Company shall not be obliged to allot and issue any shares of Class A Common Stock or any interest in shares of Class A Common Stock pursuant to the delivery of shares of Class A Common Stock under the Purchase Right unless and until I have paid to the Company such sum as is, in the opinion of the Company, sufficient to indemnify the Company in full against the Tax-Related Items and the Secondary NIC Liability, or I have made such other arrangement as in the opinion of the Company will ensure that the full amount of any Tax-Related Items and any Secondary NIC Liability will be recovered from me within such period as the Company may then determine. In the absence of any such other arrangement being made, the Company shall have the right to retain out of the aggregate number of shares to which I would have otherwise been entitled upon the delivery of shares of Class A Common Stock under the Purchase Right, such number of shares of Class A Common Stock as, in the opinion of the Company, will enable the Company to sell as agent for me (at the best price which can reasonably expect to be obtained at the time of the sale) and to pay over to the Company sufficient monies out of the net proceeds of the sale, after deduction of all fees, commissions and expenses incurred in relation to such sale, to satisfy my liability under such indemnity.

Exhibit 10.28

TRANSITION AND SEPARATION AGREEMENT

This Transition and Separation Agreement (the "Agreement") by and between James Wilbur ("Executive") and 10x Genomics, Inc., a Delaware corporation (the "Company"), is made effective as of the date Executive signs this Agreement (the "Effective Date") with reference to the following facts:

A. Executive's services to the Company and its affiliates will end on the Termination Date (as defined below), subject to the terms and conditions of this Agreement.

B. Executive and the Company are parties to an offer letter dated July 12, 2022 and Executive is also a participant in the Company's Death and Disability Policy effective as of January 26, 2022 and Change in Control Severance Policy (the "Severance Policy") effective as of July 30, 2020 (collectively, the "Prior Agreements").

C. Executive and the Company desire to establish the obligations of the parties in connection with Executive's separation from the Company including, without limitation, all amounts due and owing to Executive.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties agree as follows:

1. Chief Commercial Officer Employment.

(a) *Transition Period*. During the period (the "Transition Period") commencing on the Effective Date and ending on the Termination Date (as defined below), Executive shall remain employed by the Company as the Company's Chief Commercial Officer reporting to the Chief Executive Officer of the Company (the "CEO"). The Termination Date shall be Executive's last day of employment. Effective as of the Termination Date, Executive shall also cease serving as an executive officer of the Company. During the Transition Period, Executive shall perform such duties as are reasonably requested by the CEO, including advising the Company and responding to requests for information (the "Transition Services"). During the Transition Period, Executive will devote such time and attention during normal business hours to the business and affairs of the Company as is reasonably necessary to perform the Transition Services. Executive shall not commence employment or provide services to any third party (e.g., consulting services) on or prior to the Termination Date, however Executive shall not be prohibited from seeking employment with another employer during the Transition Period. For the purposes hereof, "Termination Date" shall mean the earliest of (i) the date the Company terminates Executive's employment with the Company for Cause (as defined in the Severance Policy), (ii) the date that Executive voluntarily terminates Executive's employment with the Company for any reason (each of (i) and (ii), a "Non-Qualifying Termination"), (iii) the date the Company terminates Executive's employment with the Company for other than Cause or (iv) February 1, 2024 (each of (iii) and (iv), a "Qualifying Termination"). For the avoidance of doubt, the Transition Period shall not be extended beyond the Termination Date in the event of any leave of absence by Executive or in the event of Executive's death or Disability (as defined in the Company's Death and Disability Policy).

(b) *Salary, Equity Vesting and Benefits Continuation*. During the Transition Period, Executive will continue to be paid base salary at the rate in effect

on the date of this Agreement in accordance with the Company's regular payroll procedures, be eligible for all employee benefit plans available to senior executives of the Company and continue to vest into outstanding equity awards, in each case, in accordance with their terms. Notwithstanding the foregoing, in no event will Executive be eligible for any severance or benefits under the Severance Policy, and shall only be eligible for the benefits and payments set forth herein. All payments made to Executive during the Transition Period will be subject to required withholding taxes and authorized deductions. During the tail period applicable to other departing officers of the Company, the Company shall maintain director and officer liability insurance covering Executive providing the same level of coverage as the director and officer liability insurance covering other Company executives. Executive shall not be eligible for any bonus or to participate in any of the Company's annual incentive plans, including that Executive shall not be entitled to any annual performance bonus under the Company's Annual Incentive Plan for the full year of 2023. Executive shall not be eligible to earn any compensation following the Termination Date.

(c) *Protection of Information*. Executive reaffirms Executive's commitment to remain in compliance with that certain At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement entered into between Executive and the Company (the "Confidentiality Agreement"). Without limiting the foregoing, Executive acknowledges and agrees that, during the Transition Period, Executive shall not, directly or indirectly, become employed by or provide assistance to any competitor of the Company or otherwise create a conflict of interest under the Company's Code of Business Conduct and Ethics.

(d) *Securities Laws.* Executive acknowledges that to the extent required by the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Executive will have continuing obligations under Section 16(a) and 16(b) of the Exchange Act to report matching transactions, if any, in Company common stock for six (6) months following the Termination Date. Executive further acknowledges that any transactions by Executive involving Company securities will remain subject to securities laws in all respects, including, without limitation, laws regarding trading while in possession of material nonpublic information.

2. Final Paycheck; Payment of Accrued Wages and Expenses.

(a) *Final Paycheck*. As soon as administratively practicable on or after the Termination Date, the Company will pay Executive all accrued but unpaid base salary earned through the Termination Date, subject to standard payroll deductions and withholdings. Executive is entitled to these payments regardless of whether Executive executes this Agreement or the Release of Claims (as defined below).

(b) *Business Expenses*. The Company shall reimburse Executive for all outstanding expenses incurred prior to the Termination Date that are consistent with the Company's policies in effect from time to time with respect to travel, entertainment and other business expenses, subject to the Company's requirements with respect to reporting and documenting such expenses. Executive is entitled to these reimbursements regardless of whether Executive executes this Agreement or the Release of Claims.

(c) *No Additional Benefits for Non-Qualifying Termination*. In the event Executive experiences a Non-Qualifying Termination, then Executive shall not be entitled to any compensation or benefits.

3. Separation Payments and Benefits. Without admission of any liability, fact or claim, the Company hereby agrees, subject to (i) this Agreement becoming effective, (ii) Executive experiencing a Qualifying Termination and successfully completes the Transition Services, (iii) the delivery to the Company of the release of claims in the form attached hereto as Exhibit A (the "Release of Claims") that is timely signed and not revoked by Executive on or after the Termination Date and (iv) Executive's not being in breach of the Confidentiality Agreement, to provide Executive the severance benefits set forth below. Specifically, the Company and Executive agree as follows:

(a) *Severance*. To the extent that the Qualifying Termination occurs prior to February 1, 2024, then during the Severance Period (as defined below), the Company shall continue to pay Executive his base salary at the rate in effect immediately prior to the Termination Date. Such payments shall be made in accordance with the Company's standard payroll practices, less applicable deductions and withholdings, beginning on the first payroll date following the date the Release of Claims becomes effective and irrevocable and with the first installment including any amounts that would have been paid had the Release of Claims been effective and irrevocable on the Termination Date. For the purposes hereof, "Severance Period" shall mean the period commencing on the Termination Date and ending on February 1, 2024.

(b) *Separation Payment*. Executive shall be entitled to a one time separation payment of $204,000, less applicable deductions and withholdings. Such severance payment shall be made in a single lump sum on the first payroll date following the date the Release of Claims becomes effective and irrevocable.

(c) *Healthcare Payment*. Executive shall be entitled to a one time payment of $14,335, less applicable deductions and withholdings, to assist Executive with securing COBRA coverage for Executive and Executive's covered dependents, if any ("Healthcare Payment"). For the avoidance of doubt, Executive may use the Healthcare Payment for any purpose, and is not obligated to elect COBRA or similar healthcare benefits after the Termination Date. The Healthcare Payment shall be made in a single payment on the first payroll date following the date the Release of Claims becomes effective and irrevocable.

(d) *Equity Awards*. If the Qualifying Termination occurs prior to February 1, 2024, then the vesting of each of Executive's outstanding unvested equity awards which are subject to time-based vesting shall immediately accelerate in respect of that number of shares that would have vested through the end of the Severance Period had Executive's services continued through such date. Notwithstanding the foregoing, any unvested portions of Executive's market-based performance stock award granted on March 21, 2023 shall not be accelerated, even in the event of a Qualifying Termination prior to February 1, 2024, and shall vest, pursuant to such award's terms, only in the event, and to the extent, that the performance vesting conditions of such award are met prior to the Termination Date. In the event Executive's death or Disability terminates Executive's employment with, or service to, the Company prior to the Termination Date, the foregoing acceleration provisions of this Section 3(d) shall not apply and instead the acceleration of each of Executive's outstanding unvested equity awards shall be governed by the terms of the Company's Death and Disability Policy.

(e) *Sole Separation Benefit*. Executive agrees that the payment provided by this Section 3 is not required under the Company's normal policies and procedures and is provided as a severance solely in connection with this Agreement. Executive acknowledges and agrees that the payment referenced in this Section 3 constitutes adequate and valuable consideration, in and of itself, for the promises contained in this Agreement and the Release of Claims.

4. Full Payment. Executive acknowledges that the payments and arrangements herein shall constitute full and complete satisfaction of any and all amounts properly due and owing to Executive as a result of Executive's employment with the Company and the termination thereof. Executive further acknowledges that, other than the Confidentiality Agreement, the equity award agreements and Executive's indemnification agreement with the Company (the "Indemnification Agreement") (collectively, the "Surviving Agreements"), this Agreement shall supersede each other agreement entered into between Executive and the Company regarding Executive's employment, including, without limitation, the Prior Agreements, and each such agreement, but not the Surviving Agreements, shall be deemed terminated and of no further effect as of the Effective Date, except as provided herein.

5. Executive's Release of the Company. Executive understands that by agreeing to the release provided by this Section 5, Executive is agreeing not to sue, or otherwise file any claim against, the Company or any of its employees or other agents for any reason whatsoever based on anything that has occurred as of the date Executive signs this Agreement.

(a) On behalf of Executive and Executive's heirs, assigns, executors, administrators, trusts, spouse and estate, Executive hereby releases and forever discharges the "Releasees" hereunder, consisting of the Company and each of its respective owners, affiliates, subsidiaries, predecessors, successors, assigns, agents, directors, officers, partners, employees and insurers, and all persons acting by, through, under or in concert with them, or any of them, of and from any and all manner of action or actions, cause or causes of action, in law or in equity, suits, debts, liens, contracts, agreements, promises, liability, claims, demands, damages, loss, cost or expense, of any nature whatsoever, known or unknown, fixed or contingent (hereinafter called "Claims"), which Executive now has or may hereafter have against the Releasees, or any of them, by reason of any matter, cause or thing whatsoever from the beginning of time to the date hereof, including, without limiting the generality of the foregoing, any Claims arising out of, based upon, or relating to Executive's hire, employment, remuneration or resignation by the Releasees, or any of them, Claims arising under federal, state or local laws relating to employment, Claims of any kind that may be brought in any court or administrative agency, including any Claims arising under Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000, et seq.; Americans with Disabilities Act, as amended, 42 U.S.C. § 12101 et seq.; the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 et seq.; Civil Rights Act of 1866, and Civil Rights Act of 1991; 42 U.S.C. § 1981, et seq.; Equal Pay Act, as amended, 29 U.S.C. § 206(d); regulations of the Office of Federal Contract Compliance, 41 C.F.R. Section 60, et seq.; the Family and Medical Leave Act, as amended, 29 U.S.C. § 2601 et seq.; the Fair Labor Standards Act of 1938, as amended, 29 U.S.C. § 201 et seq.; the Employee Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; the Worker Adjustment and Retraining Notification Act, as amended, 29 U.S.C. § 2101 et seq.; the California Fair Employment and Housing Act, as amended, Cal. Lab. Code § 12940 et seq.; the California Equal Pay Law, as amended, Cal. Lab. Code §§ 1197.5(a),199.5; the Moore-Brown-Roberti Family Rights Act of 1991, as amended, Cal. Gov't Code

§§12945.2, 19702.3; California Labor Code §§ 1101, 1102; the California WARN Act, California Labor Code §§ 1400 et. seq; California Labor Code §§ 1102.5(a),(b); claims for wages under the California Labor Code and any other federal, state or local laws of similar effect; the employment and civil rights laws of California; Claims for breach of contract; Claims arising in tort, including, without limitation, Claims of wrongful dismissal or discharge, discrimination, harassment, retaliation, fraud, misrepresentation, defamation, libel, infliction of emotional distress, violation of public policy and/or breach of the implied covenant of good faith and fair dealing; and Claims for damages or other remedies of any sort, including, without limitation, compensatory damages, punitive damages, injunctive relief and attorney's fees.

(b) Notwithstanding the generality of the foregoing, Executive does not release the following claims:

(i) Claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law;

(ii) Claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of the Company;

(iii) Claims to continued participation in certain of the Company's group benefit plans pursuant to the terms and conditions of COBRA;

(iv) Claims to any benefit entitlements vested as the date of Executive's employment termination, pursuant to written terms of any Company employee benefit plan;

(v) Claims for indemnification under any indemnification agreement (including the Indemnification Agreement), the Company's Bylaws, California Labor Code Section 2802 or any other applicable law;

(vi) Executive's right to bring to the attention of the Equal Employment Opportunity Commission claims of discrimination; *provided*, *however*, that Executive does release Executive's right to secure any damages for alleged discriminatory treatment;

(vii) Claims to enforce Executive's rights under the Agreement; and

(viii) Claims that may arise as a result of any actions taken only after execution of this Agreement.

(c) EXECUTIVE ACKNOWLEDGES THAT EXECUTIVE HAS BEEN ADVISED OF AND IS FAMILIAR WITH THE PROVISIONS OF CALIFORNIA CIVIL CODE SECTION 1542, WHICH PROVIDES AS FOLLOWS:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE

MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

BEING AWARE OF SAID CODE SECTION, EXECUTIVE HEREBY EXPRESSLY WAIVES ANY RIGHTS EXECUTIVE MAY HAVE THEREUNDER, AS WELL AS UNDER ANY OTHER STATUTES OR COMMON LAW PRINCIPLES OF SIMILAR EFFECT.

6. Post-Employment Obligations.

(a) *Non-Disparagement*. Executive agrees that Executive shall not, directly or indirectly, defame or encourage, assist or induce others to defame the Company, its affiliates and their respective affiliates, directors, officers, agents, partners, stockholders, employees, products, services, technology or business, either publicly or privately. Executive further acknowledges and agrees that this prohibition includes, without limitation, making or publishing any statements, written or otherwise, that are defamatory, disloyal, reckless or maliciously untrue (i.e., made with knowledge of their falsity or reckless disregard for their truth or falsity) and that concern the business, public image, reputation or goodwill of the Company or any of the Releasees, including, without limitation, their past, present or future products, services or operations. Employee hereby represents and warrants that Employee has to date not made statements or engaged in other conduct that would violate this paragraph if such conduct were to occur after the Effective Date. Nothing in this Section 6(a) shall have application to any evidence or testimony required by any court, arbitrator or government agency. Nothing in this Section 6 shall prevent Executive or any Releasee from testifying truthfully in response to a subpoena or other legal process; nor shall anything herein prevent Executive from discussing terms and conditions of Executive's employment with the Company, as permitted by the National Labor Relations Act and California law, including but not limited to discussing or disclosing information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that Executive has reason to believe is unlawful, or communicating directly with, cooperating with, or providing information to, any federal, state or local government regulator, including, but not limited to, the U.S. Securities and Exchange Commission, the U.S. Commodity Futures Trading Commission or the U.S. Department of Justice.

(b) *Return of Company Property*. Executive warrants and represents that, not later than five (5) business days after the Termination Date, Executive will turn over to the Company all physical or personal property that are the property of the Company and that Executive had in Executive's possession, custody or control.

7. Executive Representations. Executive warrants and represents that (a) Executive has not filed or authorized the filing of any complaints, charges or lawsuits against the Company or any affiliate of the Company with any governmental agency or court, and that if, unbeknownst to Executive, such a complaint, charge or lawsuit has been filed on Executive's behalf, Executive will immediately cause it to be withdrawn and dismissed, (b) Executive has been paid all compensation, wages, bonuses, commissions and/or benefits to which Executive may be entitled and no other compensation, wages, bonuses, commissions and/or benefits are due to Executive, except as provided in this Agreement, (c) Executive has no known workplace injuries or occupational diseases and has been provided and/or has not been denied any leave requested under the Family and Medical Leave Act or any similar state law, (d) the execution, delivery and performance of this Agreement by Executive does not and will not conflict with, breach, violate or cause a

default under any agreement, contract or instrument to which Executive is a party or any judgment, order or decree to which Executive is subject and (e) upon the execution and delivery of this Agreement by the Company and Executive, this Agreement will be a valid and binding obligation of Executive, enforceable in accordance with its terms.

8. No Assignment by Executive. Executive warrants and represents that no portion of any of the matters released herein, and no portion of any recovery or settlement to which Executive might be entitled, has been assigned or transferred to any other person, firm or corporation not a party to this Agreement, in any manner, including by way of subrogation or operation of law or otherwise. If any claim, action, demand or suit should be made or instituted against the Company or any other Releasee because of any actual assignment, subrogation or transfer by Executive, Executive agrees to indemnify and hold harmless the Company and all other Releasees against such claim, action, suit or demand, including necessary expenses of investigation, attorneys' fees and costs. In the event of Executive's death, this Agreement shall inure to the benefit of Executive and Executive's executors, administrators, heirs, distributees, devisees and legatees. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only upon Executive's death by will or operation of law.

9. Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of California or, where applicable, United States federal law, in each case, without regard to any conflicts of laws provisions or those of any state other than California.

10. Miscellaneous. This Agreement, together with the Surviving Agreements, comprises the entire agreement between the parties with regard to the subject matter hereof and supersedes, in their entirety, any other agreements between Executive and the Company with regard to the subject matter hereof, including, without limitation, the Prior Agreements. Executive acknowledges that there are no other agreements, written, oral or implied, and that Executive may not rely on any prior negotiations, discussions, representations or agreements. This Agreement may be modified only in writing, and such writing must be signed by both parties containing a recital that it is intended to modify this Agreement. This Agreement may be executed in separate counterparts, each of which is deemed to be an original and all of which taken together constitute one and the same agreement. For the avoidance of doubt, Executive acknowledges and agrees that nothing in this Agreement shall trigger Good Reason (as defined in the Severance Policy) or any term of like import to resign Executive's employment.

11. Company Assignment and Successors. The Company shall assign its rights and obligations under this Agreement to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise), and shall cause any such successor to expressly assume its obligations hereunder. This Agreement shall be binding upon and inure to the benefit of the Company and its successors, assigns, personnel and legal representatives.

12. Maintaining Confidential Information. Executive reaffirms Executive's obligations under the Confidentiality Agreement, which shall remain in effect through the Termination Date and thereafter in accordance with its terms. Executive acknowledges and agrees that the benefits provided in Section 3 above shall be subject to Executive's continued compliance with the Confidentiality Agreement. For the avoidance of doubt, nothing in the Confidentiality Agreement or this Agreement will be construed to prohibit Executive from filing a charge with, reporting possible violations to, or participating or cooperating with any governmental agency or entity, including but not limited to the

EEOC, the Department of Justice, the Securities and Exchange Commission, Congress or any agency Inspector General, or making other disclosures that are protected under the whistleblower, anti-discrimination or anti-retaliation provisions of federal, state or local law or regulation. Executive does not need the prior authorization of the Company to make any such reports or disclosures, and Executive is not required to notify the Company that Executive has made such reports or disclosures. Furthermore, in accordance with 18 U.S.C. § 1833, notwithstanding anything to the contrary in the Confidentiality Agreement or this Agreement: (a) Executive shall not be in breach of this Agreement, and shall not be held criminally or civilly liable under any federal or state trade secret law (i) for the disclosure of a trade secret that is made in confidence to a federal, state or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (ii) for the disclosure of a trade secret that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal; and (b) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney, and may use the trade secret information in the court proceeding, if Executive files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order. Nothing in this Agreement shall prevent Executive from discussing terms and conditions of Executive's employment with the Company, as permitted by the National Labor Relations Act and applicable state law, including but not limited to discussing or disclosing information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that Executive has reason to believe is unlawful, or communicating directly with, cooperating with or providing information to any federal, state or local government regulator including, but not limited to, the U.S. Securities and Exchange Commission, the U.S. Commodity Futures Trading Commission or the U.S. Department of Justice.

13. Section 409A of the Code. This Agreement is intended, to the greatest extent permitted under law, to comply with the short-term deferral exemption provided in Section 409A of the Code, and the regulations and other interpretative guidance issued thereunder ("Section 409A") such that no benefits or payments under this Agreement are subject to Section 409A. Notwithstanding anything herein to the contrary, the timing of any payments under this Agreement shall be made consistent with such exemption. Executive's right to receive a series of installment payments under this Agreement, if any, shall be treated as a right to receive a series of separate payments. To the extent applicable, this Agreement shall be interpreted in accordance with Section 409A, including without limitation any such regulations or other guidance that may be issued after the Effective Date. Notwithstanding any provision of this Agreement to the contrary, in the event that the Company determines that any amounts payable hereunder may be subject to Section 409A, the Company may, to the extent permitted under Section 409A cooperate in good faith to adopt such amendments to this Agreement or adopt other appropriate policies and procedures, including amendments and policies with retroactive effect, that the Company determines are necessary or appropriate to avoid the imposition of taxes under Section 409A; provided, however, that this Section 13 shall not create an obligation on the part of the Company to adopt any such amendment, policy or procedure or take any such other action, nor shall the Company have any liability for failing to do so. To the extent that any reimbursements payable pursuant to this Agreement are subject to the provisions of Section 409A, such reimbursements shall be paid to Executive no later than December 31 of the year following the year in which the expense was incurred, the amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year, and Executive's right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

14. Executive's Cooperation. After the Termination Date, Executive shall cooperate with the Company and its affiliates, upon the Company's reasonable request, with respect to any internal investigation or administrative, regulatory or judicial proceeding involving matters within the scope of Executive's duties and responsibilities to the Company or its affiliates during Executive's employment with the Company (including, without limitation, Executive being available to the Company upon reasonable notice for interviews and factual investigations, appearing at the Company's reasonable request to give testimony without requiring service of a subpoena or other legal process, and turning over to the Company all relevant Company documents which are or may have come into Executive's possession during Executive's employment); *provided*, *however*, that (i) any such request by the Company shall not be unduly burdensome or interfere with Executive's personal schedule or ability to engage in gainful employment and (ii) this provision shall not apply to any such investigation or proceeding that arises out of or relates to a dispute between Executive and the Company and/or any of its affiliates.

(Signature page(s) follow)

IN WITNESS WHEREOF, the undersigned have caused this Transition and Separation Agreement to be duly executed and delivered as of the date indicated next to their respective signatures below.

DATED: January 15, 2024

___/s/James Wilbur_____
James Wilbur

DATED: January 15, 2024

By: __/s/Eric S. Whitaker_____
Eric S. Whitaker
Chief Legal Officer

[Signature Page to Transition and Separation Agreement]

EXHIBIT A

GENERAL RELEASE OF CLAIMS

This General Release of Claims ("Release") is entered into as of February 5, 2024, between James Wilbur ("Executive") and 10x Genomics, Inc., a Delaware corporation (the "Company" and, together with Executive, the "Parties"), effective as of the eighth (8th) day after the date of Executive's signature hereto.

1. Executive's Release of the Company. Executive understands that by agreeing to this Release, Executive is agreeing not to sue, or otherwise file any claim against, the Company or any of its directors, officers, employees, investors or other agents for any reason whatsoever based on anything that has occurred in connection with Executive's employment or other relationship with the Company and the conclusion of that employment or other relationship with the Company arising before the date Executive signs this Release.

(a) On behalf of Executive and Executive's heirs, assigns, executors, administrators, trusts, spouse and estate, Executive hereby releases and forever discharges the "Releasees" hereunder, consisting of the Company and each of its owners, affiliates, subsidiaries, predecessors, successors, assigns, agents, directors, officers, partners, employees and insurers, and all persons acting by, through, under or in concert with them, or any of them, of and from any and all manner of action or actions, cause or causes of action, in law or in equity, suits, debts, liens, contracts, agreements, promises, liability, claims, demands, damages, loss, cost or expense, of any nature whatsoever, known or unknown, fixed or contingent (hereinafter called "Claims"), which Executive now has or may hereafter have against the Releasees, or any of them, by reason of any matter, cause or thing whatsoever from the beginning of time to the date hereof, including, without limiting the generality of the foregoing, any Claims arising out of, based upon, or relating to Executive's hire, employment, remuneration or resignation by the Releasees, or any of them, Claims arising under federal, state or local laws relating to employment, Claims of any kind that may be brought in any court or administrative agency, including any Claims arising under Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000, et seq.; Americans with Disabilities Act, as amended, 42 U.S.C. § 12101 et seq.; the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 et seq.; the Age Discrimination in Employment Act, as amended, 29 U.S.C. § 621, et seq.; Civil Rights Act of 1866, and Civil Rights Act of 1991; 42 U.S.C. § 1981, et seq.; Equal Pay Act, as amended, 29 U.S.C. § 206(d); regulations of the Office of Federal Contract Compliance, 41 C.F.R. Section 60, et seq.; the Family and Medical Leave Act, as amended, 29 U.S.C. § 2601 et seq.; the Fair Labor Standards Act of 1938, as amended, 29 U.S.C. § 201 et seq.; the Employee Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; the Worker Adjustment and Retraining Notification Act, as amended, 29 U.S.C. § 2101 et seq.; the California Fair Employment and Housing Act, as amended, Cal. Lab. Code § 12940 et seq.; the California Equal Pay Law, as amended, Cal. Lab. Code §§ 1197.5(a),199.5; the Moore-Brown-Roberti Family Rights Act of 1991, as amended, Cal. Gov't Code §§12945.2, 19702.3; California Labor Code §§ 1101, 1102; the California WARN Act, California Labor Code §§ 1400 et. seq; California Labor Code §§ 1102.5(a),(b); Claims for wages under the California Labor Code and any other federal, state or local laws of similar effect; the employment and civil rights laws of California; Claims for breach of contract; Claims arising in tort, including, without limitation, Claims of wrongful dismissal or discharge, discrimination, harassment, retaliation, fraud, misrepresentation,

defamation, defamation, infliction of emotional distress, violation of public policy and/or breach of the implied covenant of good faith and fair dealing; and Claims for damages or other remedies of any sort, including, without limitation, compensatory damages, punitive damages, injunctive relief and attorney's fees.

(b) Notwithstanding the generality of the foregoing, Executive does not release the following claims:

(i) Claims to enforce Executive's rights under the Transition and Separation Agreement entered into between the Company and Executive on January 15, 2024 (the "Transition and Separation Agreement").

(ii) Claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law;

(iii) Claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of the Company;

(iv) Claims to continued participation in certain of the Company's group benefit plans pursuant to the terms and conditions of COBRA;

(v) Claims to any benefit entitlements vested as the date of Executive's employment termination, pursuant to written terms of any Company or affiliate employee benefit plan, program or policy;

(vi) Claims for indemnification under any indemnification agreement including the Indemnification Agreement (as defined in the Transition and Separation Agreement), the Company's Bylaws or any other applicable law;

(vii) Executive's right to bring to the attention of the Equal Employment Opportunity Commission claims of discrimination; *provided*, *however*, that Executive does release Executive's right to secure any damages for alleged discriminatory treatment; and

(viii) Claims that may arise as a result of any actions taken only after the execution of this Release.

(c) *Acknowledgement.* In accordance with the Older Workers Benefit Protection Act of 1990, Executive has been advised of the following:

(i) Executive should consult with an attorney before signing this Release;

(ii) Executive has been given at least twenty-one (21) days to consider this Release;

(iii) Executive has seven (7) days after signing this Release to revoke it. If Executive wishes to revoke this Agreement, Executive must deliver notice of Executive's revocation in writing, no later than 11:59 p.m. PT on the 7th day following Executive's execution of this Release by email to Eric Whitaker at eric.whitaker@10xgenomics.com. Executive understands that if Executive revokes this Release, it will be null and void in its entirety, and

Executive will not be entitled to any payments or benefits provided in the Transition and Separation Agreement.

(d) EXECUTIVE ACKNOWLEDGES THAT EXECUTIVE HAS BEEN ADVISED OF AND IS FAMILIAR WITH THE PROVISIONS OF CALIFORNIA CIVIL CODE SECTION 1542, WHICH PROVIDES AS FOLLOWS:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

BEING AWARE OF SAID CODE SECTION, EXECUTIVE HEREBY EXPRESSLY WAIVES ANY RIGHTS EXECUTIVE MAY HAVE THEREUNDER, AS WELL AS UNDER ANY OTHER STATUTES OR COMMON LAW PRINCIPLES OF SIMILAR EFFECT.

2. Executive Representations. Executive warrants and represents that (a) Executive has not filed or authorized the filing of any complaints, charges or lawsuits against the Company or any of its affiliates with any governmental agency or court, and that if, unbeknownst to Executive, such a complaint, charge or lawsuit has been filed on Executive's behalf, Executive will immediately cause it to be withdrawn and dismissed, (b) Executive has been paid all compensation, wages, bonuses, commissions and/or benefits to which Executive may be entitled and no other compensation, wages, bonuses, commissions and/or benefits are due to Executive, except as provided in Section 3 of the Transition and Separation Agreement, (c) Executive has no known workplace injuries or occupational diseases and has been provided and/or has not been denied any leave requested under the Family and Medical Leave Act or any similar state law, (d) the execution, delivery and performance of this Release by Executive does not and will not conflict with, breach, violate or cause a default under any agreement, contract or instrument to which Executive is a party or any judgment, order or decree to which Executive is subject and (e) upon the execution and delivery of this Release by the Company and Executive, this Release will be a valid and binding obligation of Executive, enforceable in accordance with its terms.

3. Maintaining Confidential Information. Executive reaffirms Executive's obligations under the Confidentiality Agreement (as defined in the Transition and Separation Agreement). Executive acknowledges and agrees that the payments provided in the Transition and Separation Agreement shall be subject to Executive's continued compliance with Executive's obligations under the Confidentiality Agreement.

4. Cooperation with the Company. Executive reaffirms Executive's obligations to cooperate with the Company pursuant to Section 14 of the Transition and Separation Agreement.

5. Severability. The provisions of this Release are severable. If any provision is held to be invalid or unenforceable, it shall not affect the validity or enforceability of any other provision.

6. Choice of Law. This Release shall in all respects be governed and construed in accordance with the laws of the State of California, including all matters of construction, validity and performance, without regard to conflicts of law principles.

7. Integration Clause. This Release and the Transition and Separation Agreement contain the Parties' entire agreement with regard to the transition and separation of Executive's employment, and supersede and replace any prior agreements as to those matters, whether oral or written. This Release may not be changed or modified, in whole or in part, except by an instrument in writing signed by Executive and the Chief Executive Officer or Chief Legal Officer of the Company.

8. Execution in Counterparts. This Release may be executed in counterparts with the same force and effectiveness as though executed in a single document. Facsimile signatures shall have the same force and effectiveness as original signatures.

9. Intent to be Bound. The Parties have carefully read this Release in its entirety; fully understand and agree to its terms and provisions; and intend and agree that it is final and binding on all Parties.

(*Signature page(s) follow*)

IN WITNESS WHEREOF, and intending to be legally bound, the Parties have executed the foregoing on the dates shown below.

DATED: February 5, 2024 By: /s/ James Wilbur

James Wilbur

DATED: February 5, 2024

By: /s/ Eric S. Whitaker
Eric S. Whitaker
Chief Legal Officer

6230 Stoneridge Mall Road
Pleasanton, CA 94588-3260
925 401 7300

10xgenomics.com

Exhibit 19.1

10X GENOMICS, INC.

AMENDED AND RESTATED
INSIDER TRADING POLICY

(Amended and Restated on October 24, 2023)

INTRODUCTION

10x Genomics, Inc. (together with its subsidiaries, the "Company") opposes the unauthorized disclosure of any nonpublic information acquired in the course of your service with the Company and the misuse of material nonpublic information in securities trading. Any such actions will be deemed violations of this Insider Trading Policy (this "Policy").

Legal prohibitions on insider trading

Federal and state laws prohibit trading in the securities of a company while in possession of material nonpublic information and in breach of a duty of trust or confidence. These laws also prohibit anyone who is aware of material nonpublic information from providing this information to others who may trade. Violating such laws can undermine investor trust, harm the reputation and integrity of the Company, and result in dismissal from the Company or even serious criminal and civil charges against the individual and the Company. The Company reserves the right to take whatever disciplinary or other measure(s) it determines in its sole discretion to be appropriate in any particular situation, including disclosure of wrongdoing to governmental authorities.

Compliance Officers

Please direct any questions, requests or reports as to any of the matters discussed in this Policy to the Chief Executive Officer, the Chief Financial Officer, the Chief Legal Officer or the Senior Director, Corporate of the Company (each, a "Compliance Officer" and collectively, the "Compliance Officers"). The Compliance Officers are generally responsible for the administration of this Policy. Each Compliance Officer may select others to assist with the execution of his or her duties.

Persons covered by this Policy

This Policy applies to all directors, officers, employees and agents (such as consultants and independent contractors) of the Company. For purposes of this Policy, "officers" refer to those individuals who meet the definition of "officer" under Section 16 of the Securities Exchange Act of 1934, as amended, (the "Exchange Act"). References in this Policy to "you" (as well as general references to directors, officers, employees and agents of the Company) should also be understood to include members of your immediate family, persons with whom you share a household, persons that are your economic dependents and any other individuals or entities whose transactions in securities you influence, direct or control (including, for example, a venture or other investment fund, if you influence, direct or control transactions by the fund). You are responsible for making sure that these other individuals and entities comply with this Policy.

Reporting violations

It is your responsibility to help enforce this Policy. You should be alert to possible violations and promptly report violations or suspected violations of this Policy to a Compliance Officer at (925) 401-7300. If your situation requires that your identity be kept secret, your anonymity will be preserved to the greatest extent reasonably possible, or otherwise permitted by law. If you wish to remain anonymous, send a letter addressed to a Compliance Officer at 10x Genomics, Inc., 6230 Stoneridge Mall Drive, Pleasanton, California 94588, or contact the whistleblower hotline at 855-787-3119. If you make an anonymous report, please provide as much detail as possible, including any evidence that you believe may be relevant to the issue.

Personal responsibility

The ultimate responsibility for complying with this Policy and applicable laws and regulations rests with you. You should use your best judgment at all times and consult with your legal and financial advisors, as needed. We advise you to seek assistance from a Compliance Officer if you have any questions at all.

TRANSACTIONS COVERED BY THIS POLICY

Types of transactions covered by this Policy

Except as discussed in the section entitled "Limited Exceptions", this Policy applies to *all* transactions *involving* the securities of the Company or the securities of other companies as to which you possess material nonpublic information obtained in the course of your service with the Company. This Policy therefore applies to purchases, sales and other transfers of common stock, options, warrants, preferred stock, debt securities (such as debentures, bonds and notes) and other securities. This Policy also applies to any arrangements that affect economic exposure to changes in the prices of these securities. These arrangements may include, among other things, transactions in derivative securities (such as exchange-traded put or call options), hedging transactions, short sales and certain decisions with respect to participation in benefit plans. This Policy also applies to any offers with respect to the transactions discussed above.

You should note that there are no exceptions from insider trading laws or this Policy based on the size of the transaction.

For the avoidance of doubt, this Policy does not prohibit transactions involving the securities of the Company (or the securities of other companies) or limit transactions to those discussed under "Limited Exceptions" if such transactions are conducted while you are NOT aware of material nonpublic information regarding the Company (or such other companies); however, such transactions may still be subject to certain provisions of this Policy, such as the blackout provisions discussed in the section entitled "Trading Blackout Periods" and the preclearance provisions discussed in the section entitled "Preclearance of Trades".

Responsibilities regarding the nonpublic information of other companies

This Policy prohibits the unauthorized disclosure or other misuse of any nonpublic information of other companies, such as the Company's distributors, vendors, customers, collaborators, suppliers, potential acquisition targets and competitors. This Policy also prohibits insider trading and tipping based on the material nonpublic information of other companies.

Applicability of this Policy after your departure

You are expected to comply with this Policy until such time as you are no longer affiliated with the Company *and* you no longer possess any material nonpublic information subject to this Policy. In addition, if you are subject

to a trading blackout under this Policy at the time you cease to be affiliated with the Company, you are expected to abide by the applicable trading restrictions until at least the end of the relevant blackout period.

No exceptions based on personal circumstances

There may be instances where you suffer financial harm or other hardship or are otherwise required to forgo a planned transaction because of the restrictions imposed by this Policy. Personal financial emergency or other personal circumstances are not mitigating factors under securities laws and will not excuse a failure to comply with this Policy.

MATERIAL NONPUBLIC INFORMATION

"Material" information

Information should be regarded as material if there is a substantial likelihood that a reasonable investor would consider it important in deciding whether to buy, hold or sell securities or would view the information as significantly altering the total mix of information in the marketplace about the issuer of the security. In general, any information that could reasonably be expected to affect the market price of a security is likely to be material. Either positive or negative information may be material.

It is not possible to define all categories of "material" information. However, some examples of information that may be regarded as material include information with respect to:

- Financial results, financial condition, earnings pre-announcements, guidance, projections or forecasts, particularly if inconsistent with the expectations of the investment community;
- Restatements of financial results, or material impairments, write-offs or restructurings;
- Changes in independent auditors, or notification that the Company may no longer rely on an audit report;
- Business plans or budgets;
- Creation of significant financial obligations, or any significant default under or acceleration of any financial obligation;
- Impending bankruptcy or financial liquidity problems;
- Significant developments involving business relationships, including execution, modification or termination of significant agreements or orders with partners, collaborators, customers, suppliers, distributors, manufacturers or other business partners;
- Product introductions, modifications, defects or recalls or significant pricing changes or other product announcements of a significant nature;
- Significant developments in research and development or relating to intellectual property;
- Significant legal or regulatory developments, whether actual or threatened;
- Major events involving the Company's securities, including calls of securities for redemption, adoption of stock repurchase programs, option repricings, stock splits, changes in dividend policies, public or private securities offerings, modification to the rights of security holders or notice of delisting;
- Significant cybersecurity incidents experienced by the Company, such as a data breach, or any other significant disruption in the Company's operations or loss, potential loss, breach or unauthorized access of Company property or assets, whether at its facilities or through its information technology infrastructure;

- Significant corporate events, such as a pending or proposed merger, joint venture or tender offer, a significant investment, the acquisition or disposition of a significant business or asset or a change in control of the company; and

- Major personnel changes, such as changes in senior management or lay-offs.

If you have any questions as to whether information should be considered "material," you should consult with a Compliance Officer. In general, it is advisable to resolve any close questions as to the materiality of any information by assuming that the information is material.

"Nonpublic" information

Information is considered nonpublic if the information has not been broadly disseminated to the public for a sufficient period to be reflected in the price of the security. Any questions as to whether information is nonpublic should be directed to a Compliance Officer.

POLICIES REGARDING MATERIAL NONPUBLIC INFORMATION

Confidentiality of nonpublic information

The unauthorized use or disclosure of nonpublic information relating to the Company or other companies is prohibited. All nonpublic information you acquire in the course of your service with the Company may only be used for legitimate Company business purposes. In addition, nonpublic information of others should be handled in accordance with the terms of any relevant nondisclosure agreements, and the use of any such nonpublic information should be limited to the purpose for which it was disclosed.

You must use all reasonable efforts to safeguard nonpublic information in the Company's possession. You may not disclose nonpublic information about the Company or any other company, unless required by law, or unless (i) disclosure is required for legitimate Company business purposes, (ii) you are authorized to disclose the information and (iii) appropriate steps have been taken to prevent misuse of that information (including entering an appropriate nondisclosure agreement that restricts the disclosure and use of the information, if applicable). This restriction also applies to internal communications within the Company and to communications with agents of the Company. In cases where disclosing nonpublic information to third parties is required, you should coordinate with a Compliance Officer.

No trading on material nonpublic information

Except as discussed in the section entitled "Limited Exceptions", you may not, directly or indirectly through others, engage in any transaction involving the Company's securities *while aware of* material nonpublic information relating to the Company. It is not an excuse that you did not "use" the information in your transaction.

Similarly, you may not engage in transactions involving the securities of any other company if you are aware of material nonpublic information about that company (except to the extent the transactions are analogous to those presented in the section entitled "Limited Exceptions"). For example, you may be involved in a proposed transaction involving a prospective business relationship or transaction with another company. If information about that transaction constitutes material nonpublic information for that other company, you would be prohibited from engaging in transactions involving the securities of that other company (as well as transactions involving Company securities, if that information is material to the Company). It is important to note that "materiality" is different for different companies. Information that is not material to the Company may be material to another company.

No disclosing material nonpublic information for the benefit of others

You may not disclose material nonpublic information concerning the Company or any other company to friends, family members or any other person or entity not authorized to receive such information where such person or entity may benefit by trading on the basis of such information. In addition, you may not make recommendations or express opinions on the basis of material nonpublic information as to trading in the securities of companies to which such information relates. You are prohibited from engaging in these actions whether or not you derive any profit or personal benefit from doing so.

Obligation to disclose material nonpublic information to the Company

You may not enter into any transaction, including those discussed in the section entitled "Limited Exceptions", unless you have disclosed any material nonpublic information that you become aware of in the course of your service with the Company, and that senior management is not aware of, to a Compliance Officer. If you are a member of senior management, the information must be disclosed to the Chief Executive Officer, and if you are

the Chief Executive Officer or a director, you must disclose the information to the Board of Directors, before any transaction is permissible.

TRADING BLACKOUT PERIODS

To limit the likelihood of trading at times when there is a significant risk of insider trading exposure, the Company has instituted quarterly trading blackout periods and may institute special trading blackout periods from time to time. It is important to note that whether or not you are subject to blackout periods, you remain subject to the prohibitions on trading on the basis of material nonpublic information and any other applicable restrictions in this Policy.

Quarterly blackout periods

Except as discussed in the section entitled "Limited Exceptions," directors, executive officers and other employees and agents identified by the Company must refrain from conducting transactions involving the Company's securities during quarterly blackout periods. Even if you are not specifically identified as being subject to quarterly blackout periods, you should exercise caution when engaging in transactions during quarterly blackout periods because of the heightened risk of insider trading exposure.

Quarterly blackout periods begin at the start of the fifteenth day of the last month of each fiscal quarter (i.e., March 15, June 15, September 15 and December 15) and end at the start of the third full trading day following the date of public disclosure of the financial results for that fiscal quarter. This period is a particularly sensitive time for transactions involving the Company's securities from the perspective of compliance with applicable securities laws due to the fact that, during this period, individuals may often possess or have access to material nonpublic information relevant to the expected financial results for the quarter. The term "trading day" means a day on which Nasdaq is open for trading.

Exceptions to the blackout period policy may be approved by a Compliance Officer or, in the case of exceptions for directors, the Board of Directors.

All directors, officers, employees of the Company and agents identified by the Company are subject to quarterly blackout periods unless otherwise determined by the Chief Legal Officer.

Special blackout periods

From time to time, the Company may also prohibit directors, officers, employees and agents from engaging in transactions involving the Company's securities when, in the judgment of a Compliance Officer, a trading blackout is warranted. The Company will generally impose special blackout periods when there are material developments known to the Company that have not yet been disclosed to the public. For example, the Company may impose a special blackout period in anticipation of announcing a significant transaction or business development. However, special blackout periods may be declared for any reason.

The Company will notify those persons subject to a special blackout period. Each person who has been so identified and notified by the Company may not engage in any transaction involving the Company's securities until instructed otherwise by a Compliance Officer and should not disclose to others the fact of such suspension of trading.

No "safe harbors"

There are no unconditional "safe harbors" for trades made at particular times, and all persons subject to this Policy should exercise good judgment at all times. Even when a quarterly blackout period is not in effect, you may

be prohibited from engaging in transactions involving the Company's securities because you possess material nonpublic information, are subject to a special blackout period or are otherwise restricted under this Policy.

PRECLEARANCE OF TRADES

Except as discussed in the section entitled "Limited Exceptions," each person designated by the Chief Legal Officer as being subject to these preclearance procedures should refrain from engaging in any transaction involving the Company's securities without first obtaining preclearance of the transaction from a Compliance Officer. Additionally, as discussed in the section entitled "Additional Restrictions and Guidance," no individual may engage in a transaction involving an exchange fund or pledge Company securities as collateral for a loan without first obtaining preclearance of the transaction from a Compliance Officer. This is done by submitting a completed and signed Preclearance Request Form (obtained by requesting such form by email to preclearance@10xgenomics.com) to a Compliance Officer and obtaining the required signature from a Compliance Officer.

These preclearance procedures are intended to decrease insider trading risks associated with transactions by individuals with regular or special access to material nonpublic information. In addition, requiring preclearance of transactions by directors and officers facilitates compliance with Rule 144 resale restrictions under the Securities Act of 1933, as amended, the liability and reporting provisions of Section 16 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Preclearance of a trade, however, is not a defense to a claim of insider trading and does not excuse you from otherwise complying with insider trading laws or this Policy.

A Compliance Officer is under no obligation to approve a transaction submitted for preclearance, and may determine not to permit the transaction.

Preclearance should not be understood to represent legal advice by the Company that a proposed transaction complies with the law. None of the Company, the Compliance Officers or the Company's other employees will have any liability in connection with a request for preclearance.

ADDITIONAL RESTRICTIONS AND GUIDANCE

This section addresses certain types of transactions that may expose you and the Company to significant risks. You should understand that, even though a transaction may not be expressly prohibited by this section, you are responsible for ensuring that the transaction otherwise complies with other provisions in this Policy that may apply to the transaction, such as the general prohibition against insider trading as well as preclearance procedures and blackout periods, to the extent applicable.

Short sales

Short sales (*i.e.,* the sale of a security that must be borrowed to make delivery) and "selling short against the box" (*i.e.,* a sale with a delayed delivery) with respect to Company securities are prohibited under this Policy. Short sales may signal to the market possible bad news about the Company or a general lack of confidence in the Company's prospects, and an expectation that the value of the Company's securities will decline. In addition, short sales are effectively a bet against the Company's success and may reduce the seller's incentive to improve the Company's performance. Short sales may also create a suspicion that the seller is engaged in insider trading. In addition, Section 16(c) of the Exchange Act prohibits Section 16 reporting persons (i.e., directors, officers and the Company's 10% stockholders) from making short sales of the Company's equity securities.

Derivative securities and hedging transactions

You are prohibited from engaging in transactions in publicly-traded options, such as puts and calls, and other derivative securities with respect to the Company's securities. This prohibition extends to any hedging or similar transaction designed to decrease the risks associated with holding Company securities. This prohibition does not extend to transactions involving an exchange fund, though you may not participate in a transaction involving an exchange fund without first obtaining preclearance of the transaction from a Compliance Officer by following the procedures set forth in the section entitled "Preclearance of Trades." Stock options, stock appreciation rights and other securities issued pursuant to Company benefit plans or other compensatory arrangements with the Company are also subject to this Policy's general prohibition on hedging or similar transactions; *provided*, *however*, that in addition to pre-cleared exchange fund transactions described above, you are not prohibited from exercising any stock options issued under any of the Company's benefit plans or other compensatory arrangements in accordance with the terms of such plans or arrangements, as described in the "Limited Exceptions" section of this Policy.

Transactions in derivative securities may reflect a short-term and speculative interest in the Company's securities and may create the appearance of impropriety, even where a transaction does not involve trading on inside information. Trading in derivatives may also focus attention on short-term performance at the expense of the Company's long-term objectives. In addition, the application of securities laws to derivatives transactions can be complex, and persons engaging in derivatives transactions may subject themselves to an increased risk of violating securities laws.

Using Company securities as collateral for loans

You may not pledge Company securities as collateral for loans without first obtaining preclearance of the transaction from a Compliance Officer by following the procedures set forth in the section entitled "Preclearance of Trades." If you default on the loan, the lender may sell the pledged securities as collateral in a foreclosure sale. The sale, even though not initiated at your request, is still considered a sale for your benefit and, if made at a time when you are aware of material nonpublic information or otherwise are not permitted to trade in Company securities, may result in inadvertent insider trading violations, Section 16 violations (for officers and directors), violations of this Policy and unfavorable publicity for you and the Company.

Holding Company securities in margin accounts

You may not purchase Company securities on margin (i.e., borrowing money to purchase the securities) or hold Company securities in margin accounts. Under typical margin arrangements, if you fail to meet a margin call, the broker may be entitled to sell securities held in the margin account without your consent. The sale, even though not initiated at your request, is still considered a sale for your benefit and, if made at a time when you are aware of material nonpublic information or are otherwise not permitted to trade, may result in inadvertent insider trading violations, Section 16 violations (for officers and directors), violations of this Policy and unfavorable publicity for you and the Company.

Placing open orders with brokers

Except in accordance with an approved trading plan (as discussed below), you should exercise caution when placing open orders, such as limit orders or stop orders, with brokers, particularly where the order is likely to remain outstanding for an extended period of time. If you are subject to the blackout window, open orders should be canceled prior to entering a blackout window, as this may result in the execution of a trade at a time when you are aware of material nonpublic information or otherwise are not permitted to trade in Company securities, which may result in inadvertent insider trading violations, Section 16 violations (for officers and directors), violations of this Policy and unfavorable publicity for you and the Company. If you are subject to blackout periods or preclearance requirements, you should so inform any broker with whom you place any open order at the time it is placed.

LIMITED EXCEPTIONS

The following are certain limited exceptions to the restrictions imposed by the Company under this Policy, other than those transactions described under “Additional Restrictions and Guidance”. Please be aware that even if a transaction is subject to an exception to this Policy, you will need to separately assess whether the transaction complies with applicable law. For example, even if a transaction is indicated as exempt from this Policy, you may need to comply with the “short-swing” trading restrictions under Section 16 of the Exchange Act, to the extent applicable. You are responsible for complying with applicable law at all times.

Transactions pursuant to a trading plan that complies with SEC rules

The SEC has enacted rules that provide an affirmative defense against alleged violations of U.S. federal insider trading laws for transactions pursuant to trading plans that meet certain requirements. In general, these rules, as set forth in Rule 10b5-1 under the Exchange Act, provide for an affirmative defense if you enter into a contract, provide instructions or adopt a written plan for trading securities when you are not aware of material nonpublic information. The contract, instructions or plan must:

- be submitted to and pre-approved by a Compliance Officer;
- include a “Cooling Off Period” that extends to the later of 90 days after adoption or modification of a trading plan or two business days after filing the Form 10-K or Form 10-Q covering the fiscal quarter in which the trading plan was adopted, up to a maximum of 120 days;
- include a representation in the trading plan that you are (1) not aware of any material nonpublic information about the Company or its securities and (2) adopting the trading plan in good faith and not as part of a plan or scheme to evade Rule 10b-5;
- have been entered into in good faith at a time when you were not in possession of material nonpublic information about the Company and not otherwise in a blackout period, and you must have acted in good

faith with respect to the trading plan;

- either (1) specify the amount, price and date of all transactions under the trading plan, or (2) specify an objective method for determining the amount, price and date of the transaction and/or place any subsequent discretion for determining the amount, price and date of the transaction in another person who is not, at the time of the transaction, aware of material nonpublic information, and (3) prohibit you from exercising any subsequent influence over the transactions; and

- complies with all other applicable requirements of Rule 10b5-1.

Transactions made pursuant to a written trading plan that (i) complies with the affirmative defense set forth in Rule 10b5-1, (ii) complies with the requirements for trading plans set forth above and (iii) is approved by a Compliance Officer, are not subject to the restrictions in this Policy against trades made while aware of material nonpublic information or to the preclearance procedures or blackout periods established under this Policy. In approving a trading plan, a Compliance Officer may, in furtherance of the objectives expressed in this Policy, impose criteria in addition to those set forth in Rule 10b5-1. You should therefore confer with a Compliance Officer prior to entering into any trading plan.

The Compliance Officers may impose such other conditions on the implementation and operation of the Trading Plan as deemed necessary or advisable. Individuals may not adopt more than one trading plan at a time except under the limited circumstances permitted by Rule 10b5-1 and subject to preapproval by a Compliance Officer.

The SEC rules regarding trading plans are complex and must be complied with completely to be effective. The description provided above is only a summary, and the Company strongly advises that you consult with your legal advisor if you intend to adopt a trading plan. While trading plans are subject to review and approval by the Company, the individual adopting the trading plan is ultimately responsible for compliance with Rule 10b5-1 and ensuring that the trading plan complies with this Policy. None of the Company, its Compliance Officers or the Company's other employees assume any liability in connection with a trading plan submitted for approval, nor the legality or consequences relating to a person entering into, informing the Company of, or trading under, a trading plan.An individual may only modify a trading plan outside of a blackout period and, in any event, when the individual does not possess material nonpublic information. Modifications to and terminations of a trading plan are subject to preapproval by a Compliance Officer and modifications of a trading plan that change the amount, price or timing of the purchase or sale of the securities underlying a trading plan will trigger a new Cooling-Off Period.

The Company reserves the right to publicly disclose, announce or respond to inquiries from the media regarding the adoption, modification or termination of a trading plan and non-Rule 10b5-1 trading arrangements, or the execution of transactions made under a trading plan. The Company also reserves the right from time to time to suspend, discontinue, or otherwise prohibit transactions under a trading plan if a Compliance Officer or the Board of Directors, in its discretion, determines that such suspension, discontinuation or other prohibition is in the best interests of the Company.

Trading plans must be filed with a Compliance Officer and must be accompanied with an executed certificate stating that the trading plan complies with Rule 10b5-1 and any other criteria established by the Company.

Receipt and vesting of stock options, restricted stock, restricted stock units and stock appreciation rights

The trading restrictions under this Policy do not apply to the acceptance or purchase of stock options, restricted stock, restricted stock units or stock appreciation rights issued or offered by the Company. The trading

restrictions under this Policy also do not apply to the vesting, cancellation or forfeiture of stock options, restricted stock, restricted stock units or stock appreciation rights in accordance with applicable plans and agreements.

Exercise of stock options for cash

The trading restrictions under this Policy do not apply to the exercise of stock options for cash under the Company's stock option plans. Likewise, the trading restrictions under this Policy do not apply to the exercise of stock options in a stock-for-stock exercise with the Company or an election to have the Company withhold securities to cover tax obligations in connection with an option exercise, so long as that election is irrevocable and made in writing at a time when a trading blackout is not in place and the individual is not in possession of material nonpublic information. However, the trading restrictions under this Policy do apply to (i) the sale of any securities issued upon the exercise of a stock option, (ii) a cashless exercise of a stock option through a broker, since this involves selling a portion of the underlying shares to cover the costs of exercise, and (iii) any other market sale for the purpose of generating the cash needed to pay the exercise price of an option.

Purchases from the employee stock purchase plan

The trading restrictions in this Policy do not apply to elections with respect to participation in the Company's employee stock purchase plan or to purchases of securities under the plan. However, the trading restrictions do apply to any subsequent sales of any such securities.

Certain 401(k) plan transactions

The trading restrictions in this Policy do not apply to purchases of Company stock in the 401(k) plan resulting from periodic contributions to the plan based on your payroll contribution election. The trading restrictions do apply, however, to elections you make under the 401(k) plan to (i) increase or decrease the percentage of your contributions that will be allocated to a Company stock fund, (ii) move balances into or out of a Company stock fund, (iii) borrow money against your 401(k) plan account if the loan will result in liquidation of some or all of your Company stock fund balance, and (iv) pre-pay a plan loan if the pre-payment will result in the allocation of loan proceeds to a Company stock fund.

Stock splits, stock dividends and similar transactions

The trading restrictions under this Policy do not apply to a change in the number of securities held as a result of a stock split or stock dividend applying equally to all securities of a class, or similar transactions.

Change in form of ownership

Transactions that involve merely a change in the form in which you own securities are permissible. For example, you may transfer shares to an *inter vivos* trust of which you are the sole beneficiary during your lifetime.

Other exceptions

Any other exception from this Policy must be approved by a Compliance Officer, in consultation with the Board of Directors or an independent committee of the Board of Directors.

COMPLIANCE WITH SECTION 16 OF THE SECURITIES EXCHANGE ACT

Obligations under Section 16

Section 16 of the Exchange Act and the related rules and regulations, set forth (i) reporting obligations, (ii) limitations on "short-swing" transactions and (iii) limitations on short sales and other transactions applicable to directors, officers, large stockholders and certain other persons.

Notification requirements to facilitate Section 16 reporting

To facilitate timely reporting of transactions pursuant to Section 16 requirements, each person subject to Section 16 reporting requirements must provide, or must ensure that his or her broker provides, the Company with detailed information (*e.g.,* trade date, number of shares, exact price, *etc.*) regarding his or her transactions involving the Company's securities, including gifts, transfers, pledges and transactions pursuant to a trading plan, both prior to (to confirm compliance with preclearance procedures, if applicable) and promptly following execution.

Personal responsibility

The obligation to file Section 16 reports, and to otherwise comply with Section 16, is personal. The Company is not responsible for the failure to comply with Section 16 requirements.

ADDITIONAL INFORMATION

Delivery of Policy

This Policy will be delivered to all directors, officers, employees and agents of the Company when they commence service with the Company. In addition, this Policy (or a summary of this Policy) will be circulated periodically. Upon the effectiveness of this Policy, this Policy is binding on each director, officer, employee and agent of the Company.

Amendments

We are committed to continuously reviewing and updating our policies and procedures. The Company therefore reserves the right to amend, alter or terminate this Policy at any time and for any reason, subject to applicable law.

Current Version of Policy

A copy of the Company's current policies regarding insider trading may be obtained by contacting a Compliance Officer.

* * *

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-233720, 333-253667, 333-262863, and 333-269837) pertaining to the 10x Genomics, Inc. 2019 Omnibus Incentive Plan and the 10x Genomics, Inc. 2019 Employee Stock Purchase Plan of our reports dated February 15, 2024, with respect to the consolidated financial statements of 10x Genomics, Inc. and the effectiveness of internal control over financial reporting of 10x Genomics, Inc. included in this Annual Report (Form 10-K) for the year ended December 31, 2023.

/s/ Ernst & Young LLP

San Jose, California
February 15, 2024

Exhibit 31.1

CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Serge Saxonov, certify that:

1. I have reviewed this Annual Report on Form 10-K of 10x Genomics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2024

By: /s/ Serge Saxonov

Serge Saxonov
Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Justin McAnear, certify that:

1. I have reviewed this Annual Report on Form 10-K of 10x Genomics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2024

By: /s/ Justin J. McAnear

Justin J. McAnear
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Serge Saxonov, the Chief Executive Officer of 10x Genomics, Inc. (the "Company"), hereby certify, that, to my knowledge:

1. The Annual Report on Form 10-K for the period ended December 31, 2023 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 15, 2024

By: /s/ Serge Saxonov

Serge Saxonov
Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Justin McAnear, the Chief Financial Officer of 10x Genomics, Inc. (the "Company"), hereby certify, that, to my knowledge:

1. The Annual Report on Form 10-K for the period ended December 31, 2023 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 15, 2024

By: /s/ Justin J. McAnear

Justin J. McAnear
Chief Financial Officer
(Principal Financial and Accounting Officer)

6230 Stoneridge Mall Road
Pleasanton, CA 94588-3260
925 401 7300

10xgenomics.com

Exhibit 97.1

10X GENOMICS, INC.
POLICY FOR RECOVERY OF ERRONEOUSLY AWARDED COMPENSATION

10x Genomics, Inc. (the "**Company**") has adopted this Policy for Recovery of Erroneously Awarded Compensation (the "**Policy**"), effective as of October 2, 2023 (the "**Effective Date**"). Capitalized terms used in this Policy but not otherwise defined herein are defined in Section 11.

1. PERSONS SUBJECT TO POLICY

This Policy shall apply to current and former Officers of the Company.

2. COMPENSATION SUBJECT TO POLICY

This Policy shall apply to Incentive-Based Compensation received on or after the Effective Date. For purposes of this Policy, the date on which Incentive-Based Compensation is "received" shall be determined under the Applicable Rules, which generally provide that Incentive-Based Compensation is "received" in the Company's fiscal period during which the relevant Financial Reporting Measure is attained or satisfied, without regard to whether the grant, vesting or payment of the Incentive-Based Compensation occurs after the end of that period.

3. RECOVERY OF COMPENSATION

In the event that the Company is required to prepare a Restatement, the Company shall recover, reasonably promptly, the portion of any Incentive-Based Compensation that is Erroneously Awarded Compensation, unless the Committee has determined that recovery would be Impracticable. Recovery shall be required in accordance with the preceding sentence regardless of whether the applicable Officer engaged in misconduct or otherwise caused or contributed to the requirement for the Restatement and regardless of whether or when restated financial statements are filed by the Company. For clarity, the recovery of Erroneously Awarded Compensation under this Policy will not give rise to any person's right to voluntarily terminate employment for "good reason," or due to a "constructive termination" (or any similar term of like effect) under any plan, program or policy of or agreement with the Company or any of its affiliates.

4. MANNER OF RECOVERY; LIMITATION ON DUPLICATIVE RECOVERY

The Committee shall, in its sole discretion, determine the manner of recovery of any Erroneously Awarded Compensation, which may include, without limitation, reduction or cancellation by the Company or an affiliate of the Company of Incentive-Based Compensation or Erroneously Awarded Compensation, reimbursement or repayment by any person subject to this Policy of the Erroneously Awarded Compensation, and, to the extent permitted by law, an offset of the Erroneously Awarded Compensation against other compensation payable by the Company or an affiliate of the Company to such person. Notwithstanding the foregoing, unless otherwise prohibited by the Applicable Rules, to the extent this Policy provides for recovery of Erroneously Awarded Compensation already recovered by the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 or Other Recovery Arrangements, the amount of Erroneously Awarded Compensation already recovered by the Company from the recipient of such Erroneously Awarded Compensation may be credited to the amount of Erroneously Awarded Compensation required to be recovered pursuant to this Policy from such person.

5. ADMINISTRATION

This Policy shall be administered, interpreted and construed by the Committee, which is authorized to make all determinations necessary, appropriate or advisable for such purpose. The Board of Directors of the Company (the "**Board**") may re-vest in itself the authority to administer, interpret and construe this Policy in

accordance with applicable law, and in such event references herein to the "Committee" shall be deemed to be references to the Board. Subject to any permitted review by the applicable national securities exchange or association pursuant to the Applicable Rules, all determinations and decisions made by the Committee pursuant to the provisions of this Policy shall be final, conclusive and binding on all persons, including the Company and its affiliates, equityholders and employees. The Committee may delegate administrative duties with respect to this Policy to one or more directors or employees of the Company, as permitted under applicable law, including any Applicable Rules.

6. INTERPRETATION

This Policy will be interpreted and applied in a manner that is consistent with the requirements of the Applicable Rules, and to the extent this Policy is inconsistent with such Applicable Rules, it shall be deemed amended to the minimum extent necessary to ensure compliance therewith.

7. NO INDEMNIFICATION; NO LIABILITY

The Company shall not indemnify or insure any person against the loss of any Erroneously Awarded Compensation pursuant to this Policy, nor shall the Company directly or indirectly pay or reimburse any person for any premiums for third-party insurance policies that such person may elect to purchase to fund such person's potential obligations under this Policy. None of the Company, an affiliate of the Company or any member of the Committee or the Board shall have any liability to any person as a result of actions taken under this Policy.

8. APPLICATION; ENFORCEABILITY

Except as otherwise determined by the Committee or the Board, the adoption of this Policy does not limit, and is intended to apply in addition to, any other clawback, recoupment, forfeiture or similar policies or provisions of the Company or its affiliates, including any such policies or provisions of such effect contained in any employment agreement, bonus plan, incentive plan, equity-based plan or award agreement thereunder or similar plan, program or agreement of the Company or an affiliate or required under applicable law (the "**Other Recovery Arrangements**"). The remedy specified in this Policy shall not be exclusive and shall be in addition to every other right or remedy at law or in equity that may be available to the Company or an affiliate of the Company.

9. SEVERABILITY

The provisions in this Policy are intended to be applied to the fullest extent of the law; provided, however, to the extent that any provision of this Policy is found to be unenforceable or invalid under any applicable law, such provision will be applied to the maximum extent permitted, and shall automatically be deemed amended in a manner consistent with its objectives to the extent necessary to conform to any limitations required under applicable law.

10. AMENDMENT AND TERMINATION

The Board or the Committee may amend, modify or terminate this Policy in whole or in part at any time and from time to time in its sole discretion. This Policy will terminate automatically when the Company does not have a class of securities listed on a national securities exchange or association.

11. DEFINITIONS

"**Applicable Rules**" means Section 10D of the Exchange Act, Rule 10D-1 promulgated thereunder, the listing rules of Nasdaq, and any applicable rules, standards or other guidance adopted by the Securities and Exchange Commission or any national securities exchange or association on which the Company's securities are listed.

"**Committee**" means the Compensation Committee of the Board.

"**Erroneously Awarded Compensation**" means the amount of Incentive-Based Compensation received by a current or former Officer that exceeds the amount of Incentive-Based Compensation that would have been received by such current or former Officer based on a restated Financial Reporting Measure, as determined on a pre-tax basis in accordance with the Applicable Rules.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

"**Financial Reporting Measure**" means any measure determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures derived wholly or in part from such measures, including GAAP, IFRS and non-GAAP/IFRS financial measures, as well as stock or share price and total equityholder return.

"**GAAP**" means United States generally accepted accounting principles.

"**IFRS**" means international financial reporting standards as adopted by the International Accounting Standards Board.

"**Impracticable**" means (a) the direct costs paid to third parties to assist in enforcing recovery would exceed the Erroneously Awarded Compensation; provided that the Company (i) has made reasonable attempts to recover the Erroneously Awarded Compensation, (ii) documented such attempt(s), and (iii) provided such documentation to the relevant listing exchange or association, (b) to the extent permitted by the Applicable Rules, the recovery would violate the Company's home country laws pursuant to an opinion of home country counsel; provided that the Company has (i) obtained an opinion of home country counsel, acceptable to the relevant listing exchange or association, that recovery would result in such violation, and (ii) provided such opinion to the relevant listing exchange or association, or (c) recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and the regulations thereunder.

"**Incentive-Based Compensation**" means, with respect to a Restatement, any compensation that is granted, earned, or vested based wholly or in part upon the attainment of one or more Financial Reporting Measures and received by a person: (a) after beginning service as an Officer; (b) who served as an Officer at any time during the performance period for that compensation; (c) while the issuer has a class of its securities listed on a national securities exchange or association; and (d) during the applicable Three-Year Period.

"**Officer**" means each person who serves as an executive officer of the Company, as defined in Rule 10D-1(d) under the Exchange Act.

"**Restatement**" means an accounting restatement to correct the Company's material noncompliance with any financial reporting requirement under securities laws, including restatements that correct an error in previously issued financial statements (a) that is material to the previously issued financial statements or (b) that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

"**Three-Year Period**" means, with respect to a Restatement, the three completed fiscal years immediately preceding the date that the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare such Restatement, or, if earlier, the date on which a court, regulator or other legally authorized body directs the Company to prepare such Restatement. The "Three-Year Period" also includes any transition period (that results from a change in the Company's fiscal year) within or immediately following the three completed fiscal years identified in the preceding sentence. However, a transition period between the last day of the Company's previous fiscal year end and the first day of its new fiscal year that comprises a period of nine to 12 months shall be deemed a completed fiscal year.