

**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 September 30, 2025

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: 001-38720



Twist Bioscience Corporation

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

46-2058888
(I.R.S. Employer
Identification No.)

681 Gateway Blvd, South San Francisco, CA 94080
(Address of principal executive offices and zip code)

(800) 719-0671
(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	TWST	The Nasdaq Global Select Market

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 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. (Check one):

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

Table of Contents

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

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

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

As of March 31, 2025, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of shares of common stock held by non-affiliates of the registrant was approximately \$2.32 billion based upon the closing sale price on the Nasdaq Global Select Market reported for such date.

The number of shares of the Registrant's common stock outstanding as of November 13, 2025, was 61,148,026.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive proxy statement to be filed in connection with its 2025 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K.

**TWIST BIOSCIENCE CORPORATION
ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2025**

TABLE OF CONTENTS

	Page
<u>PART I</u>	
<u>Item 1. Business</u>	<u>3</u>
<u>Item 1A. Risk Factors</u>	<u>13</u>
<u>Item 1B. Unresolved Staff Comments</u>	<u>42</u>
<u>Item 1C. Cybersecurity</u>	<u>42</u>
<u>Item 2. Properties</u>	<u>44</u>
<u>Item 3. Legal Proceedings</u>	<u>44</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>44</u>
<u>PART II</u>	
<u>Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>45</u>
<u>Item 6. [Reserved]</u>	<u>46</u>
<u>Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>47</u>
<u>Item 7A. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>57</u>
<u>Item 8. Consolidated Financial Statements and Supplementary Data</u>	<u>58</u>
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>95</u>
<u>Item 9A. Controls and Procedures</u>	<u>95</u>
<u>Item 9B. Other Information</u>	<u>97</u>
<u>Item 9C. Disclosure Regarding Foreign Jurisdiction that Prevent Inspections</u>	<u>97</u>
<u>PART III</u>	
<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	<u>98</u>
<u>Item 11. Executive Compensation</u>	<u>98</u>
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>98</u>
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>98</u>
<u>Item 14. Principal Accounting Fees and Services</u>	<u>98</u>
<u>PART IV</u>	
<u>Item 15. Exhibits, Financial Statement Schedules</u>	<u>99</u>
<u>Item 16. Form of 10-K Summary</u>	<u>102</u>
<u>SIGNATURES</u>	<u>103</u>

Forward-looking statements

This Annual Report on Form 10-K for the fiscal year ended September 30, 2025 (this "Form 10-K"), contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements relate to, among other matters, plans for product development and licensing to third parties, expectations regarding market penetration, anticipated customer conversions to our products, plans to expand in the international markets, and identification and development of potential antibody candidates. Forward-looking statements are also identified by the words "believe," "will," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," "predict," "could," "potentially" and variations of such words and similar expressions. You should not rely upon forward-looking statements as predictions of future events. Such statements are based on management's expectations as of the date of this filing and involve many risks and uncertainties that could cause our actual results, events or circumstances to differ materially from those expressed or implied in our forward-looking statements. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- our ability to increase our revenue and our revenue growth rate;
- our ability to accurately estimate capital requirements and our needs for additional financing;
- our estimates of the size of our market opportunities;
- our ability to increase DNA production, reduce turnaround times and drive cost reductions for our customers;
- our ability to effectively manage our growth and maintain and improve operational efficiency, cost control, and gross margin as we scale;
- our ability to successfully enter new markets and manage our international expansion;
- our ability to comply with evolving international regulatory requirements, including those in the European Union and other key markets;
- our ability to develop and commercialize additional products in the synthetic biology, biologic drug industries, including our portfolio of Express products;
- our ability to leverage our investment in our manufacturing facility in Wilsonville, Oregon;
- our ability to protect our intellectual property, including our proprietary DNA synthesis platform;
- costs associated with defending intellectual property infringement and other claims;
- the effects of increased competition in our business;
- our ability to keep pace with rapid changes in technology and evolving competitive dynamics;
- our ability to integrate and leverage artificial intelligence and machine learning technologies to improve operational efficiency, product development, and customer solutions;
- our ability to successfully identify, evaluate and manage any future acquisitions of businesses, solutions or technologies;
- the success of our marketing efforts;
- a significant disruption in, or breach in security of our information technology systems and resultant interruptions in service and any related impact on our reputation;
- our ability to attract and retain qualified employees and key personnel;
- the effects of natural or man-made catastrophic events or public health emergencies;

Table of Contents

- the effectiveness of our internal controls;
- changes in government regulation affecting our business;
- uncertainty as to economic and market conditions and the impact of adverse economic conditions; and
- other risk factors included under the section titled "Risk Factors"

You should not rely upon forward-looking statements as predictions of future events. Such statements are based on management's expectations as of the date of this filing and involve many risks and uncertainties that could cause our actual results, events or circumstances to differ materially from those expressed or implied in our forward-looking statements.

Readers are urged to carefully review and consider all of the information in this Form 10-K and in other documents we file from time to time with the Securities and Exchange Commission (the "SEC"). We undertake no obligation to update any forward-looking statements made in this Form 10-K to reflect events or circumstances after the date of this filing or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

When we use the terms "Twist," "Twist Bioscience," the "Company," "we," "us" or "our" in this report, we are referring to Twist Bioscience Corporation and its consolidated subsidiaries unless the context requires otherwise. Sequence space and the Twist logo are trademarks of Twist Bioscience Corporation. All other company and product names may be trademarks of the respective companies with which they are associated.

* * * * *

PART I

Item 1. Business

At Twist Bioscience Corporation, we work in service of our customers who are changing the world for the better. In fields such as health care, food/agriculture, industrial chemicals/materials and academic research, by using our products, our customers are developing ways to better lives and improve the sustainability of the planet. We believe Twist Bioscience is uniquely positioned to help accelerate their efforts and the faster our customers succeed, the better for all of us.

We have developed a disruptive DNA synthesis platform to industrialize the engineering of biology. The core of our platform is a proprietary technology that pioneers a new method of manufacturing synthetic DNA by “writing” DNA on a silicon chip. We have miniaturized traditional chemical DNA synthesis reactions to write over 1,000,000 pieces of DNA (oligonucleotides) up to 500 bases through direct synthesis on each silicon chip, approximately the size of a large mobile phone, reducing by 99.8% the amount of chemicals we estimate would be used per gene as compared to plate-based synthesis. We have combined our silicon-based DNA writing technology with proprietary software, scalable commercial infrastructure and an e-commerce platform to create an integrated technology platform that enables us to achieve high levels of quality, precision, automation, and manufacturing throughput at a significantly lower cost and quicker than our competitors.

Building from this platform, we deliver products and services for a wide range of uses and markets. We have applied our unique technology to manufacture a broad range of products, including synthetic genes, tools for next generation sequencing ("NGS"), sample preparation, and both products and services for drug discovery and development, all designed to enable our customers to conduct research more efficiently and effectively. We sell our products and services to a global customer base of more than 3,800, customers across a broad range of industries.

We believe our products and services enable a broad range of applications that may ultimately improve health and the sustainability of the planet across multiple industries, including:

- healthcare for the identification, prevention, diagnosis and treatment of disease (antibody discovery and optimization technology);
- chemicals/materials for cost-effective and sustainable production of new and existing specialty chemicals and materials, such as spider silk, nylon, rubber, fragrances, food flavors and food additives;
- food/agriculture for more effective and sustainable crop production; and
- academic research for a broad range of education and discovery applications.

Background

We currently generate revenue through our synthetic biology and NGS tools product lines as well as biopharma services for antibody discovery, optimization and development. In addition, we are leveraging our platform to expand our portfolio to include other products and services to address additional market opportunities.

In fiscal year 2025, we served more than 3,800 customers and reported \$376.6 million in revenue, including \$215.1 million in revenue from the healthcare sector, \$93.2 million in revenue from the chemicals/materials sector, \$65.9 million in revenue from the academic research sector and \$2.4 million in revenue from the food/agriculture sector.

Our Markets

Synthetic Biology

Our synthetic biology products serve life sciences researchers across a variety of healthcare applications including drug discovery, disease detection, enzyme engineering, gene editing and basic academic research. In addition, our synthetic biology products are used for chemical and materials applications including development of synthetic spider silk, nylon, rubber, fragrances, flavors and food additives; for food and agricultural applications including improving crop traits such as adding vitamins or improving drought tolerance, and engineering bacteria to deliver nitrogen at the root of plants. While synthetic DNA has been produced for more than 40 years, the complexities of biology and the production constraints inherent in legacy processes have historically limited the applications and market opportunities for DNA synthesis.

Synthetic DNA is the fundamental building block that allows researchers to engineer biology. Synthetic DNA is a foundational product enabling the entire bioeconomy, with synthetic biology alone expected to have a \$2-4 trillion global impact by 2030-2040. The National Security Commission on Emerging Biotechnology recognized synthetic DNA as a critical choke point in many supply chains, making broad access important for many industries. In addition to synthetic DNA, we offer RNA products and proteins to fuel discoveries through the design-build-test-learn cycle.

Next-Generation Sequencing

Our NGS tools play an integral role in the way our customers prepare their patient samples to be sequenced. NGS has transformed many markets in recent years by changing the landscape of diagnosing disease and disorders and offers a path to prevent or treat disease. Some of the markets impacted by NGS include cancer diagnosis and care, reproductive health, food/agriculture, consumer genomics, infectious disease research and drug discovery. As NGS technology improves and the cost of sequencing declines, new emerging markets that were once considered impractical, such as therapy selection, population-scale sequencing, liquid biopsy (a test that detects multiple types of cancer from a single blood sample), minimal residual disease ("MRD") testing and single cell sequencing, have become major areas of interest and investment.

Historically, a significant constraint in many NGS applications has been the high cost and long turnaround time of oligonucleotide production. Highly accurate and reproducible oligonucleotide production is required to produce high quality target enrichment data. Traditionally, the lack of options for oligonucleotide production forced researchers to choose between using less precise methods or reducing the number of samples in their study. Twist's silicon-based platform synthesizes millions of oligonucleotides simultaneously with high uniformity and accuracy. Using highly uniform oligonucleotides ensures that the amount of oversampling needed to represent a dataset is kept to a minimum, meaning researchers can screen with confidence while reducing the down-stream sequencing costs.

The ability of the Twist DNA synthesis platform to precisely manufacture target enrichment probes at large scale has dramatically increased the types of projects that can now be addressed using NGS technologies. In addition to target enrichment, we offer innovative and application-specific library preparation with Twist-developed enzymes, buffers, beads, unique dual indexes ("UDIs"), unique molecular identifiers ("UMIs"), adapters and more. Our platform has unlocked new applications, improved data quality, and dramatically expanded the types of scientific questions that can be answered using NGS. In addition, the speed of our DNA synthesis platform enables customers to quickly deploy NGS technologies to applications where the time to answer is critical.

Our Platform

We developed the Twist Bioscience DNA synthesis platform to address the limitations of throughput, scalability, and cost inherent in legacy DNA synthesis methods. Our platform stems from extensive analyses and improvements to the existing gene synthesis and assembly workflows. Our core technologies combine expertise in silicon, software, fluidics, chemistry, and motion and vision control to miniaturize thousands of parallel chemical reactions on silicon and write thousands of strands of DNA in parallel.

Our Products

We have developed multiple products derived from synthetic DNA and our versatile DNA synthesis technology. Our current offering consists of two primary product lines, synthetic biology tools and NGS tools, that address different needs of our customers across a variety of applications as well as a biopharma service offering. As we have moved further up the value chain from fragments to genes to preps to proteins and beyond, the strategic connection between our synbio and biopharma groups tightens. More customers now leverage both products and services to accelerate discovery and identify breakthrough therapeutics. This growing convergence highlights the power of our integrated platform and reinforces Twist's unique position to serve the full spectrum of innovation in discovery.

Synthetic Biology Products

Synthetic Genes and Gene Fragments

Synthetic genes are manufactured strands of DNA. Customers (biotech, pharma, industrial chemical, agricultural companies as well as academic labs) order our synthetic genes to conduct a wide range of research, including product development for therapeutics, diagnostics, chemicals/materials, food/agriculture as well as a multitude of emerging applications within academic research. Virtually all research and development of this type requires trial and error, and our customers require many variations of genes to find the DNA sequence that achieves their objectives.

We offer two primary categories of synthetic genes: clonal genes of perfect quality delivered to the customer in a vehicle called a vector; and genes that customers can place in their own vector, non-clonal genes or fragments. Within these two categories, customers can order different lengths of DNA depending on their required final gene construct. Customers can order longer genes or shorter genes and can stitch genes together to create longer or shorter constructs if desired.

Currently, we manufacture genes of up to 5,000 base pairs in length, yielding a clonally perfect piece of DNA that our customers can immediately use for their research. We offer non-clonal genes of up to 5,000 base pairs in length, which we believe addresses the vast majority of demand for non-clonal genes. We also offer larger quantities of DNA for customers who require it for their development efforts. Our error rate for gene fragments is 1:7500 nucleotides.

In November 2023, we introduced Express Genes, a product line that offers customers the same perfect-quality clonal genes at a turnaround time of 5 business days. We charge a premium for this fast turnaround time. We make all genes and gene fragments on our Express timeline.

In fiscal year 2024, we expanded our Express product portfolio to include many other products including Multiplexed Gene Fragments and IgG proteins on a fast turnaround timeline. Our ability to provide this rapid turnaround for products at scale differentiates us from our competitors.

Oligonucleotide, or Oligo Pools

Oligo pools, or high diversity collections of oligonucleotides, are utilized in many applications, including targeted NGS, CRISPR gene editing, mutagenesis experiments, DNA origami (the nanoscale folding of DNA to create two- and three-dimensional shapes at the nanoscale), among others. Our oligo pools are also used for high-throughput reporter assays to study cell signaling pathways, gene regulation and the structure of cell regulatory elements. For these applications, we provide customers with accurate and uniform synthetic oligos to precisely match their required designs.

We sell a diverse, customizable set of oligo pools, ranging from a few hundred oligos to over one million, and offer oligonucleotides of up to 500 nucleotides in length, with an error rate of 1:3000 nucleotides. In fiscal year 2024, we added an offering of cloned oligo pools to further enable researchers.

IgG Proteins

Pairing the automation in our synthetic biology platform along with our expertise in antibody discovery, we introduced an immunoglobulin G ("IgG") protein offering for our customers focused on the pursuit of drug discovery and development. In the process of antibody discovery, antibody fragments (Fab, small chain fragment variable (scFv) or VHH) must be reformatted to full IgGs. Leveraging our silicon-based synthesis platform, we provide customers with a high throughput IgG capability, removing this bottleneck from the

antibody discovery process. We offer standard and Express turnaround times in both CHO and HEK293 cell lines as well as a wide variety of antibody characterization assays.

NGS Tools

Building from our DNA synthesis platform, we have developed products to enable NGS. Our products work on multiple sequencing platforms as we are sequencer agnostic. In particular, we are focused on addressing the demand for better sample preparation products that improve sequencing workflow, increase sequencing accuracy, and reduce downstream sequencing costs. Using our silicon-based DNA synthesis platform, we are able to synthesize exact sequences of interest. In the target enrichment process, our synthetic DNA probes bind to the sequence of interest within the sample, acting like a magnet to isolate and physically extract the targeted segment of DNA.

Our NGS products are primarily used within diagnostic tests for various indications including rare disease, SARS-CoV-2 and cancer through liquid biopsy and MRD. In addition, customers use our NGS tools for therapy selection, population genetics research and biomarker discovery, translational research, microbiology and applied markets research. Our customers are primarily diagnostic companies and hospitals, research institutions, agricultural biotechnology companies, and consumer genetics companies conducting diagnostic tests for a wide range of applications.

We offer a wide variety of NGS tools for our customers including library preparation kits, human exome kits, fixed and custom panels as well as Alliance panels. Alliance panels are customer-curated content sold through Twist. In addition, we offer specific workflow solutions including a methylation detection kit for cancer, rare and inherited disease study, as well as a fast hybridization solution (FastHyb), which allows researchers to go from sample to sequencer in a single day. In addition to NGS tools for DNA workflows, we offer full RNA sequencing workflows.

Synthetic Controls

Leveraging our DNA synthesis platform, we offer positive synthetic controls that provide quality control measures for a wide range of applications from assay development to routine testing of samples with both NGS and reverse transcription polymerase chain reaction (RT-PCR) assays.

Drug and Target Discovery Services and Solutions

Biopharma Services

Modern therapeutic targets are increasing in complexity and traditional, single modality platforms are no longer sufficient on their own. Our biopharma services group offers the “discovery trifecta” – in vivo, in vitro and in silico antibody discovery all under one roof. We provide comprehensive discovery services for our partners including library generation, screening, developability assays and antibody expression and characterization that result in ultra fast lead selection and engineering, which can mean a faster path in the race to the clinic.

Partnerships with Leading Companies

We have several avenues available to monetize our antibody discovery programs. Partnerships for our antibody development platforms require us to provide rapid, high quality, fit for purpose antibodies based on one or more targets and functional criterion provided to us by the customer.

We provide end-to-end services, whereby customers can choose to design and/or purchase libraries, or select various discovery platforms for Twist to characterize antibody candidates that bind to the customer's target(s) of interest. Customers pursuing artificial intelligence (“AI”) enabled antibody discovery platforms may use Twist to generate not only the antibodies of interest but also comprehensive high quality characterization data that is critical for use in the development and refinement of algorithms and subsequently used for the identification of therapeutic antibody candidates with appropriate developability properties. These partnerships generate revenue through licensing fees, fee-for service, as well as, in some cases, the inclusion of success-based milestones for clinical, regulatory and commercial achievements.

To date, we have generated antibody leads to multiple biological targets and these antibody leads are in various stages of early discovery and development.

As of September 30, 2025, we had signed 442 revenue-generating partnerships. Through these partnerships, we had 1182 completed programs and 84 active programs with 82 of the programs including milestones and/or royalties as of September 30, 2025. Some of our partners include Bayer, Boehringer Ingelheim GmbH, Takeda Pharmaceutical Company Limited, Adicet Bio, Ono Pharmaceutical Ltd., Kyowa Kirin, Invetx, Inc., Astellas Pharma Inc. and Neogene Therapeutics, Inc.

In October 2024, we entered into an agreement with XOMA Royalty under which they paid Twist \$15 million cash in exchange for 50% of future milestone and royalty payments from our existing collaborations as of the date of signing. We retain all upfront, service and other revenue earned under antibody discovery and biopharma solutions agreements as well as half of future milestones and royalties.

Our Growth Strategy

Our objective is to be the leading provider of synthetic DNA and related solution worldwide, including RNA and proteins, and to leverage our platform to build a leadership position in other life sciences markets in which we have a competitive advantage. We intend to accomplish this objective by executing on the following:

- maintain and expand our position as the provider of choice for high-quality, affordable synthetic DNA, RNA and proteins to customers across multiple industries;
- expand antibody and protein production as well as expand array of characterization assays to support customers conducting therapeutics discovery projects;
- become a leading supplier of NGS sample preparation products for a wide range of applications including liquid biopsy tests, MRD, agricultural genomics and population genomics;
- conduct biopharma services for our current customers and future partners; and
- expand our global presence.

Beyond these opportunities, we are working with industry partners to create new markets for our products by leveraging our platform.

Sales and Marketing

We have built a versatile and scalable commercial platform that enables us to reach a diverse customer base that we estimate consists of over 100,000 synthetic DNA users, potential customers of our NGS tools products and partners who may use our services for antibody discovery. In order to address this diverse customer base, we employ a multi-channel strategy comprised of a direct sales force targeting synthetic DNA customers, a direct sales force focusing on the NGS market and an e-commerce platform that serves both commercial channels. We employ business development and sales representatives for our biopharma solutions as well. Our sales force is focused on customer acquisition, support, and management across industries, and is highly trained on both the technical aspects of our platform and how our product and services can be used in a wide range of industries. Our easy-to-use e-commerce platform allows customers to design, validate, and place on-demand orders of customized DNA online, and enables them to receive real-time customized quotes for their products and track their order status through the manufacturing and delivery process. This is a critical part of our strategy to address our large markets and diverse customer base, as well as drive commercial productivity, enhance the customer experience, and promote loyalty.

We sell our products through a worldwide commercial organization that includes direct sales personnel, commercial consultants in Europe and Asia, an e-commerce platform and distributors. As of September 30, 2025, we employed 278 employees and 5 dedicated commercial consultants in sales, marketing and customer support.

Research and Development

We are engaged in ongoing research and development efforts focused on enhancements to existing products and the development of new products. Currently, we are pursuing research and development projects with respect to the following:

- process development for highest quality oligos;
- develop proprietary enzymes to optimize SynBio and NGS products and workflows;

Table of Contents

- evaluate and implement AI applications to potentially optimize services for our customers;
- expansion of our product offerings for oligo, gene, synthetic controls, NGS library preparation and target enrichment, and DNA Libraries products;
- continuous process improvements across the business to facilitate speed, efficiency and automation;
- develop new products including mRNA and proteins; and
- expand capabilities for antibody and protein production to support multiple formats and provide a wide array of characterization assays.

Research and development activities are conducted in collaboration with manufacturing activities to help expedite new products from the development phase to manufacturing and to more quickly implement new process technologies. From time to time, our research and development efforts have included participation in technology collaborations with universities and research institutions.

As of September 30, 2025, we employed 91 people in our research and development team.

Patents and Other Intellectual Property Rights

Worldwide, we own or exclusively in-license over 200 issued or allowed patents and more than 250 pending patent applications as of September 30, 2025. 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 DNA synthesis, NGS and antibody libraries. Our policy is to file patent applications to protect technology, inventions and add improvements that are important to our business. Individual patent terms extend for varying periods of time, depending upon the date of filing of the patent application, the date of patent issuance, and the legal term of patents in the countries in which they are obtained.

Manufacturing and Facilities

The production of our products is a highly complex and precise process. We currently manufacture all of our products and multiple sub-assemblies at our manufacturing facilities in South San Francisco, California and Wilsonville, Oregon. We consider our long-lived assets to be ready for their intended use when they are first capable of producing a unit of product that is saleable at which point depreciation of the asset commences. We also outsource some of our sub-assemblies to third party manufacturers. All of our products originate from synthetic DNA obtained from nanostructured clusters fabricated on our proprietary silicon technology platform. Due to its on-demand nature, the gene synthesis business requires manufacturing operations to be in operation 24 hours a day, seven days a week, 365 days per year. For synthetic genes, we have built a highly scalable gene production process with what we believe is industry-leading capacity to address the growing demand of scalable, high-quality, affordable synthetic genes. As of September 30, 2025, we employed 412 people in our manufacturing and operations team.

In addition to synthetic genes, we manufacture oligo pools. The pooling process has been fully automated through a mixture of custom proprietary and over-the-counter liquid handling equipment. We have the capacity to make many millions of high-quality oligos per day that can be used to make genes and gene fragments of various lengths, multiplex gene fragments, oligo pools of various sizes, DNA libraries and NGS tools products. We intend to increase our shipments to leverage our production capacity through our e-commerce platform, and express offerings, which we believe will expand both our market opportunity and our customer base.

The manufacturing process for our NGS tools is highly flexible given the efficiency of our production capability. We have automated the entire workflow using proprietary and over-the-counter laboratory equipment. We have built dedicated production capabilities for our NGS products.

ISO certification

Medical device manufacturers implement a Quality Management System ("QMS") for medical devices to ensure that their products consistently meet regulatory requirements and customer expectations. Implementing a QMS for medical devices is crucial for ensuring patient safety, regulatory compliance, and the overall effectiveness and reliability of medical devices in the market. The international standard International Organization for Standardization ("ISO") 13485 is widely recognized and provides a framework for developing and maintaining a QMS specific to the medical device industry. We certified our QMS to ISO 13485:2016 standard (Medical

devices—Quality management systems—Requirements for regulatory purposes). ISO is a global network of national standards with over 21,000 standards for nearly every aspect of technology and business. ISO has standard bodies in 163 countries. ISO surveillance audits are carried out annually by the registrar (certification body) to ensure we maintain our system in compliance with ISO standards and to demonstrate the continuous improvement of our QMS. Recertification is required every three years, and we have been successfully recertified since obtaining our original ISO certification. Our latest successful surveillance audit took place in September 2025.

In 2020, our QMS for manufacturing NGS Target Enrichment Panels at our South San Francisco facility was certified to ISO 13485:2016, followed by certification of our Wilsonville manufacturing facility in 2023.

Supply Chain

We have historically purchased many of the components and raw materials used in our products from numerous suppliers worldwide. For reasons of quality assurance, sole source availability or cost effectiveness, certain components and raw materials used in the manufacture of our products are available only from one supplier. We have worked closely with our suppliers to develop contingency plans to assure continuity of supply while maintaining high quality and reliability, and in some cases, we have established long-term supply contracts with our suppliers. We qualify additional suppliers for key materials in an effort to ensure continuity of supply for our operations.

Competition

The synthetic biology industry is intensely competitive and is characterized by price competition, technological change, international competition, product turnaround time and manufacturing yield problems. The competitive factors in the market for our products include:

- price;
- product quality, reliability and accuracy;
- product offerings & complexity;
- turnaround time;
- breadth of product line;
- design and introduction of new products;
- market acceptance of our products and those of our customers;
- throughput and scale; and
- technical support and service.

We face competition from a broad range of providers of core synthetic biology products such as GenScript Biotech Corporation, GENEWIZ (owned by Azenta Life Sciences), Integrated DNA Technologies, Inc. (owned by Danaher Corporation), DNA 2.0 Inc. d/b/a/ ATUM, GeneArt (owned by Thermo Fisher Scientific Inc.), Eurofins Genomics LLC, OriGene Technologies, Inc., Eurofins Genomics Blue Heron, Elegen Corporation, Ansa Biotechnologies, Inc., Telesis Bio, Inc. and others. Additionally, we compete with both large and emerging providers in the life sciences tools and diagnostics industries focused on sample preparation for NGS such as Thermo Fisher Scientific Inc., Illumina, Inc., Integrated DNA Technologies, Inc., Roche Holding AG, New England Biolabs, Inc., Watchmaker Genomics, Inc. and Agilent Technologies, Inc. In the antibody discovery market, we compete with contract research organizations including Curia Global, Inc., GenScript Biotech Corporation, and Genovac (formerly part of Aldevron, LLC), and antibody discovery biotechnology companies, such as FairJourney Biologics S.A/IONTAS Limited, Adimab, LLC, Distributed Bio (owned by Charles River Laboratories International, Inc.), Ablexis, LLC, Specifica Inc., OmniAb, Inc., Alloy Therapeutics, Inc. and AbCellera Biologics Inc.

Corporate Responsibility

We are at the forefront of the bioeconomy revolution, and our products are increasingly being used to empower our customers, which consist of diagnostic, therapeutic and healthcare companies, agricultural biotech companies, chemical companies, academic institutions and government entities, around the world to address large societal challenges. All of our work supports our mission to provide synthetic DNA and DNA products to improve health and sustainability.

Full results from our Corporate Responsibility efforts, including our 2025 Corporate Responsibility Report can be found here: <https://www.twistbioscience.com/company/corporate-responsibility>. The information on our website, including, without limitation, in the 2025 Corporate Responsibility Report, should not be deemed incorporated by reference into this annual report or otherwise “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section.

Human Capital

Our employees are a key factor in our ability to serve our customers. The ability to hire and retain highly skilled professionals remains key to our success in the marketplace. To attract, develop and motivate our employees, we offer a challenging work environment, ongoing skills development initiatives, attractive career advancement, opportunities and a culture that rewards entrepreneurial initiative and exceptional execution.

Our guiding principles of grit, impact, service and trust serve as the foundation of our culture. Our guiding principles set the tone for how we work together, provide a framework for giving feedback and increase the power of our brand. Service is at the core of our business and our interactions with one another. We relentlessly focus on exceeding internal and external customer needs.

Employee Population

As of September 30, 2025, we had 979 employees. Of these employees, 91 were primarily engaged in research and development activities; 278 were primarily engaged in marketing, sales and customer support; 198 were primarily engaged in general and administrative activities; and 412 were primarily engaged in operations and manufacturing, dedicated to manufacturing our synthetic genes, oligo pools, NGS tools, antibody proteins and DNA libraries. None of our employees is represented by a labor union, and we consider our employee relations to be good.

Recruiting, Development and Retention

Recruiting

We believe that our employees are our most important asset. Beginning with the pre-recruitment process, we provide internship opportunities in both scientific and non-scientific fields for students interested in biotechnology and the science, technology, engineering and mathematics (STEM) careers. We engage with local communities to provide expert speakers sharing nontraditional career pathways for the biotechnology field. We partner with community colleges to build our brand as a source of high-quality candidates for every role with the goal of identifying the best possible candidate to fill open positions within the Company.

Growth and Development

We invest significant financial and support resources to develop the talent we need to remain at the cutting edge of innovation to ensure Twist Bioscience is an employer of choice. Our performance management system is aimed at supporting our culture, maintaining consistency with our guiding principles and to focusing on continuous learning and development. Our success in the market depends on employees understanding and embracing how their job contributes to the Company’s overall strategy. We encourage cross team communication as well as integrated departmental communication. We believe this broadens our employee’s skill set and provides opportunity for growth and advancement. We invest in our next generation of leaders through a six-month leadership program and individualized coaching for mid-level managers. In addition, we offer tuition reimbursement aimed at growth and career development.

Compensation and Benefits, Health and Wellness

We strive to provide pay, comprehensive benefits and services that help meet the varying needs of our employees. Our total rewards package includes above-market pay; fully covered healthcare benefits for employees, with family member healthcare benefits covered at 90%; onsite services; and other benefits.

Employee Health and Safety

We remain steadfast in our commitment to promote the health and safety of our employees and have implemented a robust Injury and Illness Prevention Program (IIPP). We require annual workplace safety training to reinforce workplace safety procedures that may be useful in the event of emergency situations and to assist our employees in helping to prevent workplace accidents. Our Employee Safety Committee, which is comprised of numerous cross-departmental members, meets on a regular basis (at least quarterly) to review workplace safety and adherence to safety policies. As part of our efforts, all employees and managers complete workplace harassment and sexual harassment training that includes details on how to report any violation of these policies.

Employee Communications and Engagement

We employ a variety of tools to facilitate open and direct communication including open forums with executives, employee surveys and engagement through focus groups, forums and committees. We endeavor to further refine our employee programs through our employee engagement survey as well as follow up quarterly pulse surveys. Our most recent survey was conducted in September 2025 where 90% of our employees responded.

We hold All Employee meetings twice per month as well as a monthly managers meeting for all people managers.

Community Engagement, Social and Relationship Capital

We are endeavoring to develop relationships, give back to our communities and engage in corporate social responsibility and sustainability initiatives. We provide all employees with eight fully paid hours each year to give back to the community at an organization of their choice. We are working to engage with the local community organizations to provide volunteer opportunities for our employees.

Government Regulation

Twist Bioscience is a leading provider of synthetic DNA products, serving customers across research, development and commercial applications. We offer a wide range of products intended for "Research Use Only" ("RUO") as well as a limited catalog of NGS tools that have been CE-marked pursuant to, and regulated by, the In Vitro Diagnostic Device Regulation (EU) 2017/746 (the "IVDR"), and sold as in-vitro diagnostic medical devices ("IVDs") in the European market. Our RUO products are sold and promoted for non-diagnostic and non-clinical purposes to academic institutions, life sciences and research laboratories, and biopharmaceutical and biotechnology companies who then integrate our products into their workflows for further commercialization. These products serve as vital research tools, enabling our customers to develop a diverse spectrum of commercial products. However, if we expand our portfolio of IVDs, we may be subject to a variety of specialized regulatory requirements, including those set forth by the U.S. Food and Drug Administration (the "FDA") in the United States and the IVDR in the European Union ("EU").

Aside from certain labeling requirements, we believe that most of our products, as currently marketed, are largely unregulated by governmental bodies, including the FDA. Even so, we recognize that the applications of synthetic biology are rapidly evolving and we are actively involved in supporting our customers who are developing regulated products, including through contract manufacturing and specialized packaging solutions. As such, we may be subject to certain regulatory requirements, directly or indirectly, and maintain a robust QMS to ensure compliance. Furthermore, if we expand our own portfolio of IVDs, we anticipate further engagement with regulatory bodies such as the FDA. We are committed to navigating this evolving landscape and ensuring that our products and services meet the highest quality and regulatory standards. For example, we have been recently evaluated by an external third party who has determined that we have processes in place to support compliance with current Good Manufacturing Practices and to support the required regulatory requirements as future regulations are updated by the FDA. Currently, our QMS adheres to ISO 13485:2016 to ensure the quality and reliability of our products.

RUO is a term applicable to our target enrichment products for the NGS market and is applied to kits sold to this market segment. It is intended to restrict use of the kits to non-in vitro diagnostic purposes. Our NGS target enrichment and library preparation products are used in a more comprehensive workflow for NGS for research purposes only. In the future, we may develop this larger workflow as an in vitro diagnostic, for which we will obtain prior authorization from FDA or other applicable regulatory authorities before commercialization. For example, we launched a limited line of IVDs that are CE-marked and IVDR compliant to support our European customers who are in the in vitro diagnostic medical device market.

FDA

Pursuant to its authority under the Federal Food, Drug, and Cosmetic Act (the "FDC Act"), the FDA has jurisdiction over medical devices. The FDA regulates, among other things, the research, testing, manufacturing, safety, labeling, storage, recordkeeping, premarket clearance or approval, marketing and promotion and sales and distribution of medical devices in the United States to ensure that medical products distributed domestically are not adulterated and are safe and effective for their intended uses. In addition, the FDA regulates the import and export of medical devices.

Medical Device Regulation in General

IVDs are a category of medical devices that include reagents, instruments, and systems intended for use in diagnosis of disease or other conditions, including a determination of the state of health, in order to cure, mitigate, treat, or prevent disease or its sequelae. IVDs are intended for use in the collection, preparation, and examination of specimens taken from the human body. An RUO IVD product is an IVD product that is in the laboratory research phase of development or is intended for use in the conduct of nonclinical laboratory research and not intended to produce results for clinical use. As such, an RUO IVD is not intended for use in clinical investigations or in clinical practice. Such RUO products do not require premarket clearance or approval from the FDA, provided that they be labeled "For Research Use Only. Not For Use In Diagnostic Procedures" pursuant to FDA regulations or they may be considered to be adulterated and misbranded.

As noted above, although our products are currently intended for research purposes only, the regulatory requirements related to marketing, selling, and supporting such products could be uncertain and depend on the totality of circumstances. This uncertainty exists even if a use by our customers occurs without our consent. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

According to the FDA, including the RUO labeling statement will not necessarily render the device exempt from FDA premarket clearance, approval, or other regulatory requirements if the totality of circumstances surrounding the distribution of the product indicate that the manufacturer intended its RUO products for diagnostic use. Such circumstances may include, but are not limited to, the product's advertising, labeling, or promotion, or the manufacturer's assistance of a clinical laboratory in validating or verifying a test that incorporates products labeled RUO. This uncertainty exists even if such use by our customers occurs without our consent. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

Some of our customers may use our products in their own laboratory-developed tests ("LDTs"). The FDA has historically taken the position that LDTs are considered to be IVDs but has generally exercised enforcement discretion. However, the FDA recently attempted to regulate virtually all LDTs as medical devices by publishing a final rule that would have phased out the policy of enforcement discretion it historically applied to LDTs (the "LDT Final Rule"). On August 6, 2025, the FDA rescinded the LDT Final Rule after it was vacated in its entirety on March 31, 2025 by the United States District Court for the Eastern District of Texas.

EU Regulation

In the EU, the new IVDR imposes stricter requirements for the marketing and sale of applicable medical devices, including in the area of clinical evaluation requirements, quality systems and post-market surveillance. Some of the IVDR requirements such as general safety and performance requirements became effective in May 2022 while the complete enforcement of the entirety of IVDR will not happen until May 2028. We likely will be impacted by this new regulation, either directly as a manufacturer of IVDs, or indirectly as a supplier to customers who are placing IVDs in the EU market for clinical or diagnostic use. In February 2024, we introduced IVDR-compliant Precision Dx products for whole exome sequencing to meet the needs of our European customers and demonstrate our commitment to providing compliant solutions for clinical and diagnostic use in the EU.

Federal Select Agent Program

The Centers for Disease Control and Prevention (the "CDC") and the Animal and Plant Health Inspection Service (the "APHIS") administer requirements of the Federal Select Agent Program ("FSAP"). FSAP requirements govern possession, use, and transfer of select agents and toxins consisting of biological materials that have the potential to pose a severe threat to public, animal or plant health or to animal or plant products.

The FSAP currently lists approximately 63 select agents and toxins. The registered entities primarily consist of academic, federal and non-federal government, commercial, and private facilities that conduct research studies or diagnostic activities. We are not a registered entity under the FSAP and it is our policy generally not to produce or otherwise work with any biological material that is subject to the FSAP license requirements. To the extent that we may possess, use, or transfer any material considered a select agent or toxin under the FSAP prospectively, we would seek to register with the FSAP and obtain all necessary permits for possession, transfer, importation, or any other regulated activity.

Export Controls

Some sequences and synthetic controls we produce may be subject to licensing requirements for export outside of the United States under the U.S. Export Administration Regulations. Given the evolving nature of our industry, legislative bodies or regulatory authorities may adopt additional regulation or expand existing regulation to include our products. Changes to the current regulatory framework, including the imposition of additional or new regulations, could arise at any time, and we may be unable to obtain or maintain comparable regulatory approval or clearance of our products, if required. For example, the U.S. government is expected to promulgate a new export control regarding DNA writers, which may require additional compliance considerations with respect to hiring. These regulations and restrictions may materially and adversely affect our business, financial condition, and results of operations.

OSTP Framework for Nucleic Acid Synthesis Screening

The Office of Science and Technology Policy in 2024 published the Framework for Nucleic Acid Synthesis Screening. The Framework requires that U.S.-funded researchers and institutions limit the purchase of synthetic nucleic acids only to companies that publicly attest to adherence to the screening requirements of the Framework. Twist's biosecurity practices satisfy or exceed the requirements of the Framework and, as such, Twist has publicly attested to our adherence. We have also agreed, as required by the Framework, to amend our attestation within 72 hours should the status of our adherence to the Framework change.

Available Information

Our corporate website address is www.twistbioscience.com. We use the investor relations page of our website for purposes of compliance with Regulation FD and as a routine channel for distribution of important information, including news releases, analyst presentations, financial information and corporate governance practices. Our filings with the SEC are posted on our website and available free of charge as soon as reasonably practical after they are electronically filed with, or furnished to, the SEC. The SEC's website, www.sec.gov, contains reports, proxy statements and other information regarding issuers that file electronically with the SEC. The content on any website referred to in this Form 10-K is not incorporated by reference in this Form 10-K unless expressly noted. Further, the Company's references to website URLs are intended to be inactive textual references only.

Item 1A. Risk Factors

Risk Factor Summary

Investing in our common stock involves a high degree of risk. You should carefully consider all information in this Form 10-K and in subsequent reports we file with SEC prior to investing in our common stock. These risks are discussed more fully in the section titled "Risk Factors." These risks and uncertainties include, but are not limited to, the following:

- We have incurred net losses in every period to date, and we expect to continue to incur significant losses as we develop our business and may never achieve profitability;
- If we are unable to maintain adequate revenue growth or do not successfully manage such growth, our business and growth prospects will be harmed;
- The continued success of our business relies heavily on our disruptive technologies and products and our position in the market as a leading provider of synthetic DNA using a silicon chip;
- We are substantially dependent on the success of our synthetic DNA products;

- We operate in a highly competitive industry and if we are not able to compete effectively, our business and operating results will likely be harmed;
- If we are unable to attract new customers and retain and grow sales from our existing customers, our business will be materially and adversely affected;
- Our revenue, results of operations, cash flows and reputation in the marketplace may suffer upon the loss of a limited number of large customers;
- If we, or our partners or suppliers, experience a significant disruption in, or breach in security of, information technology systems or other cybersecurity incidents, our business could be adversely affected;
- As we continue to grow our business, we will need to implement new systems and software successfully, otherwise our business and our financial condition and results of operations could be adversely affected;
- Rapidly changing technology and extensive competition in synthetic biology could make the products we are developing and producing obsolete or non-competitive unless we continue to develop and manufacture new and improved products and pursue new market opportunities;
- We depend on one single-source supplier for a critical component for our DNA synthesis process. Although we have a reserve of supplies and alternative suppliers exist, the loss of this supplier or its failure to supply us with the necessary component on a timely basis could cause delays in the future capacity of our DNA synthesis process and adversely affect our business;
- We depend on the continuing efforts of our senior management team and other key personnel, including our scientific and engineering personnel. If we lose members of our senior management team or other key personnel or are unable to successfully retain, recruit and train qualified researchers, engineering and other personnel, our ability to develop our products could be harmed, and we may be unable to achieve our goals;
- We may engage in strategic transactions, including acquisitions and divestitures that could disrupt our business, cause dilution to our stockholders, reduce our financial resources, or prove not to be successful;
- We may require additional financing to achieve our goals, and such additional financing may not be available acceptable terms, or at all, which could have an adverse effect on our business;
- If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which would adversely affect our business;
- Our ability to protect our intellectual property and proprietary technology through patents and other means is uncertain; and
- If we are unable to obtain, maintain and enforce intellectual property protection, others may be able to make, use, or sell products and technologies substantially the same as ours, which could adversely affect our ability to compete in the market.

Risk Factors

The following discussion of risk factors contains forward-looking statements. These risk factors may be important to understanding other statements in this Form 10-K. The following information should be read in conjunction with Part II, Item 7, "Management's discussion and analysis of financial condition and results of operations" and the consolidated financial statements and related notes in Part II, Item 8, "Consolidated financial statements and supplementary data" of this Form 10-K. The risks and uncertainties described below are not the only ones we face. Additional risk and uncertainties not presently known to us or that we presently deem less significant may also impair our business operations. If any of the events or circumstances described in the following risk factors actually occur, our business, operating results, financial condition, cash flows, and prospects could be materially and adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.

Our business, financial condition and operating results can be affected by a number of factors, whether currently known or unknown, including but not limited to those described below, any one or more of which could, directly or indirectly, cause our actual financial condition and operating results to vary materially from past, or from anticipated future, financial condition and operating results. Any of these factors, in whole or in part, could materially and adversely affect our business, financial condition, operating results and stock price.

Because of the following factors, as well as other factors affecting our financial condition and operating results, past financial performance should not be considered to be a reliable indicator of future performance, and investors should not use historical trends to anticipate results or trends in future periods.

Risks Related to Our Business

We have incurred net losses in every period to date, and we may continue to experience losses as we develop our business and may never achieve profitability.

We have incurred net losses each year since inception and have generated limited revenue from product sales to date. We expect to incur increasing costs as we grow our business. We cannot be certain if or when we will produce sufficient revenue from our operations to support our costs. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the success of our existing products and the development and commercialization of additional products in the synthetic biology and biologic drug industries as well as leveraging our investment in our manufacturing facility in Wilsonville, Oregon, and investing in technology to support our growth. Even if profitability is achieved, we may not be able to sustain profitability. We incurred net losses of \$77.7 million, \$208.7 million and \$204.6 million for the years ended September 30, 2025, 2024 and 2023, respectively. As of September 30, 2025, we had an accumulated deficit of \$1,319.6 million. We may continue to experience losses in the future as we continue to devote a substantial portion of our resources to market acceptance of our products, future product development, and our market penetration and margins as well as the other risks described in this Form 10-K, many of which are beyond our control. In addition, inflationary pressure could adversely impact our financial results by increasing operating costs. We may not fully offset these cost increases by raising prices for our products and services, which could result in downward pressure on our margins. Further, our clients may choose to reduce their business with us if we increase our pricing.

If we are unable to maintain adequate revenue growth or do not successfully manage such growth, our business and growth prospects will be harmed.

We have experienced significant revenue growth in a short period of time. We may not achieve similar growth rates in future periods. Investors should not rely on our operating results for any prior periods as an indication of our future operating performance. To effectively manage our anticipated future growth, we must continue to maintain and enhance our manufacturing, sales, financial and customer support administration systems, processes and controls. Failure to effectively manage our anticipated growth could lead us to over-invest or under-invest in development, operational, and administrative infrastructure; result in weaknesses in our infrastructure, systems, or controls; give rise to operational mistakes, losses, loss of customers, productivity or business opportunities; and result in loss of employees and reduced productivity of remaining employees.

Our continued growth could require significant capital expenditures and might divert financial resources from other projects such as the development of new products and services, including the development and commercialization of additional products in the synthetic biology and biologic drug industries. As additional products are developed and commercialized, we may need to incorporate new equipment, implement new technology systems, or hire new personnel with different qualifications. Failure to manage this growth or transition could result in delays in launching new products, turnaround time delays, higher manufacturing costs, declining product quality, deteriorating customer service, and slower responses to competitive challenges. A failure in any one of these areas could make it difficult for us to meet market expectations for our products, and could damage our reputation and the prospects for our business.

If our management is unable to effectively manage our anticipated growth, our expenses may increase more than expected, our revenue could decline or grow more slowly than expected and we may be unable to implement our business strategy. In addition, the quality of our products may suffer, which could negatively affect our reputation and harm our ability to retain and attract customers.

We may encounter difficulties in managing our growth, and these difficulties could impair our profitability.

Currently, we are working simultaneously on multiple projects, expanding our capacity as well as targeting several market sectors, including activities in the academic, chemicals/materials, diagnostics, therapeutics and food sectors. In addition, we work to renew our ISO certifications from time to time. These diversified operations and activities place significant demands on our limited resources and require us to substantially expand the capabilities of our technical, administrative and operational resources and technology systems.

If we are unable to manage this growth and the periodic ISO recertification of our manufacturing facilities effectively, our shipments to our customers could be impacted, our time and resources could be diverted from other products and offerings and our business and operating results could suffer. In addition, if we fail to timely deliver products or meet quantity requirements under our contracts with customers, we may offer discounts to them, and customers' minimum purchase requirements, if applicable, may be reduced. Our ability to manage our operations and costs, including research and development, costs of components, manufacturing, sales and marketing, requires us to continue to invest in and improve our technology systems and processes and take other actions to enhance our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees. Failure to attract and retain sufficient numbers of talented employees will further strain our human resources and could impede our growth.

The continued success of our business relies heavily on our disruptive technologies and products and our position in the market as a leading provider of synthetic DNA using a silicon chip.

Our future profitability will depend on our ability to successfully execute and maintain a sustainable business model and generate continuous streams of revenue. Our business model is premised on the fact that we are the only DNA synthesis provider to synthesize DNA on a silicon chip on a large commercial level and the competitive advantages this creates. Our DNA synthesis methods, among other things, reduce the amount of raw materials required, speed up the synthesis process and deliver large volumes of high-quality synthetic DNA at low unit cost. However, if other competitors develop and commercialize a manufacturing process using a silicon chip or other similar technologies providing for the development of competitive synthetic DNA products at scale, this could be disruptive to our business model and could adversely affect our business prospects, financial condition and results of operations. If we are unable to convert sufficient number of current manufacturers of synthetic DNA to buyers of our synthetic DNA, surpass our competitors regarding certain industry-related data points, and effectively implement our e-commerce platform which facilitates efficient order entry and fulfillment for our customers, our business, prospects, financial condition and results of operation will be adversely affected.

We are substantially dependent on the success of our synthetic DNA products.

To date, we have invested a substantial portion of our efforts and financial resources towards the research and development and commercialization of our synthetic DNA products. The DNA synthesis business is very capital intensive, particularly for early-stage companies that do not have significant off-setting revenues and which are making significant investments in the commercialization and marketing of their products.

Substantially all of our revenue generated to date is from our synthetic DNA products. Our financial results are dependent on strengthening our synthetic biology and NGS product groups while diversifying into other developing sectors.

Our near-term prospects, including our ability to finance our research and development activities and initiatives and enter into strategic collaborations, will depend heavily on the successful development and commercialization of our synthetic DNA products. These initiatives will be substantially dependent on our ability to generate revenue from our synthetic DNA products and obtain other funding necessary to support these initiatives. We continuously innovate to expand our portfolio of products. Our inability to continue these initiatives and initiate new research and development efforts could result in a failure to develop or delay in developing new products, improve upon existing products, or expand our addressable market, which could have a material and adverse impact on our sales, business, financial position and results of operations.

We operate in a highly competitive industry and if we are not able to compete effectively, our business and operating results will likely be harmed.

We face competition from a broad range of providers of core synthetic biology products such as GenScript Biotech Corporation, GENEWIZ (owned by Azenta Life Sciences), Integrated DNA Technologies, Inc. (owned by Danaher Corporation), DNA 2.0 Inc. d/b/a/ ATUM, GeneArt (owned by Thermo Fisher Scientific Inc.), Eurofins Genomics LLC, OriGene Technologies, Inc., Eurofins Genomics Blue Heron, Elegen Corporation, Ansa Biotechnologies, Inc., Telesis Bio, Inc. and others. Additionally, we compete with both large and emerging

providers in the life sciences tools and diagnostics industries focused on sample preparation for NGS such as Thermo Fisher Scientific Inc., Illumina, Inc., Integrated DNA Technologies, Inc., Roche Holding AG, New England Biolabs, Inc., Watchmaker Genomics, Inc. and Agilent Technologies, Inc. In the antibody discovery market, we compete with contract research organizations including Curia Global, Inc., GenScript Biotech Corporation, and Genovac (formerly part of Aldevron, LLC), and antibody discovery biotechnology companies, such as FairJourney Biologics S.A/IONTAS Limited, Adimab, LLC, Distributed Bio (owned by Charles River Laboratories International, Inc.), Ablexis, LLC, Specifica Inc., OmniAb, Inc., Alloy Therapeutics, Inc. and AbCellera Biologics Inc. We may not be successful in maintaining our competitive position for a number of reasons. Some of our current competitors, as well as many of our potential competitors, have significant name recognition, substantial intellectual property portfolios, longer operating histories, greater resources to invest in new technologies, substantial experience in new product development and manufacturing capabilities and more established distribution channels to deliver products to customers than we do. These competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. Our competitors may develop disruptive technologies or products that are comparable or superior to our technologies and products. In light of these advantages, even though we believe our technology is superior to the products offerings of our competitors, current or potential customers might accept competitive products in lieu of purchasing our products. Increased competition is likely to result in continued pricing pressures, which could harm our sales, profitability or market share. Our failure to continue competing effectively or winning additional business with our existing customers could materially and adversely affect our business, financial condition or results of operations.

If we are unable to attract new customers and retain and grow sales from our existing customers, our business will be materially and adversely affected.

In order to grow our business, we must continue to attract new customers and retain and grow sales from our existing customers on a cost-effective basis. To do this, we aim to attract new and existing buyers of synthetic DNA and NGS tool kits, convert makers of synthetic DNA into buyers of synthetic DNA, monetize our antibody discovery platform by entering into partnerships, expand the market opportunities available for our product portfolio and achieve widespread market acceptance by delivering both our current product offerings and new products and technologies at affordable cost, with high-quality, reliable turnaround times and throughput, superior e-commerce services and effective technical support. We cannot guarantee that our efforts to provide these key requirements will be consistently acceptable to, and meet the performance expectations of, our customers and potential customers. Furthermore, the commercialization of certain of the applications for which our customers use our products may be subject to clinical studies and/or coverage and reimbursement determinations by government and private payors, and if they are proven to have less clinical value than anticipated and/or fail to receive adequate coverage and reimbursement determinations it could have a negative impact on our sales and revenues. For example, we currently generate a significant amount of our NGS tool revenues from sales related to liquid biopsy applications, including MRD, that are undergoing clinical studies and/or subject to coverage and reimbursement determinations by government and private payors. If these liquid biopsy applications, including MRD, are proven to have less clinical value than anticipated and/or fail to receive adequate coverage and reimbursement determinations, it could have a material negative impact on our sales and revenues. If we are unable to successfully attract new customers and retain and grow sales from our existing customers, our business, financial position and results of operations would be negatively impacted.

Our revenue, results of operations, cash flows and reputation in the marketplace may suffer upon the loss of a limited number of large customers.

We have derived, and believe we may continue to derive, a significant portion of our revenues from a limited number of large customers. Our customers may buy less of our products depending on their own technological developments, the clinical efficacy and commercial success of the applications for which they use our products, end-user demand for our products and internal budget cycles. Customers may also buy less of our products during the transition period from product development to commercial production. In addition, existing customers may choose to produce some or all of their synthetic DNA requirements internally by using or developing manufacturing capabilities organically or by using capabilities from acquisitions of assets or entities from third parties with such capabilities. The loss of any significant customer or a significant reduction in the amount of product ordered by any significant customer would adversely affect our revenue, results of operations, cash flows and reputation in the marketplace.

If we, or our partners or suppliers, experience a significant disruption in, or breach in security of, information technology systems or other cybersecurity incidents, our business could be adversely affected.

We rely on several centralized information technology systems throughout our Company to provide products, keep financial records, process orders, manage inventory, process shipments to customers and operate other critical functions. In addition, we currently generate a growing portion of our revenue through sales on our e-commerce platform. We manage our website and e-commerce platform internally and as a result any compromise of our security or misappropriation of proprietary information could have a material adverse effect on our business, financial condition and results of operations. We rely on encryption and authentication technology licensed from third parties to provide the security and authentication necessary to effect secure Internet transmission of confidential information, such as credit and other proprietary information. In 2024, we received ISO 27001:2022 certification, the most advanced information security standard published by the ISO, the world's largest developer of voluntary international standards, and the International Electrotechnical Commission. Even though our information security management system received ISO 27001:2022 certification, our, and our partners' or suppliers', information technology systems have been and may still be susceptible to damage, disruptions or shutdowns due to power outages, hardware failures, computer viruses, cyberattacks such as phishing, social engineering, ransomware, denial-of-service and other malware attacks, telecommunication failures, user errors, catastrophes or other unforeseen events. Additionally, some actors are using AI technology to launch more automated, targeted and coordinated attacks. Our, or our partners' or suppliers' information technology systems also may experience interruptions, delays or cessations of service or produce errors in connection with system integration, software upgrades or system migration work that takes place from time to time. If we were to experience a prolonged system disruption in the information technology systems that involve our interactions with customers or suppliers, including negatively impacting our order fulfillment and order entry on our e-commerce platform, it could result in the loss of sales and customers and significant incremental costs, which could adversely affect our business.

In addition, security breaches of our, or our partners' or suppliers', information technology systems could result in the misappropriation or unauthorized disclosure of confidential information belonging to us or to our employees, partners, customers or suppliers, including trade secrets or other intellectual property, proprietary business information, and personal information. Cybersecurity incidents, including phishing attacks and attempts to misappropriate or compromise confidential or proprietary information or sabotage enterprise IT systems are becoming increasingly frequent and sophisticated. While we have not, to our knowledge, experienced any material system failure, accident, or security breach to date, because techniques used to obtain unauthorized access to or to sabotage systems are constantly evolving and generally are not recognized until they are launched against a target, we cannot be sure that our continued data protection efforts and investment in information technology will prevent significant breakdowns, data leakages, breaches in our systems or the systems of our third party contractors and collaborators, or other cyber incidents in the future that could have a material adverse effect upon our reputation, business, operations, or financial condition. If such an event were to occur, it could materially disrupt our operations and programs, the development of our product candidates and production and shipment of our products. Any event that leads to unauthorized access, use, or disclosure of personal information, including personal information regarding our partners, suppliers or employees, could require us to comply with federal or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information and harm our reputation. We would also be exposed to a risk of litigation and potential liability, which could materially adversely affect our business, results of operations and financial condition. In addition, the costs related to significant security breaches or disruptions could be material and exceed the limits of the cybersecurity insurance we maintain against such risks. As a result of any cyber incident, we could incur significant legal and financial exposure and reputational damages that could have a material adverse effect on our business.

Threats involving the misuse of access to 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, and 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.

In addition, we and our third-party providers are at heightened risk of theft or cyber attack of technology, data, and intellectual property through direct intrusion by private parties or foreign actors, including those affiliated with or controlled by nation-state actors. This includes attacks which could materially disrupt our systems and operations, supply chain, and ability to produce, sell and distribute our products and services. If any theft affects or attack our technology, data, or intellectual property, our efforts to protect and enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from our intellectual property, and we may be at heightened risk of losing our proprietary intellectual property rights around the world, including outside of such countries, to the extent such theft, attack or intrusion destroys the proprietary nature of our intellectual property. 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.

As we continue to grow our business, we will need to implement new systems and software successfully, otherwise our business and our financial condition and results of operations could be adversely affected.

We will need to invest in improvements to our operational and IT systems and processes as part of our ongoing effort to improve the overall efficiency and competitiveness of our business, including improvements to prevent increasingly sophisticated cybersecurity incidents and improve standardization, systemization and automation to support growth. Transitioning to these new or upgraded processes and systems requires significant capital investments and personnel resources. Implementation is also highly dependent on the coordination of numerous employees, contractors and software and system providers. While these efforts have resulted in improvements to our operational systems, we expect to continue to incur expenses to implement additional improvements and upgrades to our systems. Many of these expenditures have been and may continue to be incurred in advance of the realization of any direct benefits to our business. Additionally, the effort to gain technological expertise, make use of data analytics, and develop new technologies in our business requires us to incur significant expenses. We cannot guarantee that we will be successful at improving our operational systems, adapting to changes in technology, including the successful utilization of data analytics, AI, and machine learning, or that our efforts will result in the anticipated benefits to us. In addition, the integration of emerging technologies, including data analytics, AI, and machine learning, into our systems and processes may require us to address rapidly developing laws and regulations governing AI. We may also experience difficulties in implementing or operating our new or upgraded operational or IT systems, including, but not limited to, ineffective or inefficient operations, significant system failures, system outages, delayed implementation and loss of system availability, which could lead to increased implementation and/or operational costs, loss or corruption of data, delayed shipments and interruptions of operations resulting in lost sales and/or profits. If our operational or IT system upgrades, improvements and associated implementation efforts are not successful or if we experience unexpected interruption in transition to new or upgraded processes or systems, our financial condition and results of operations could be adversely affected, and our business may become less competitive.

Rapidly changing technology and extensive competition in synthetic biology could make the products we are developing and producing obsolete or non-competitive unless we continue to develop and manufacture new and improved products and pursue new market opportunities.

The synthetic biology industry is characterized by rapid and significant technological changes, frequent new product introductions and enhancements and evolving industry demands and standards. Our future success will depend on our ability to continually improve the products we are developing and producing, to develop and introduce new products that address the evolving needs of our customers on a timely and cost-effective basis and to pursue new market opportunities that develop as a result of technological and scientific advances. These new market opportunities may be outside the scope of our proven expertise or in areas which have unproven market demand, and the utility and value of new products and services developed by us may not be accepted in the markets served by the new products. Our inability to gain market acceptance of existing products in new markets or market acceptance of new products could harm our future operating results. Our future success also depends on our ability to manufacture these new and improved products to meet customer demand in a timely and cost-effective manner, including our ability to resolve manufacturing issues that may arise as we commence production of any new products we develop. Unanticipated difficulties or delays in replacing existing products with new products we introduce or in manufacturing improved or new products in sufficient quantities to meet customer demand could diminish future demand for our products and harm our future operating results. Further, while the impact that AI may have on the synthetic biology industry is still uncertain, recent advances in

AI capabilities may indicate that it could be a significant disruptor in the synthetic biology industry. For example, AI may reduce customer demand for certain types of gene synthesis.

In addition, there is extensive competition in our end markets, and our future success will depend on our ability to maintain a competitive position with respect to technological advances. Technological development by others may result in our technologies, as well as products developed using our technologies, becoming obsolete. Our ability to compete successfully will depend on our ability to develop proprietary technologies and products that are technologically superior to and/or are less expensive than our competitors' technologies and products. Our competitors may be able to develop competing and/or superior technologies and processes and compete more aggressively and sustain that competition over a longer period of time.

Issues relating to the use of AI and machine learning and compliance with evolving regulations and industry standards could adversely affect our business and operating results.

In our ongoing efforts to innovate and optimize operational efficiency, we have integrated AI and machine learning into various aspects of our workplace. While AI and machine learning presents opportunities for enhanced productivity and innovation, it also introduces inherent risks, including legal and regulatory compliance risks and potential liability, that could adversely impact our business and reputation. Proper use of AI and machine learning can lead to improved decision-making, cost reduction, and competitive advantage. However, improper use, including algorithmic biases, ethical considerations, data privacy issues, and potential regulatory non-compliance, could result in reputational damage, legal liabilities, and financial losses. The rapidly evolving regulatory landscape surrounding AI also poses risks, as new laws and regulations could impose additional compliance burdens, resulting in increased operational costs. We are committed to implementing robust governance and control mechanisms to mitigate these risks, but there can be no assurance that such measures will adequately prevent or mitigate the adverse effects that the integration and use of AI may have on our business, financial condition, and results of operations.

Adverse global economic conditions and U.S. policy changes could have a negative effect on our business, financial condition and results of operations.

The global economy has been impacted by geopolitical tensions. For example, new U.S. federal administration has recently imposed significant new tariffs on imports, which, along with other U.S. trade actions, have triggered retaliatory actions by certain affected countries. These geopolitical tensions could result in, among other things, macroeconomic uncertainty, cyberattacks, supply chain disruptions, higher costs and changes to foreign exchange rates and financial markets. In addition, tariffs and trade restrictions may result in increased production costs and product pricing, supply chain disruptions, limited access to markets and uncertainty related to planning long-term investments and strategies. Additionally, the administration's halt on certain federal research grants may negatively impact our industry. Any prolonged reductions in such funding could slow innovation, delay collaborations and limit the adoption of new technologies that contribute to our business growth. If these or similar policy changes continue or expand, we may face increased costs or impact on the demand for our products. We are monitoring and evaluating any potential impacts that global economic conditions and other policy changes may have on our business, and we are considering ways in which we may offset any impacts. However, there is no assurance that we will be successful in mitigating the effects in the current environment. Although we cannot predict the full extent of these impacts, any such policy changes could adversely affect our business, financial condition and results of operations.

A significant portion of our sales depends on customers' budgets that may be subject to significant and unexpected variation, including seasonality.

Our customers' spending on research and development impacts our sales and profitability. Our customers and potential customers include those conducting research and development in academia, as well as the chemicals/materials, diagnostics, therapeutics and food/agriculture industries, and their budgets can have a significant effect on the demand for our products. Their research and development budgets are based on a wide variety of factors, including factors beyond our control, such as:

- the allocation of available resources to make purchases;
- funding from government sources;
- funding from research grants;
- changes in government programs that provide funding to research institutions and companies;

Table of Contents

- the spending priorities among various types of research equipment;
- policies regarding capital expenditures during recessionary periods;
- political climate or macroeconomic conditions, including government shutdowns, economic downturns or market uncertainty or reduced spending in response to emergency public health situations;
- inability to raise sufficient funds in the capital markets;
- changes in the regulatory environment;
- healthcare legislative reform measures,
- differences in budgetary cycles;
- inflationary pressures; and
- market acceptance of relatively new technologies, such as ours.

Any decrease in spending or change in spending priorities of our customers and potential customers could significantly reduce the demand for our products. As we expand into new geographic markets, our revenue may be impacted by seasonal trends in the different regions, the seasonality of customer budgets in those regions and the mix of domestic versus international sales. In addition, access to capital markets is critical to many of our customers' ability to fund their operations, including purchasing our products and services. Traditionally, biotechnology and life sciences companies have funded their research and development expenditures by raising capital in the equity markets. Declines and uncertainties in these markets have severely restricted raising new capital and have affected companies' ability to fund existing research and development efforts which may lead them to delay project starts, reduce or cancel orders and or cancel projects. In the past, we experienced some cancellations of customer orders that we believe were due to customers' funding concerns. Moreover, we have no control over the timing and volume of purchases by these customers and potential customers, and as a result, revenue from these sources may vary significantly due to factors that can be difficult to forecast. Any delay or reduction in purchases by customers and potential customers or our inability to forecast fluctuations in demand could harm our future operating results.

We generally do not have long-term contracts with our customers requiring them to purchase any specified quantities from us.

We generally do not have long-term contracts with our customers requiring them to purchase any specified quantities from us and without such contracts our customers are not obligated to order or reorder our products. As a result, we cannot accurately predict our customers' decisions to reduce or cease purchasing our products. Additionally, even where we enter into contracts with our customers, there is no guarantee that such agreements will be negotiated on terms that are commercially favorable to us in the long-term. Therefore, if many of our customers were to substantially reduce their transaction volume or cease ordering products from us, this could materially and adversely affect our financial performance.

We depend on one single-source supplier for a critical component for our DNA synthesis process. Although we have a reserve of supplies and alternative suppliers exist, the loss of this supplier or its failure to supply us with the necessary component on a timely basis could cause delays in the future capacity of our DNA synthesis process and adversely affect our business.

We depend on one single-source supplier for a critical component for our DNA synthesis process. We do not currently have the infrastructure or capability internally to manufacture this component. Although we have a reserve of supplies and although alternative suppliers exist for this critical component of our synthesis process, our existing DNA synthesis manufacturing process has been designed based on the functions, limitations, features and specifications of the components that we currently utilize. We have a supply agreement in place with this component supplier. However, there can be no assurance that our supply of this component will not be limited, interrupted, or of satisfactory quality or continue to be available at acceptable prices. Additionally, we do not have any control over the process or timing of the acquisition or manufacture of materials by our supplier and cannot ensure that it will deliver to us the component we order on time, or at all.

The loss of this component provided by this supplier could require us to change the design of our manufacturing process based on the functions, limitations, features and specifications of the replacement components.

In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event we must switch to a new supplier. The time and effort to qualify a new supplier could result in additional costs, diversion of resources or reduced manufacturing yields, any of which would negatively impact our operating results. Further, we may be unable to enter into agreements with a new supplier on commercially reasonable terms, which could have a material adverse impact on our business. Our dependence on this single-source supplier exposes us to certain risks, including the following:

- our supplier may cease or reduce production or deliveries, raise prices or renegotiate terms;
- we may be unable to locate a suitable replacement on acceptable terms or on a timely basis, if at all;
- if there is a disruption to our single-source supplier's operations, and if we are unable to enter into arrangements with alternative suppliers, we will have no other means of completing our synthesis process until they restore the affected facilities or we or they procure alternative manufacturing facilities or sources of supply;
- delays caused by supply issues may harm our reputation, frustrate our customers and cause them to turn to our competitors for future projects; and
- our ability to progress our DNA synthesis products could be materially and adversely impacted if the single-source supplier upon which we rely were to experience a significant business challenge, disruption or failure due to issues such as financial difficulties or bankruptcy, issues relating to other customers such as regulatory or quality compliance issues, or other financial, legal, regulatory, operational or reputational issues.

Moreover, to meet anticipated market demand, our single-source supplier may need to increase manufacturing capacity, which could involve significant challenges. This may require us and our supplier to invest substantial additional funds and hire and retain the technical personnel who have the necessary experience. Neither we nor our supplier may successfully complete any required increase to existing manufacturing capacity in a timely manner, or at all.

We must continue to secure and maintain sufficient and stable supplies of raw materials. Any shortage of raw materials or materials necessary for our production capabilities may adversely affect our business.

Although historically we have not experienced price increases due to unexpected shortages in raw materials or other materials and other unanticipated events, there is no assurance that our supply of raw materials or other materials will not be significantly adversely affected in the future, which may in turn adversely affect our business, prospects, financial condition and results of operation.

In addition, as we grow, our existing suppliers may not be able to meet our increasing demand, and we may need to find additional suppliers. There is no assurance that we will always be able to secure suppliers who provide raw materials at the specification, quantity and quality levels that we demand (or at all) or be able to negotiate acceptable fees and terms of services with any such suppliers. Identifying a suitable supplier is an involved process that requires us to become satisfied with their quality control, responsiveness and service, financial stability and labor and other ethical practices. Even if we are able to expand existing sources, we may encounter delays in production and added costs as a result of the time it takes to train suppliers in our methods, products and quality control standards.

We typically enter into supply and quality agreements with our critical suppliers to ensure supply as well as maintain healthy levels of onsite inventory to support ongoing manufacturing processes. Our suppliers may reduce or cease their supply of raw materials, component parts and outsourced services and products to us at any time in the future. If the supply of raw materials, component parts and the outsourced services and products is interrupted due to shortages or other reasons, our production processes may be delayed. If any such event occurs, our operation and financial position may be adversely affected.

Although we believe that we have stable relationships with our existing suppliers, we cannot assure you that we will be able to secure a stable supply of raw materials going forward. A deterioration of our relationship with any of our suppliers, or problems experienced by these suppliers, could lead to shortages in our production capacity for some or all of our products. In such case, we may not be able to fulfill the demand of existing customers or supply new customers. In addition, shortages of raw materials or component parts or an increase in the cost of

the raw materials or component parts we use could result in decreased revenue or could impair our ability to maintain or expand our business.

While we have experienced increased operating costs in recent periods, which we believe were due in part to a rise in inflation, we do not believe that inflation has had a material effect on our business, financial condition or results of operations. In the event of significant price increases for raw materials, we may have to pass the increased raw materials costs to our customers. However, we cannot assure you that we will be able to raise the prices of our products sufficiently to cover increased costs resulting from increases in the cost of our raw materials or overcome the interruption of a sufficient supply of qualified raw materials for our products. As a result, a price increase for our raw materials may negatively impact our business, financial position and results of operations.

We depend on the continuing efforts of our senior management team and other key personnel, including our scientific and engineering personnel. If we lose members of our senior management team or other key personnel or are unable to successfully retain, recruit and train qualified researchers, engineering and other personnel, our ability to develop our products could be harmed, and we may be unable to achieve our goals.

Our future success depends upon the continuing services of members of our senior management team and scientific and engineering personnel. We are highly dependent on Dr. Emily Leproust, our Chief Executive Officer ("CEO"), who is employed "at will," meaning we or she may terminate the employment relationship at any time. In addition, our researchers and engineers are critical to our future technological and product innovations, and we will need to hire additional qualified personnel. We have had, and may continue to have, difficulty attracting and retaining such talent. Our industry, particularly in the San Francisco Bay Area, is characterized by high demand and intense competition for talent, and the turnover rate can be high. We compete for qualified management and scientific personnel with other life science companies, academic institutions and research institutions, particularly those focusing on genomics. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or that they have divulged proprietary or other confidential information, or that their former employers own their research output.

Our employees could leave our Company with little or no prior notice and would be free to work for a competitor. If one or more of our senior executives or other key personnel were unable or unwilling to continue in their present positions, we might not be able to replace them easily or at all, and other senior management may be required to divert attention from other aspects of the business. In addition, we do not have "key person" life insurance policies covering members of our management team or other key personnel. While we conduct succession planning to identify the person(s) for key positions who possess the skills and capabilities to take on the responsibilities filled by our leaders, we cannot assure you that these strategies will successfully mitigate the loss of any key personnel. The loss of any of these individuals or our inability to attract or retain qualified personnel, including researchers, engineers and others, could prevent us from pursuing collaborations and adversely affect our product development and introductions, business growth prospects, results of operations and financial condition.

We may be unable to successfully recruit and maintain adequate sales, marketing and other support personnel in order to increase our market share and expand our customer base.

Our ability to achieve profitability depends on our being able to increase our market share and expand our customer base. Although members of our sales and marketing teams have considerable industry experience and have engaged in marketing activities for our products, in the future we must expand our sales, marketing, distribution and customer support capabilities with the appropriate technical expertise to effectively market our products. Furthermore, it takes six to nine months to recruit, onboard and ramp sales personnel to full capability. To perform sales, marketing, distribution and customer support successfully, we will face a number of risks, including that:

- we may not be able to attract, retain and manage the sales, marketing and service workforce necessary to publicize and gain broader market acceptance of our technology;
- the time and cost of establishing a specialized sales, marketing and service force for a particular product or service, which may be difficult to justify in light of the revenue generated;
- our field sales personnel may not be able to access our customers' premises which could delay the adoption and ordering of our products; and

- our sales, marketing and service employees may be unable to initiate and execute successful commercialization activities with respect to new products or markets we may seek to enter.

If our sales and marketing efforts, or those of any third-party sales and distribution partners, are not successful, our new technologies and products may not gain market acceptance, which could materially impact our business operations.

We may engage in strategic transactions, including acquisitions, collaborations, or investments in other companies or technologies, that could disrupt our business, cause dilution to our stockholders, reduce our financial resources, or prove not to be successful.

We may enter into transactions to acquire other businesses, products or technologies and our ability to do so successfully cannot be ensured. While historically we have not completed many acquisitions, we closed a business acquisition in the first quarter of 2022, and we are continuing to pursue opportunities in the life sciences industry that complement and expand our synthetic DNA product offering and our other products in both local and international markets. If we identify suitable opportunities, we may not be able to make such acquisitions on favorable terms or at all. Any acquisitions we make may not strengthen our competitive position, and these transactions may be viewed negatively by customers or investors. We may decide to incur debt in connection with an acquisition or issue our common stock or other equity securities to the stockholders of the acquired company, as we did for the business acquisitions, which would reduce the percentage ownership of our existing stockholders. We could incur losses resulting from undiscovered liabilities of the acquired business that are not covered by any indemnification we may obtain from the seller. In addition, we may not be able to successfully integrate the acquired personnel, technologies and operations into our existing business in an effective, timely and non-disruptive manner. Acquisitions may also divert management attention from day-to-day responsibilities, increase our expenses and reduce our cash available for operations and other uses. In addition, we cannot guarantee that we will be able to fully recover the costs of such acquisitions or that we will be successful in leveraging any such strategic transactions into increased business, revenue or profitability. We also cannot predict the number, timing or size of any future acquisitions or the effect that any such transactions might have on our operating results.

From time to time, we may consider other strategic transactions, including collaborations or investments in other companies. The competition for collaborators is intense, and the negotiation process is time-consuming and complex. Any new collaboration may be on terms that are not optimal for us, and we may not be able to maintain any new collaboration. Any such collaboration may require us to incur non-recurring or other charges, increase our near- and long-term expenditures and pose significant integration or implementation challenges or disrupt our management or business. These transactions would entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention to manage a collaboration, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses, difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business, impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership and the inability to retain key employees of any acquired business. Antitrust or other competition laws may also limit our ability to acquire or work collaboratively with certain businesses or to fully realize the benefits of strategic transactions to acquire or collaborate with other businesses. Accordingly, although there can be no assurance that we will undertake or successfully complete any collaborations, any transactions that we do complete may be subject to the foregoing or other risks and have a material and adverse effect on our business, financial condition, results of operations and prospects. Conversely, any failure to enter into any collaboration or other strategic transaction that would be beneficial to us could delay the development and potential commercialization of our products and technologies.

We may not achieve the anticipated benefits from the spin out of our DNA data storage application.

In May 2025, we completed the spin out of our DNA data storage application to a new independent company, Atlas Data Storage ("Atlas"), which allows us to focus on our synthetic biology, NGS and biopharma products and services. While we will retain an equity interest in Atlas and receive potential milestone payments and royalties on any future sales of Atlas' products and services, we may not achieve some or all of the anticipated benefits of the spin out if Atlas' technology development and commercialization efforts are not successful. In addition, the divestiture reduces business diversification and may prove not to be a superior alternative to the continued development of the DNA data storage application by us. Further, we are providing transition services to Atlas throughout a transition period, including use of some of our facilities and employee services which may

require significant time, attention and resources of our management and other employees, potentially diverting their attention from other aspects of our business.

We may be subject to significant pricing pressures and if we are unable to pass on any cost increase to our customers, our business, financial position and results of operations could be adversely affected.

Over time, increasing customer demand for lower prices could force us to discount our products and result in lower margins. The impact may be further exacerbated if we are unable to successfully control production costs. In addition, if due to rising market prices as a result of inflation or otherwise, our suppliers increase prices or reduce discounts on their supplies, we may be unable to pass on any cost increase to our customers, thereby resulting in reduced margins and profits. Overall, these pricing pressures may adversely affect our business, financial position and results of operations.

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

We work with materials, including chemicals, biological agents, and compounds and DNA samples that could be hazardous to human health and safety or the environment. Our operations also produce hazardous and biological waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental laws and regulations may restrict our operations. If we do not comply with applicable regulations, we may be subject to fines and penalties.

In addition, we cannot eliminate the risk of accidental injury or contamination from these materials or wastes, which could cause an interruption of our commercialization efforts, research and development programs and business operations, as well as environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance. While our property insurance policy provides limited coverage in the event of contamination from hazardous and biological products and the resulting cleanup costs, we do not currently have any additional insurance coverage for legal liability for claims arising from the handling, storage or disposal of hazardous materials. Accordingly, in the event of contamination or injury, we could be liable for damages or penalized with fines in an amount exceeding our resources and our operations could be suspended or otherwise adversely affected.

We could develop DNA sequences or engage in other activity that contravenes biosecurity requirements, or regulatory authorities could promulgate more far-reaching biosecurity requirements that our standard business practices cannot accommodate, which could give rise to substantial legal liability, impede our business and damage our reputation.

The FSAP involves rules administered by the CDC and the APHIS that regulate possession, use and transfer of biological select agents and toxins that have the potential to pose a severe threat to public, animal or plant health or to animal or plant products.

We have established a comprehensive, biosecurity program under which we follow biosafety and biosecurity best practices and avoid DNA synthesis activities that trigger FSAP rules; however, we could inadvertently err in our observance of compliance program requirements in a manner that leaves us in noncompliance with FSAP or other biosecurity rules. In addition, authorities could promulgate new biosecurity requirements that restrict our operations. One or more resulting legal penalties, restraints on our business or reputational damage could have material adverse effects on our business and financial condition.

Third parties may use our products in ways that could damage our reputation.

After our customers have received our products, we do not have any control over their use and our customers may use them in ways that are harmful to our reputation as a supplier of synthetic DNA products. In addition, while we have established a biosecurity program designed to comply with biosafety and biosecurity requirements and perform export control screening in an effort to ensure that third parties do not obtain our products for malevolent purposes, we cannot guarantee that these preventative measures will eliminate or reduce the risk of the domestic and global opportunities for the misuse of our products. Accordingly, in the event of such misuse, our reputation, future revenue and operating results may suffer.

A violation of data privacy or data protection laws could adversely harm our operating results and financial condition, damage our reputation or otherwise materially harm our business.

We are subject to data privacy and data protection laws, rules, and customer-imposed controls as a result of producing, collecting, processing, storing and transmitting confidential, personal and/or sensitive data in the course of our business. A significant number of countries where we operate have enacted privacy or data protection laws, rules and regulations, creating significant compliance challenges as we seek to maintain our global reach. In some cases, there are restrictions on the transfer of personal data outside the home country. More recently, privacy and data protection regulators are paying special attention to emerging issues linked to new digital technologies, such as the use of AI, biometrics, and surveillance technologies, which pose unique challenges to existing privacy and data protection paradigms. Any actual or perceived noncompliance could result in significant consequences, including, business interruption, sanctions and significant pecuniary fines, regulatory inquiries and investigations, adverse publicity, loss of competitive advantage and customer trust, as well as privacy litigation and civil lawsuits with damages, any of which may adversely affect our business, reputation and financial statements.

Because we are subject to existing and potential additional governmental regulation, the markets for our products may be narrowed.

We are subject, both directly and indirectly, to the adverse impact of existing and potential future government regulation of our operations and markets. For example, the export of our products is subject to strict regulatory control in a number of jurisdictions. The failure to satisfy export control criteria or obtain necessary clearances could delay or prevent the shipment of products, which could adversely affect our revenues and profitability. Moreover, the life sciences industry, which is currently the primary market for our technology, has historically been heavily regulated. There are, for example, laws in several jurisdictions restricting research in genetic engineering, which can operate to narrow our markets. Given the evolving nature of this industry, legislative bodies or regulatory authorities may adopt additional regulation that adversely affects our market opportunities. Our business is also directly affected by a wide variety of government regulations applicable to business enterprises generally and to companies operating in the life science industry in particular. Failure to comply with these regulations or obtain or maintain necessary permits and licenses could result in a variety of fines or other censures or an interruption in our business operations which may have a negative impact on our ability to generate revenues and could increase the cost of operating our business.

Our products could in the future be subject to additional regulation by the FDA or other domestic and international regulatory agencies, which could increase our costs and delay our commercialization efforts, thereby materially and adversely affecting our business and results of operations.

The FDA regulates medical devices, including IVDs. IVDs are a category of medical devices that include reagents, instruments, and systems intended for use in diagnosis of disease or other conditions, including a determination of the state of health, in order to cure, mitigate, treat, or prevent disease or its sequelae. IVDs are intended for use in the collection, preparation, and examination of specimens taken from the human body. An RUO IVD product is an IVD product that is in the laboratory research phase of development or is intended for use in the conduct of nonclinical laboratory research and not intended to produce results for clinical use. As such, an RUO IVD is not intended for use in clinical investigations or in clinical practice. Such RUO products do not require premarket clearance or approval from the FDA, provided that they are labeled “For Research Use Only. Not For Use In Diagnostic Procedures” pursuant to FDA regulations. Our RUO IVD products sold in the United States are not intended for clinical or diagnostic use, and we market and label them as RUO. Our customers, however, may use our products in their own assay workflows.

The FDA has historically taken the position that LDTs are considered to be IVDs, but has generally exercised enforcement discretion. However, the FDA recently attempted to regulate virtually all LDTs as medical devices by publishing the LDT Final Rule. On August 6, 2025, the FDA rescinded the LDT Final Rule after it was vacated in its entirety on March 31, 2025 by the United States District Court for the Eastern District of Texas. While the LDT Final Rule was unsuccessful, in the future, certain of our products or related applications could be subject to additional FDA regulation. Even where a product is not subject to FDA clearance or approval requirements or deemed exempt, the FDA may impose restrictions as to the types of customers to which we can market and sell our products. Such regulation and restrictions may materially and adversely affect our business, financial condition and results of operations. Other regulatory regimes that do not currently present material challenges but that could in the future present material challenges include export controls and biosecurity.

Many countries have laws and regulations that could affect our products and which could limit our ability to sell our products in those countries. The number and scope of these requirements are increasing. We may not be able to obtain regulatory approvals in such countries or may incur significant costs in obtaining or maintaining foreign regulatory approvals. For example, the EU requires manufacturers to adhere to the IVDR, for the marketing and sale of medical devices. In February 2024, we introduced IVDR-compliant Precision Dx products for whole exome sequencing to meet the needs of our European customers and provide compliant solutions for clinical and diagnostic use in the EU. Complying with the stricter regulatory requirements of the IVDR, including with respect to quality systems and post-market surveillance, may require us to incur significant expenditures. If we fail to remain in compliance with applicable EU laws and directives, we would be unable to continue selling such products within the EU, and any other regions that tie their product registrations or regulations to the EU requirements, which could adversely affect our business.

Certain of our potential customers may require that we become certified under the Clinical Laboratory Improvement Amendments of 1988.

Although we are not currently subject to the Clinical Laboratory Improvement Amendment of 1988 ("CLIA"), we may in the future be required by certain customers to obtain a CLIA certification. CLIA, which extends federal oversight over clinical laboratories by requiring that they be certified by the federal government or by a federally approved accreditation agency, is designed to ensure the quality and reliability of clinical laboratories by mandating specific standards in the areas of personnel qualifications, administration and participation in proficiency testing, patient test management, quality control, quality assurance and inspections. If our customers require a CLIA certification, we will have to continually expend time, money and effort to ensure that we meet the applicable quality and safety requirements, which may divert the attention of management and disrupt our core business operations.

We currently manufacture all of our products and multiple sub-assemblies at our manufacturing facilities in Wilsonville, Oregon and South San Francisco, California, and if either of these facilities are destroyed or we experience at either of these facilities any manufacturing difficulties, disruptions, or delays, this could limit supply of our products or adversely affect our ability to sell products or conduct our clinical trials, and our business would be adversely impacted

We currently manufacture all of our products and multiple sub-assemblies at our manufacturing facilities in Wilsonville, Oregon and South San Francisco, California. We have consolidated all synthetic biology production in Wilsonville, and our Express product line is manufactured solely in Wilsonville. We still manufacture a significant portion of our NGS products at our South San Francisco facility. Any manufacturing difficulties at our two manufacturing locations could result in turnaround time delays. With respect to our Wilsonville facility, if regulatory, manufacturing, or other problems require us to discontinue production at the facility, we may not be able to manufacture our synthetic genes, oligo pools or selected NGS products or create our DNA libraries, which would adversely impact our business. In addition, if either of our facilities or the equipment therein is significantly damaged, destroyed, or affected by fire, flood, power loss, or similar events, or is shut down for health and safety reasons, including public health emergencies, severe weather, or other reasons, we may not be able to quickly or inexpensively replace our manufacturing capacity or replace the facility. In the event of a temporary or protracted loss of either of these facilities or the equipment therein, we might not be able to transfer manufacturing to another third party. Even if we could transfer manufacturing from one facility to another, the shift would likely be expensive and time-consuming, particularly if we were to maintain the current manufacturing standards procedures at such alternative facility.

Natural disasters, public health crises, political crises, severe weather events, and other catastrophic events or other events outside of our control may damage our facilities or the facilities of third parties on which we depend and could impact our ability to sell products.

Our headquarters in South San Francisco, California is located near known earthquake fault zones and is vulnerable to damage from earthquakes. Our primary manufacturing facility in Wilsonville, Oregon is vulnerable to extreme heat, wildfires, and severe weather events, all of which may be further exacerbated by the effects of climate change, as well as damage from earthquakes. An earthquake or other natural disaster or power shortages or outages could disrupt operations or impair critical systems at our headquarters or at any of our other facilities throughout the world. We, our suppliers, third-party service providers and customers are vulnerable to damage from natural disasters, including fire, floods or monsoons, power loss, communications failures, public health crises, such as pandemics and epidemics, political crises, such as terrorism, war, political instability or other conflicts and similar events. If any disaster were to occur, our ability to operate our business at any of our facilities could be seriously, or potentially completely, impaired. In addition, the nature of our

activities could cause significant delays in our research programs and commercial activities and make it difficult for us to recover from a disaster. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions. Accordingly, an earthquake or other disaster could materially and adversely harm our ability to conduct business. Furthermore, our in vivo antibody discovery services involve mice. In the past, vivarium sites have been shut down by animal activists, and any disturbance or shut down at the site where our in vivo antibody discovery work is being conducted could disrupt our business operations or harm our reputation.

We may not be able to scale our manufacturing capacity to meet future demand, which could harm our business.

While we believe our current manufacturing capacity is sufficient to meet existing customer demand, we cannot predict the volume of demand we will face in the future, which may result in excess or obsolete inventory and resulting charges. If we are unable to scale our manufacturing capacity for current or future products in a timely manner to meet increased customer demand in the future, we could lose revenue, and our business, financial condition, and results of operations could be materially harmed. Our ability to successfully expand our manufacturing capacity is not guaranteed. Our technology and the production process for our equipment and tools are complex. We may encounter unexpected difficulties in manufacturing, improving or increasing the capacity of our equipment and tools, and addressing these difficulties may cause us to divert our time and resources from our other product offerings. If we are unable to expand our manufacturing capacity in a timely or cost-effective manner to meet future demand, our business, financial condition, and results of operations could be materially harmed.

Delivery of our products could be delayed or disrupted by factors beyond our control, and we could lose customers as a result.

We rely on third-party carriers for the timely delivery of our products. As a result, we are subject to carrier disruptions and increased costs that are beyond our control, including travel restrictions, employee strikes, inclement weather, delays due to public health emergencies, and increased fuel costs. For example, in the past we have experienced shipment delays due to flight cancellations caused by inclement weather. Any failure to deliver products to our customers in a timely and accurate manner may damage our reputation and brand and could cause us to lose customers. If our relationship with any of these third-party carriers is terminated or impaired or if any of these third parties are unable to deliver our products, the delivery and acceptance of our products by our customers may be delayed which could harm our business and financial results. The failure to deliver our products in a timely manner may harm our relationship with our customers, increase our costs and otherwise disrupt our operations.

We may require additional financing to achieve our goals, and such additional financing may not be available acceptable terms, or at all, which could have an adverse effect on our business.

We have incurred net losses since our inception, and we anticipate net losses and negative operating cash flows for the near future. While we expect that our existing cash, cash equivalents and short-term investments are sufficient to fund our planned operating expenses, capital expenditure requirements and debt service payments through at least the next 12 months, our operating plan may change as a result of factors currently unknown to us, and as a result, we have sought and may in the future need to seek additional funds sooner than planned. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Our future capital requirements depend on many factors, including:

- the number and characteristics of any additional products or manufacturing processes we develop or acquire to serve new or existing markets;
- the scope, progress, results and costs of researching and developing future products or improvements to existing products or manufacturing processes, including increasing our manufacturing capabilities;
- the cost of manufacturing our DNA synthesis equipment and tools, our NGS sample preparation kits, and any future products we successfully commercialize;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such agreements;

Table of Contents

- the costs of acquiring or investing in complementary businesses or assets;
- the costs of expanding our sales, marketing and manufacturing capabilities in the United States and in other geographies;
- any lawsuits related to our products or commenced against us or any regulatory actions or proceedings commenced;
- the expenses needed to attract and retain skilled personnel;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation; and
- the timing, receipt and amount of sales of, or royalties on, any future approved products, if any.

Additional funds, if needed, may not be available when we need them, on terms that are acceptable to us, or at all. Furthermore, any such financing may result in dilution to stockholders, imposition of debt covenants and repayment obligations, or other restrictions that may adversely affect our business. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate our manufacturing, research and development activities, marketing and sales capabilities or other activities that may be necessary to generate revenue and achieve profitability.

As we expand our development and commercialization activities outside of the United States, we will be subject to an increased risk of inadvertently conducting activities in a manner that violates the U.S. Foreign Corrupt Practices Act (the "FCPA") and similar laws. If that occurs, we may be subject to civil or criminal penalties which could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

We are subject to the FCPA, which prohibits corporations and individuals from paying, offering to pay, or authorizing the payment of anything of value to any foreign government official, government staff member, political party, or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. We are also subject to the UK Anti-Bribery Act, which prohibits both domestic and international bribery, as well as bribery across both public and private sectors.

In the course of establishing and expanding our commercial operations and complying with non-U.S. regulatory requirements, we will need to establish and expand business relationships with various third parties and we will interact more frequently with foreign officials, including regulatory authorities. Expanded programs to maintain compliance with such laws will be costly and may not be effective. Any interactions with any such parties or individuals where compensation is provided that are found to be in violation of such laws could result in substantial fines and penalties and could materially harm our business. Furthermore, any finding of a violation under one country's laws may increase the likelihood that we will be prosecuted and be found to have violated another country's laws. We require that our employees annually certify that they understand and will comply with our Code of Ethics, our Anti-Money Laundering Policy, our Anti-Corruption Policy. Even so, if our business practices outside the United States are found to be in violation of the FCPA, UK Anti-Bribery Act, antitrust or other similar laws, we may be subject to significant civil and criminal penalties which could have a material adverse effect on our financial condition and results of operations.

We could engage in exporting or related activity that contravenes international trade restraints, or regulatory authorities could promulgate more far-reaching international trade restraints, which could give rise to one or more of substantial legal liability, impediments to our business and reputational damage.

Our international business activities must comport with U.S. export controls and other international trade restraints, including the U.S. Department of Commerce's Export Administration Regulations and economic sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls.

We have established an international trade compliance program that encompasses best practices for preventing, detecting and addressing noncompliance with international trade restraints; however, we could fail to observe the compliance program requirements in a manner that leaves us in noncompliance with export controls or other international trade restraints. In addition, authorities could promulgate international trade restraints that impinge on our ability to pursue our business as planned. One or more of resulting legal

penalties, restraints on our business or reputational damage could have material adverse effects on our business and financial condition.

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

During our fiscal years ended September 30, 2025, 2024 and 2023, 42%, 40% and 40%, respectively, of our revenue was generated from customers located outside of the United States. In connection with our growth strategy, we intend to further expand in international markets. Conducting and launching operations on an international scale requires close coordination of activities across multiple jurisdictions and time zones and consumes significant management resources. If we fail to coordinate and manage these activities effectively, our business, financial condition or results of operations could be adversely affected. International sales entail a variety of risks, including longer payment cycles and difficulties in collecting accounts receivable outside of the United States, currency exchange fluctuations, challenges in staffing and managing foreign operations, tariffs and other trade barriers (including tariffs enacted and proposed by the U.S. government on various imports from China and by the Chinese government on certain U.S. goods), unexpected changes in legislative or regulatory requirements of foreign countries into which we sell our products, difficulties in obtaining export licenses or in overcoming other trade barriers, laws and business practices favoring local companies, political instability, including conflicts and tensions involving Russia and China and the Israel-Hamas war, economic instability, difficulties protecting or procuring intellectual property rights, and restrictions resulting in delivery delays and significant taxes or other burdens of complying with a variety of foreign laws.

Changes in the value of the relevant currencies may affect the cost of certain items required in our operations. Changes in currency exchange rates may also affect the relative prices at which we are able to sell products in the same market. Our revenue from international customers may be negatively impacted as increases in the U.S. dollar relative to our international customers' local currency could make our products more expensive, impacting our ability to compete. Our costs of materials from international suppliers may increase if in order to continue doing business with us they raise their prices as the value of the U.S. dollar decreases relative to their local currency. Foreign policies and actions regarding currency valuation could result in actions by the United States and other countries to offset the effects of such fluctuations.

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

In general, under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), a corporation that undergoes an "ownership change" is subject to limitations on its ability to use its pre-change net operating loss carryforwards ("NOLs"), to offset future taxable income. We have experienced at least one ownership change in the past, and we may experience ownership changes in the future. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Code. Furthermore, our ability to use NOLs of companies that we may acquire in the future may be subject to limitations. For these reasons, we may not be able to use a material portion of the NOLs, even if we attain profitability.

The enactment of legislation implementing changes in taxation of international business activities, the adoption of other corporate tax reform policies, or changes in tax legislation or policies could impact our future financial position and results of operations.

Corporate tax reform, base-erosion efforts and tax transparency continue to be high priorities in many tax jurisdictions where we intend to have business operations. As a result, policies regarding corporate income and other taxes in numerous jurisdictions are under heightened scrutiny and tax reform legislation is being proposed or enacted in a number of jurisdictions. Recently, in July 2025, the U.S. government enacted The One Big Beautiful Bill Act (the "OBBBA") which includes a broad range of tax reform provisions that may affect our financial results. The OBBBA includes, among other provisions, the allowance of immediate expensing of qualifying domestic research and development expenses and permanent extensions of certain provisions within the Tax Cuts and Jobs Act of 2017. The Company has evaluated the impact of the guidance provided to date and determined that it did not have a material impact related to fiscal year ended September 30, 2025. The Company will continue to evaluate the impact of changes to various provisions that could affect our income tax payable and deferred tax liability.

In addition, many countries have enacted or plan to enact legislation and other guidance to align their international tax rules with the Organization for Economic Co-operation and Development's Base Erosion and Profit Shifting recommendations and action plan that aim to standardize and modernize global corporate tax policy, including changes to cross-border tax, transfer-pricing documentation rules, and nexus-based tax

incentive practices. Such legislative initiatives may materially and adversely affect our plans to expand internationally and may negatively impact our financial condition and results of operations generally.

Ethical, legal and social concerns surrounding the use of genetic information could reduce demand for our technology.

Our products may be used to create DNA sequences of humans, agricultural crops and other living organisms. Our products could be used in a variety of applications, which may have underlying ethical, legal and social concerns. Governmental authorities could, for safety, social or other purposes, impose limits on or implement regulation of the use of gene synthesis. Such concerns or governmental restrictions could limit the use of our products, which could have a material adverse effect on our business, financial condition and results of operations. In addition, public perception about the safety and environmental hazards of, and ethical concerns over, genetically engineered products and processes could influence public acceptance of our technologies, products and processes. These concerns could result in increased expenses, regulatory scrutiny, delays or other impediments to our programs.

Risks related to being a public company

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which would adversely affect our business.

As a public company, we are required to comply with Section 404 of the Sarbanes Oxley Act of 2002 (“SOX”), which requires, among other things, that companies maintain disclosure controls and procedures to ensure timely disclosure of material information, and that management review the effectiveness of those controls on a quarterly basis and that our independent registered public accounting firm provide an attestation report on the effectiveness of our internal control over financial reporting in this Form 10-K, among other additional requirements. Effective internal controls are necessary for us to provide reliable financial reports and to help prevent fraud, and our management and other personnel devote a substantial amount of time to these compliance requirements. These rules and regulations also increase our legal and financial compliance costs and make some activities more time-consuming and costly.

We cannot be certain that we will be able to maintain adequate controls over our financial processes and reporting in the future. For example, as previously disclosed in our annual reports on Form 10-K for the fiscal years ended September 30, 2020, 2021, 2022 and 2023 we had at least one material weakness in our internal control over financial reporting as of the end of each of these fiscal years, each of which has been remediated. Although management has concluded that our internal control over financial reporting was effective as of September 30, 2024 and September 30, 2025, weaknesses in our internal control over financial reporting could again be discovered in the future. If we fail to maintain effective internal controls, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our securities may be negatively affected, and we could be subject to sanctions or investigation by regulatory authorities, such as the SEC or Nasdaq.

The requirements of being a public company may strain our resources and require a substantial amount of management’s attention.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, Nasdaq listing requirements and other applicable securities rules and regulations. The SEC and other regulators have continued to adopt new rules and regulations and make additional changes to existing regulations that require our compliance. Stockholder activism, the current political environment, and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact, in ways we cannot currently anticipate, the manner in which we operate our business. Compliance with these rules and regulations may cause us to incur additional accounting, legal and other expenses. We also incur costs associated with corporate governance requirements, including requirements under securities laws, as well as rules and regulations implemented by the SEC and Nasdaq, particularly as a large accelerated filer. These rules and regulations have increased our legal and financial compliance costs and we devote significant time to comply with these requirements. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

Risks related to our intellectual property

Our ability to protect our intellectual property and proprietary technology through patents and other means is uncertain.

Our commercial success depends in part on our ability to protect our intellectual property and proprietary technologies. We rely on patent protection, where appropriate and available, as well as a combination of copyright, trade secret and trademark laws, and nondisclosure, confidentiality and other contractual restrictions to protect our proprietary technology. However, these legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage.

Worldwide, we own or exclusively in-license over 200 issued or allowed patents and more than 250 pending patent applications as of September 30, 2025. 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 DNA synthesis, NGS and antibody libraries.

Several patent applications covering our technologies have been filed recently. We cannot offer any assurances about which, if any, patents will issue, the breadth of any such patent, or whether any issued patents will be found invalid and unenforceable or will be threatened by third parties. Any successful opposition to these patents or any other patents owned by or, if applicable in the future, licensed to us could deprive us of rights necessary for the practice of our technologies or the successful commercialization of products that we may develop. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our technologies or products. Furthermore, an interference proceeding can be provoked by a third party or instituted by the U.S. Patent and Trademark Office ("USPTO"), or the European Patent Office ("EPO"), to determine who was the first to invent any of the subject matter covered by the patent claims of our applications.

Patent law can be highly uncertain and involve complex legal and factual questions for which important principles remain unresolved. In the United States and in many international jurisdictions, policy regarding the breadth of claims allowed in patents can be inconsistent. The U.S. Supreme Court and the 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. Similarly, international courts have made, and will likely continue to make, changes in how the patent laws in their respective jurisdictions are interpreted. 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 international legislative bodies.

If we are unable to obtain, maintain and enforce intellectual property protection, others may be able to make, use, or sell products and technologies substantially the same as ours, which could adversely affect our ability to compete in the market.

We may not pursue or maintain patent protection for our products in every country or territory in which we sell our products and technologies. In addition, our pending U.S. and foreign patent applications may not issue as patents or may not issue in a form that will be sufficient to protect our proprietary technology and gain or keep our competitive advantage. Any patents we have obtained or do obtain may be subject to re-examination, reissue, opposition or other administrative proceedings, or may be challenged in litigation, and such challenges could result in a determination that the patent is invalid or unenforceable.

Patents have a limited lifespan. Patent terms may be shortened or lengthened by, for example, terminal disclaimers, patent term adjustments, supplemental protection certificates, and patent term extensions. Although extensions may be available, the life of a patent, and the protection it affords, is limited. Patent term extensions and supplemental protection certificates, and the like, may be impacted by the regulatory process and may not significantly lengthen patent term. Non-payment or delay in payment of patent fees or annuities, delay in patent filings or delay in extension filing, whether intentional or unintentional, may also result in the loss of patent rights important to our business. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case. In addition, certain countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. Furthermore, many countries limit the enforceability of patents against other parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of any patents.

We cannot be certain that the steps we have taken will prevent unauthorized use or unauthorized reverse engineering of our technology. In addition, competitors may be able to design alternative methods or devices that avoid infringement of our patents. To the extent our intellectual property, including licensed intellectual property, offers inadequate protection, or is found to be invalid or unenforceable, we are exposed to a greater risk of direct competition. If our intellectual property does not provide adequate protection against our competitors' products, our competitive position could be adversely affected, as could our business. Both the patent application process and the process of managing patent disputes can be time consuming and expensive.

Monitoring unauthorized use of our intellectual property is difficult and costly. From time to time, we review our competitors' products, and may in the future seek to enforce our patents or other rights against potential infringement. However, the steps we have taken to protect our proprietary rights may not be adequate to prevent misappropriation of our intellectual property. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. We cannot guarantee that any of our patent searches or analyses, including but not limited to the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our products in any jurisdiction. For example, U.S. applications filed before November 29, 2000 and certain U.S. applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed. Therefore, patent applications covering our product candidates or technologies could have been filed by others without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our platform technologies, our products or the use of our products or technologies. The scope of a patent claim is determined by the interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our products. We may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates.

A court or other judicial body may decide that the patent we seek to enforce is invalid or unenforceable or may refuse to stop the other party from using the technology at issue on the grounds that the patent in question does not cover the technology in question. An adverse result in any litigation could put one or more of our patents at risk of being invalidated or interpreted narrowly. Some of our competitors may be able to devote significantly more resources to intellectual property litigation and may have significantly broader patent portfolios to assert against us if we assert our rights against them.

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

Filing, prosecuting and defending patents on our technologies and products in all countries throughout the world would be prohibitively expensive. In addition, the laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. Consequently, we may not be able to prevent third parties from using our inventions in countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own technologies and products and, may export otherwise infringing products to territories where we have patent protection. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

The legal systems of certain countries, particularly China and certain other developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, put our own patents at risk of being invalidated or interpreted narrowly, put our patent applications at risk of not being issued, and provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop. Certain countries in Europe and developing countries, including China and India, have

compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we may have limited remedies if any of our patents are infringed or if we are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

If we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology and products could be adversely affected.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets.

Trade secrets and know-how can be difficult to protect as trade secrets, and know-how will over time be disseminated within the industry through independent development, the publication of journal articles, and the movement of personnel skilled in the art from company to company. In addition, because we may rely on third parties in the development of our products, we may, at times, share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with third parties prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. If we are unable to prevent unauthorized material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either lawfully or through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. Competitors could willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. In addition, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have an adverse effect on our business and results of operations.

We may be involved in lawsuits to protect or enforce our patents and proprietary rights, to determine the scope, coverage and validity of others' proprietary rights, or to defend against third party claims of intellectual property infringement that could require us to spend significant time and money and could prevent us from selling our products or impact our stock price.

Litigation may be necessary for us to enforce our patent and proprietary rights and/or to determine the scope, coverage and validity of others' proprietary rights. Litigation on these matters has been prevalent in our industry and we expect that this will continue. As the biotechnology and synthetic biology industries expand and more patents are issued, the risk increases that there may be patents issued to third parties that relate to our technologies and products of which we are not aware or that we may need to challenge to continue our operations as currently contemplated. In addition, our competitors and others may have patents or may in the future obtain patents and claim that the use of our products or processes infringes these patents. As we move into new markets and applications for our products and processes, incumbent participants in such markets may

assert their patents and other proprietary rights against us as a means of slowing our entry into such markets or as a means to extract substantial license and royalty payments from us.

Patent infringement suits can be expensive, lengthy and disruptive to business operations and the outcome following legal assertions of invalidity and unenforceability is unpredictable. We could incur substantial costs and divert the attention of our management and technical personnel in prosecuting or defending against any claims and may harm our reputation. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. There can be no assurance that we will prevail in any suit initiated against us by third parties, successfully settle or otherwise resolve patent infringement claims. If we are unable to successfully settle claims on terms acceptable to us, we may be required to engage in or continue costly, unpredictable and time-consuming litigation and may be prevented from or experience substantial delays in marketing our technologies and products. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us, including treble damages and attorneys' fees and costs in the event that we are found to be a willful infringer of third party patents.

In the event of a successful claim of infringement against us, we may be required to obtain one or more licenses from third parties, which we may not be able to obtain at a reasonable cost, if at all. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products to avoid infringing third-party patents or proprietary rights. Defense of any lawsuit or failure to obtain any required licenses on favorable terms could prevent us from commercializing our products, and the risk of a prohibition on the sale of any of our products could adversely affect our ability to grow and gain market acceptance for our products.

Suppliers of certain equipment and technology platforms on which we rely for our business may also be subject to patent infringement lawsuits. Even if we are not a named party in such lawsuits, if such suppliers are enjoined by a court to stop selling their equipment and technology platforms or supporting our existing equipment and technology platforms, we may not have an alternative source for such equipment and technology platforms, which may have a material adverse effect on our business.

We may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in our patents or other intellectual property. We were previously involved in litigation of this kind with Agilent. While we have settled this dispute, there can be no assurance that future litigation will not be initiated by these parties. Some of our employees were previously employed at universities or biotechnology or biopharmaceutical companies, including our competitors or potential competitors. We 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. 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. A loss of key research personnel or their work product could hamper our ability to commercialize, or prevent us from commercializing, our products and technologies. 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 distraction to management and other employees.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. Finally, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

In addition, our agreements with some of our suppliers, distributors, customers and other entities with whom we do business may require us to defend or indemnify these parties to the extent they become involved in infringement claims against us, including the claims described above. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify any of these third parties in

connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, operating results, or financial condition.

We may not be successful in obtaining or maintaining necessary rights to our products and technologies through acquisitions and in-licenses, and our intellectual property agreements with third parties may involve unfavorable terms or be subject to disagreements over contract interpretation.

We may find that our programs require the use of proprietary rights held by third parties, and the growth of our business may depend in part on our ability to acquire, in-license or use these proprietary rights. We may be unable to acquire or in-license compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify as necessary for our products and technologies. The licensing and acquisition of third-party intellectual property rights is a competitive area, and other companies may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These companies may have a competitive advantage over us due to their size, financial resources and greater commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. Moreover, collaboration arrangements are complex and time-consuming to negotiate, document, implement and maintain. We may not be successful in our efforts to establish and implement collaborations or other alternative arrangements. We also may be unable to license or acquire third-party intellectual property rights on terms that would be favorable to us or would allow us to make an appropriate return on our investment.

We engage in discussions regarding other possible commercial and cross-licensing agreements with third parties from time to time. There can be no assurance that these discussions will lead to the execution of commercial license or cross-license agreements or that such agreements will be on terms that are favorable to us. Even if we are able to obtain a license to intellectual property of interest, we may not be able to secure exclusive rights, in which case others could use the same rights and compete with us. In addition, if we enter into cross-licensing agreements, there is no assurance that we will be able to effectively compete against others who are licensed under our patents.

In addition, provisions in our licensing and other intellectual property agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could affect the scope of our rights to the relevant intellectual property or technology or affect financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We have not yet registered some of our trademarks in all of our potential markets, and failure to secure those registrations could adversely affect our business.

Some of our trademark applications may not be allowed for registration, and our registered trademarks may not be maintained or enforced. In addition, in the U.S. Patent and Trademark Office and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings.

In addition, third parties may file first for our trademarks in certain countries. If they succeed in registering such trademarks, and if we are not successful in challenging such third-party rights, we may not be able to use these trademarks for marketing our products and technologies in those countries. Over the long-term, if we are unable to establish name recognition based on our trademarks, then our marketing abilities may be materially adversely impacted.

We depend on certain technologies that are licensed to us. We do not control these technologies and any loss of our rights to them could prevent us from selling our products.

We rely on, or may in the future rely on, licenses in order to be able to use various proprietary technologies that are material to our business. We do not or will not own the patents that underlie these licenses. Our rights to use the technology we license are subject to the negotiation of, continuation of and compliance with the terms of those licenses. In some cases, we do not or will not control the prosecution, maintenance, or filing of the patents to which we hold licenses, or the enforcement of these patents against third parties. Some of our patents and patent applications were either acquired from another company who acquired those patents and patent applications from yet another company or are licensed from a third party. For example, Twist Bioscience acquired Genome Compiler Corporation in 2016, and Genome Compiler had a non-exclusive license to U.S. Patent No. 7,805,252 owned by DNA 2.0. Thus, these patents and patent applications are not written by us or

our attorneys, and we did not have control over the drafting and prosecution. The former patent owners and our licensors might not have given the same attention to the drafting and prosecution of these patents and applications as we would have if we had been the owners of the patents and applications and had control over the drafting and prosecution. We cannot be certain that drafting and/or prosecution of the licensed patents and patent applications by the licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

Our rights to use the technology we license is subject to the validity of the owner's intellectual property rights. Enforcement of our licensed patents or defense or any claims asserting the invalidity of these patents is often subject to the control or cooperation of our licensors. Legal action could be initiated against the owners of the intellectual property that we license. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent these other companies or institutions from continuing to license intellectual property that we may need to operate our business.

Our licenses contain or will contain provisions that allow the licensor to terminate the license upon specific conditions. Our rights under the licenses are subject to or will be subject to our continued compliance with the terms of the license, including the payment of royalties due under the license. Termination of these licenses could prevent us from marketing some or all of our products. Because of the complexity of our products and the patents we have licensed, determining the scope of the license and related royalty obligation can be difficult and can lead to disputes between us and the licensor. An unfavorable resolution of such a dispute could lead to an increase in the royalties payable pursuant to the license. If a licensor believed we were not paying the royalties due under the license or were otherwise not in compliance with the terms of the license, the licensor might attempt to revoke the license. If such an attempt were successful, we might be barred from producing and selling some or all of our products.

Risks relating to owning our common stock

We have never paid dividends on our capital stock and we do not intend to pay dividends for the foreseeable future. Consequently, any gains from an investment in our common stock will likely depend on whether the price of our common stock increases.

We have never declared or paid any dividends on our common stock and do not intend to pay any dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the operation of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their common stock after any price appreciation as the only way to realize any future gains on their investments.

Our charter documents and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.

Our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could delay or prevent a change in control of our Company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

- providing for a classified board of directors with staggered, three-year terms;
- authorizing our board of directors to issue preferred stock with voting or other rights or preferences that could discourage a takeover attempt or delay changes in control;
- prohibiting cumulative voting in the election of directors;
- providing that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- prohibiting the adoption, amendment or repeal of our amended and restated bylaws or the repeal of the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors without the required approval of at least 66.67% of the shares entitled to vote at an election of directors;
- prohibiting stockholder action by written consent;
- limiting the persons who may call special meetings of stockholders; and

- requiring advance notification of stockholder nominations and proposals.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, the provisions of Section 203 of the Delaware General Corporate Law (the "DGCL"), govern us. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time without the consent of our board of directors.

These and other provisions in our amended and restated certificate of incorporation and our amended and restated bylaws and under Delaware law could discourage potential takeover attempts, reduce the price investors might be willing to pay in the future for shares of our common stock and result in the market price of our common stock being lower than it would be without these provisions.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the federal district courts of the United States will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, any action asserting a claim against us arising pursuant to any provisions of the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws, any action or proceeding asserting a claim as to which the Delaware General Corporation Law confers jurisdiction upon the Court of Chancery of the State of Delaware or any action asserting a claim against us that is governed by the internal affairs doctrine, subject in each case to the Court of Chancery having personal jurisdiction over the parties named as defendants therein. The exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. If a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we might incur additional costs associated with resolving such action in other jurisdictions.

In addition, our amended and restated certificate of incorporation provides that the U.S. federal district courts are the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. Our exclusive forum provision will not relieve us of our duties to comply with the federal securities laws and the rules and regulations thereunder, and our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations.

The enforceability of similar federal court choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find our federal court choice of forum provision to be inapplicable or unenforceable. If a court were to find either of the choice of forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions. Additionally, while the Delaware Supreme Court recently determined that choice of forum provisions for actions arising under the Securities Act are facially valid, a stockholder may nevertheless seek to bring such a claim arising under the Securities Act against us, our directors, officers, or other employees in a venue other than in the federal district courts of the United States. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation, and this may require significant additional costs associated with resolving such action in other jurisdictions.

General risk factors

The market price of our common stock is likely to be volatile and could fluctuate or decline, resulting in a substantial loss of your investment.

The market price of our common stock could be subject to wide fluctuations in response to, among other things, the factors described in this "Risk Factors" section or otherwise, and other factors beyond our control, such as fluctuations in the valuations of companies perceived by investors to be comparable to us.

Furthermore, the stock markets have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market fluctuations, as well as general economic, systemic, political and market conditions, such as recessions, interest rate changes or international currency fluctuations, may negatively affect the market price of our common stock.

Factors that could cause the market price of our common stock to fluctuate significantly include:

- actual or anticipated fluctuations in our financial condition and operating results, including fluctuations in our quarterly and annual results;
- announcements of technological innovations by us or our competitors;
- overall conditions in our industry and the markets in which we operate;
- addition or loss of significant customers, or other developments with respect to significant customers;
- changes in laws or regulations applicable to our products;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- additions or departures of key personnel;
- operational impacts resulting from a reduction in force;
- competition from existing products or new products that may emerge;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain intellectual property protection for our technologies;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us or our stockholders;
- the addition or removal of our stock to or from a stock index fund;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- the expiration of contractual lock-up agreements with our executive officers, directors and stockholders, which we may enter into in the future from time to time;
- trade and national security disputes, particularly with China, including the effect of sanctions, tariffs and other trade restrictions that may affect supply chain or sales opportunities in the United States, China and Europe;
- general economic and market conditions, including economic downturns or uncertainty in financial markets; and
- other factors beyond our control, such as terrorism, war, natural disasters and pandemics.

In the past, many companies that have experienced volatility in the market price of their stock have become subject to securities class action litigation. We are now and may in the future be the target of this type of litigation. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could harm our business.

Our quarterly and annual operating results and cash flows have fluctuated in the past and might continue to fluctuate, causing the value of our common stock to decline substantially.

Numerous factors, many of which are outside our control, may cause or contribute to significant fluctuations in our quarterly and annual operating results. These fluctuations may make financial planning and forecasting difficult. In addition, these fluctuations may result in unanticipated decreases in our available cash, which could negatively affect our business and prospects. In addition, one or more of such factors may cause our revenue or operating expenses in one period to be disproportionately higher or lower relative to the others. As a result, comparing our operating results on a period-to-period basis might not be meaningful. You should not rely on our past results as indicative of our future performance. Moreover, our stock price might be based on expectations of future performance that are unrealistic or that we might not meet and, if our revenue or operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially.

Our operating results have varied in the past. As a result, our operating results could be unpredictable, particularly on a quarterly basis. In addition to other risk factors listed in this section, some of the important factors that may cause fluctuations in our quarterly and annual operating results are further described in “Risk Factors—Risks relating to owning our common stock.”

In addition, a significant portion of our operating expense is relatively fixed in nature, and planned expenditures are based in part on expectations regarding future revenue. Accordingly, unexpected revenue shortfalls will decrease our gross margins and could cause significant changes in our operating results from quarter to quarter. If this occurs, the trading price of our common stock could fall substantially.

If securities or industry analysts do not publish research or reports about our business or publish negative reports about our business, our share price and trading volume could decline.

The trading market for our common stock will depend on the research and reports that securities or industry analysts publish about us or our business and we will not have any control over such analysts. If one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our Company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

Our actual operating results may differ significantly from our guidance.

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

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. Our aim is to state possible outcomes as high and low ranges to provide a sensitivity analysis as variables are changed but are not intended to imply that actual results could not fall outside of the suggested ranges. The principal reason that we release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such third parties.

Our guidance is only an estimate of what management believes is realizable as of the date of release, and some or all of the assumptions underlying the guidance furnished by us may not materialize or may change significantly. In light of the foregoing, investors are urged not to rely upon our guidance in making an investment decision regarding our common stock.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in the “Risk Factors” section in this Form 10-K could result in the actual operating results being different from our guidance, and the differences may be adverse and material.

We have in the past and may in the future be subject to short selling strategies that may drive down the market price of our common stock.

Short sellers have in the past and may attempt in the future to drive down the market price of our common stock. Short selling is the practice of selling securities that the seller does not own but may have borrowed with the intention of buying identical securities back at a later date. The short seller hopes to profit from a decline in the value of the securities between the time the securities are borrowed and the time they are replaced. As it is in the short seller's best interests for the price of the stock to decline, many short sellers (sometimes known as "disclosed shorts") publish, or arrange for the publication of, negative opinions regarding the relevant issuer and its business prospects to create negative market momentum. Although traditionally these disclosed shorts were limited in their ability to access mainstream business media or to otherwise create negative market rumors, the rise of the Internet and technological advancements regarding document creation, videotaping and publication by weblog ("blogging") have allowed many disclosed shorts to publicly attack a company's credibility, strategy and veracity by means of so-called "research reports" that mimic the type of investment analysis performed by large Wall Street firms and independent research analysts. These short attacks have, in the past, led to selling of shares in the market. Further, these short seller publications are not regulated by any governmental, self-regulatory organization or other official authority in the United States and they are not subject to certification requirements imposed by the SEC. Accordingly, the opinions they express may be based on distortions, omissions or fabrications. Companies that are subject to unfavorable allegations, even if untrue, may have to expend a significant amount of resources to investigate such allegations and/or defend themselves, including shareholder suits against the company that may be prompted by such allegations. We have been and may in the future be the subject of shareholder suits that we believe were prompted by allegations made by short sellers.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause the stock price of our common stock to decline.

As we have in the past, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner, we determine from time to time. We have also issued and expect to issue common stock to employees and directors pursuant to our equity incentive plans. If we sell common stock, convertible securities or other equity securities in future transactions, or common stock is issued pursuant to equity incentive plans, investors may be materially diluted. New investors in such subsequent transactions could gain rights, preferences and privileges senior to those of holders of our common stock.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation provides that directors and officers of the company shall not be personally liable to the company or its stockholders for monetary damages for breach of fiduciary duty as a director or officer. Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the DGCL, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- we will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law, which provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the company and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful;
- we may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law;
- we are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification;
- we will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification;

- the rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons; and
- we may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

Increasing scrutiny and evolving expectations around corporate responsibility practices, specifically related to environmental, social and governance (“ESG”) matters, from investors, lenders, customers, government regulators and other market participants may impose additional costs and expose us to reputational and other risks.

Companies across all industries and around the globe are facing increasing scrutiny relating to their ESG policies, initiatives and activities by investors, lenders, customers, government regulators and other market participants. Certain institutional investors, investment funds, other influential investors, customers, suppliers and other third parties are increasingly focused on ESG practices and corporate social responsibility endeavors and reporting and may use these factors to guide investment strategies. In some cases, investors may choose not to invest in our company if they believe our policies relating to corporate responsibility are inadequate. In contrast, “anti-ESG” sentiment has gained momentum across the United States, with several proposed or enacted “anti-ESG” policies, legislation, or initiatives, and the U.S. federal administration having recently issued an executive order opposing diversity, equity and inclusion initiatives in the private sector. Any initiatives, goals, or commitments we disclose related to ESG matter in light of evolving, and sometimes, conflicting, laws, regulations, policies and investor and other stakeholder expectations involve risks and uncertainties and could be difficult to achieve and costly to implement. Companies that do not adapt to or comply with the evolving investor or stakeholder expectations and standards, or which are perceived to have not responded appropriately, may suffer from reputational damage and result in the business, financial condition and/or stock price of a company being materially and adversely affected.

Further, this increased focus on ESG issues may result in new regulations and/or third-party requirements that could adversely impact our business. For example, regulatory authorities have begun to impose mandatory disclosure requirements with respect to ESG matters, such as regulations proposed or adopted by federal agencies related to climate-related disclosures, claims, practices or initiatives, the EU’s Corporate Sustainability Reporting Directive, and California’s Climate-Related Financial Risk Act and the Climate Corporate Data Accountability Act. If we fail to implement sufficient oversight or accurately capture and disclose on environmental matters, our reputation, business, operating results and financial condition may be materially adversely affected. In addition, enhancements to our processes and controls to reflect evolving reporting standards may be costly and require additional resources, and any allegation or perception that we have not taken sufficient action in these areas could negatively harm our reputation.

Item 1B. *Unresolved Staff Comments*

None.

Item 1C. *Cybersecurity*

Cybersecurity Risk Management and Strategy

Processes Used to Assess, Identify, and Manage Material Risks from Cybersecurity Threats

Risk Assessment and Management

We have implemented and maintain various information security processes designed to identify, assess and manage material risks from cybersecurity threats to our critical computer networks, third-party hosted services, communications systems, hardware and software, and our critical data, including, among other things, intellectual property, trade secrets, confidential information that is proprietary, strategic or competitive in nature, and personal data.

Our Chief Information Officer (“CIO”) together with our Senior Director of IT Infrastructure, Security and Compliance and other members of the Information and Business Technology (“IBT”) Security team, are responsible for establishing and implementing cybersecurity policies and procedures, which includes developing and updating our Security Incident Response Policy (“IRP”), managing incident response, and overseeing any policy exceptions and potential compensating controls.

Our cybersecurity program is based on the ISO 27001 security controls. We maintain an ISO 27001:2022 certification and we undergo routine audits by an independent, certified accreditation body to maintain this certification. We also provide annual, mandatory cybersecurity training for employees to equip our workforce with the knowledge to identify and respond to cybersecurity threats, such as phishing attempts.

Our process for assessing, identifying, and managing material risks from cybersecurity threats is integrated into our overall enterprise risk management process. As part of our overall enterprise risk management process, we have a cybersecurity risk management strategy based on National Institute of Standards and Technology (NIST) Special Publication. 800-30 “Guide for Conducting Risk Assessments” that provide guidelines and principles for information technology security risk management.

Incident Response

We have a dedicated Information Security team within the IBT team responsible for managing and coordinating incident response efforts. This team collaborates closely with other teams within the company, including Legal and Finance, in identifying, analyzing, and responding to cybersecurity incidents, which includes tracking cybersecurity incidents to help identify any related incidents. When cybersecurity incidents are identified, our practice is to respond to and address them utilizing incident classifications and escalation protocols, in accordance with applicable governmental regulations and other legal requirements.

We have an IRP to prepare for and respond to cybersecurity incidents. The process is tested in annual tabletop exercises to help identify strengths and areas for improvement.

Engagement of Third Party Advisors

We engage third party advisors, including assessors, cybersecurity consultants, and auditors to assess, validate, and enhance our cybersecurity program. We benefit from engaging third parties to provide specialized skills, knowledge, tools, and resources. These third parties also help reduce costs, increase efficiency, improve quality, mitigate risks, and review cybersecurity strategy, trends, and threat landscape. We refine and mature our cybersecurity roadmap and strategy based on findings and their risk standing.

Third-Party Service Provider Risk Management

We have a process in place to oversee and identify risks from cybersecurity threats associated with our use of key third-party service providers during the course of engagement. The company maintains a formal risk management program to identify, assess, monitor and mitigate risks associated with third-party relationships, including cybersecurity risks. Our vendor security assessment process evaluates key vendors and, where appropriate, assesses vendor’s controls for IT security, privacy, business continuity, and other third-party risks. Following an evaluation, the company determines and prioritizes risks based on their potential impact, which help inform the appropriate level of additional due diligence and ongoing compliance monitoring.

Material Risks from Cybersecurity Threats

We have not identified risks from known cybersecurity threats, including as a result of any previous cybersecurity incidents, that have materially affected us, including our business strategy, results of operations or financial condition, but we face certain ongoing cybersecurity risks threats that, if realized, are reasonably likely to materially affect us. For additional information regarding these risks, please refer to Item 1A, “Risk Factors — If we, or our partners or suppliers, experience a significant disruption in, or breach in security of, information technology systems or other cybersecurity incidents, our business could be adversely affected” in this Form 10-K.

Cybersecurity Governance

Board Oversight of Risks from Cybersecurity Threats

The Board oversees management’s processes for identifying and mitigating risks, including cybersecurity risks, to help align our risk exposure with our strategic objectives. Our CIO regularly briefs the Board on cybersecurity matters. We have procedures led by our CIO which govern our assessment, response and notification of internal and external parties upon the occurrence of a cybersecurity incident. Depending on the nature and severity of an incident, this process provides for escalating notification to our executive team, to evaluate the overall impact and appropriate or required external notifications. Based on its nature and severity, the Board would be informed of an incident by our executive team.

Management’s Role in Assessing and Managing Materials Risks from Cybersecurity Threats

Under the IRP, cybersecurity incidents are escalated based on a defined incident severity to management as appropriate. Management, including the CIO, is involved in assessing and managing our cybersecurity risks. Our CIO has 14 years of experience managing information technology in complex environments. As noted above, the company’s IRP includes standard processes for escalating significant cybersecurity incidents to management, including the CIO, who then informs the Board based on the nature and severity of the incident. The company’s incident response team also coordinates with external legal advisors, cybersecurity forensic firms, communication specialists, and other outside advisors and experts, as appropriate.

Item 2. Properties

Our principal facilities are described below:

Principal Facilities	Approximate Square Footage	Lease Expiration	Use	Owned or Leased
Wilsonville, OR	211,995	2044	General & Administration and Manufacturing	Leased
South San Francisco, CA	91,791	2028	General & Administration, R&D and Manufacturing	Leased
Brisbane, CA	24,786	2026	Warehouse facility	Leased
Quincy, MA	38,853	2032	General & Administration, R&D and Manufacturing	Leased
Guangzhou, China	9,956	2026	General & Administration, Sales & Marketing and Supply Chain activities	Leased
Carlsbad, CA	8,772	2026	Sales & Marketing	Leased
Singapore	1,353	2028	Sales & Marketing	Leased

The Company believes its existing facilities are in good operating condition and are suitable for the conduct of its business.

Item 3. Legal Proceedings

For a description of material pending legal proceedings, see Note 10 “Commitments and Contingencies - Legal Proceedings” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Form 10-K, which is incorporated herein by reference. In addition, we are subject to various legal proceedings and claims arising in the ordinary course of business. Although occasional adverse decisions or settlements may occur, management believes that the final disposition of such matters will not have a material adverse effect on our business, financial position, results of operations or cash flows.

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

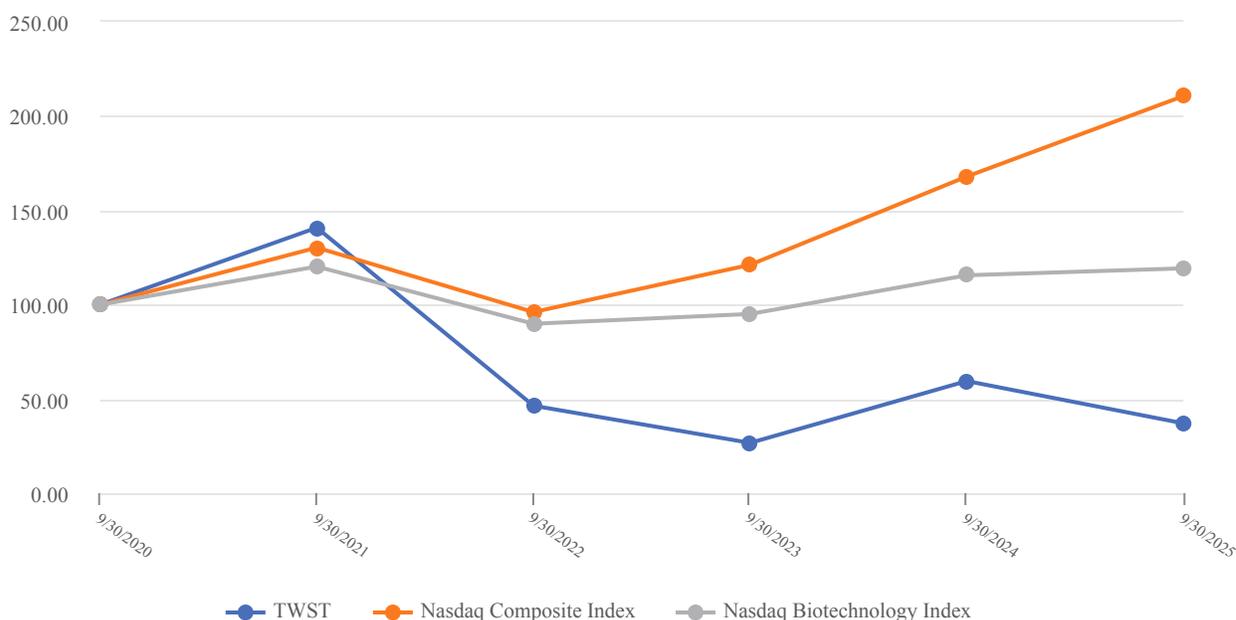
Market Information for Common Stock

Our common stock is traded on The Nasdaq Global Market under the symbol “TWST”.

Performance Graph

This graph is not “soliciting material” or subject to Regulation 14A, 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 any filing of the Company under the Securities Act or the Exchange Act, 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 shareholder return on our common stock to the cumulative total returns of the Nasdaq Composite Index and the Nasdaq Biotechnology Index. An investment of \$100 is assumed to have been made in our common stock and each index on September 30, 2020 and its performance is presented as of the end of each our fiscal years through September 30, 2025. Pursuant to applicable SEC rules, all values assume reinvestment of the full amount of all dividends; however, no dividends have been declared on our common stock to date. The returns shown on the graph below are based on historical results and are not necessarily indicative of future performance, and we do not make or endorse any predictions as to future returns.



* \$100.00 invested on September 30, 2020 in stock or index, including reinvestment of dividends.

	September 30,						
	2020	2021	2022	2023	2024	2025	
Twist Bioscience Corporation	\$ 100.00	\$ 140.81	\$ 46.39	\$ 26.67	\$ 59.47	\$ 37.04	
Nasdaq Composite Index	\$ 100.00	\$ 130.26	\$ 96.06	\$ 121.14	\$ 167.95	\$ 210.64	
Nasdaq Biotechnology Index	\$ 100.00	\$ 120.21	\$ 89.85	\$ 95.05	\$ 115.57	\$ 119.26	

Holders of Record

As of November 13, 2025, there were approximately 34 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Dividend Policy

We have never declared or paid, and do not anticipate declaring or paying in the foreseeable future, any cash dividends on our capital stock. 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 our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

None.

Item 6. [Reserved]

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to promote understanding of the results of operations and financial condition. The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes to those statements included elsewhere in this Form 10-K. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors, including those discussed under "Risk Factors" and elsewhere in this Form 10-K. The last day of our fiscal year is September 30, and we refer to our fiscal year ended September 30, 2023 as fiscal year 2023 or 2023, September 30, 2024 as fiscal year 2024 or 2024 and our fiscal year ended September 30, 2025 as fiscal year 2025 or 2025.

Additional information related to the comparison of our results of operations and liquidity and capital resources between the years 2024 and 2023 is included in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of our Annual Report on Form 10-K for the fiscal year ended September 30, 2024 filed with U.S. Securities and Exchange Commission.

Overview

We are a leading, rapidly growing synthetic biology company that has developed a disruptive DNA synthesis platform to industrialize the engineering of biology. The core of our platform is a proprietary technology that pioneers a new method of manufacturing synthetic DNA by "writing" DNA on a silicon chip. We have combined our silicon-based DNA writing technology with proprietary software, scalable commercial infrastructure and an e-commerce platform to create an integrated technology platform that enables us to achieve high levels of quality, precision, automation, and manufacturing throughput at a significantly lower cost than our competitors. We have applied our unique technology to manufacture a broad range of synthetic DNA-based products, including synthetic genes, tools for next generation sequencing ("NGS"), sample preparation, and antibody libraries for drug discovery and development, all designed to enable our customers to conduct research more efficiently and effectively. Leveraging our same technology, we have expanded our footprint beyond DNA synthesis to manufacture synthetic RNA as well as antibody proteins to disrupt and innovate within larger market opportunities, in addition to discovery partnerships for biologic drugs.

We believe our products enable a broad range of applications that may ultimately improve health and the sustainability of the planet across multiple industries including healthcare, chemicals/materials, food/agriculture, academic research, and technology. We sell our synthetic DNA and synthetic DNA-based products to a customer base of more than 3,800 customers annually across a broad range of industries. In order to address this diverse customer base, we employ a multi-channel strategy comprised of a direct sales force targeting synthetic DNA customers, a direct sales force focusing on the NGS market and an e-commerce platform that serves both commercial channels. We employ business development and sales representatives for our biopharma solutions as well. Our easy-to-use e-commerce platform allows customers to design, validate, and place on-demand orders of customized DNA online, and enables them to receive real-time customized quotes for their products and track their order status through the manufacturing and delivery process. This is a critical part of our strategy to address our large markets and diverse customer base, as well as drive commercial productivity, enhance the customer experience, and promote loyalty.

As we have moved further up the value chain from fragments to genes to preps to proteins and beyond, the strategic connection between our SynBio and Biopharma products tightens. More customers now leverage both products and services to accelerate discovery and identify breakthrough therapeutics. This growing convergence highlights the power of our integrated platform and reinforces Twist's unique position to serve the full spectrum of innovation in discovery.

We currently generate revenue through our synthetic biology and NGS tools product lines as well as biopharma services for antibody discovery, optimization and development.

We generated revenues of \$376.6 million, \$313.0 million, and \$245.1 million in the years ended September 30, 2025, September 30, 2024, and September 30, 2023, respectively, while incurring net losses of \$77.7 million, \$208.7 million and \$204.6 million in the years ended September 30, 2025, 2024 and 2023, respectively. Since our inception, we have incurred significant operating losses and have accumulated a net deficit of \$1,319.6 million. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the success of our existing products and the development and commercialization of additional products in the

synthetic biology and biologic drug industries as well as leveraging our investment in our manufacturing facility in Wilsonville, Oregon.

We sold our DNA data storage business to Atlas Data Storage, Inc. ("Atlas"), a newly formed company, that will focus solely on DNA data storage technology and commercialization, with \$155.0 million in seed financing round from third-party investors. The purpose of the transaction was to unlock value by accelerating data storage technology development and allowing each company to focus strategically on its unique products, customers and investors. Under the terms of the contribution agreement executed with Atlas, we assigned and licensed our DNA data storage technology to Atlas in exchange of receiving a minority ownership interest upon close, an upfront cash payment and a secured promissory note. We retained an ownership stake in Atlas and may participate in the upside of DNA data storage through future technology and commercial milestone payments, and a revenue share through royalties on future sales of Atlas' products and services.

Financial highlights from fiscal year 2025 compared with fiscal year 2024 include:

- Revenue growth of 20% to \$376.6 million from \$313.0 million, primarily due to growth in NGS tools and synthetic genes;
- Gross margin increased to 50.7% from 42.6%, mainly due to increase in revenues and holding fixed manufacturing costs relatively flat and driving additional cost savings through continuous process improvement initiatives;
- Loss from operations decreased to \$(136.3) million from \$(220.8) million primarily due to an increase in both revenues and gross profit for the year ended September 30, 2025, and impairment of long-lived assets recognized in the year ended September 30, 2024. Additional contributing factors were a decrease in research and development expenses offset by an increase in selling, general and administrative expenses for the year ended September 30, 2025;
- Net cash used in operating activities for the year ended September 30, 2025 decreased to \$47.6 million from \$64.1 million for the year ended September 30, 2024; and
- Gain on the sale of DNA digital data storage business of \$48.8 million.

See "Results of Operations" below for discussion of our results for the periods presented.

Key Business Metrics

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

Number of Genes Shipped

We believe that the number of genes shipped serves as a direct indicator of our operational efficiency and market demand. This metric is crucial for assessing our performance in meeting customer demand and generating revenues. Shipments of number of genes in years ended September 30, 2025 and 2024 were as follows:

(in thousands)	Year ended September 30,	
	2025	2024
Number of genes shipped	938	772

Number of Customers

We believe that the number of customers who have purchased from us since inception is representative of our ability to drive adoption of our products. We define a customer as a unique "Bill To" account where a single customer may have many "Ship To" locations and may have many unique points of contact within a single "Bill To" customer. In 2025 and 2024, the number of customers who purchased products from us were more than 3,800 and 3,550 customers, respectively.

Percentage of Revenue from Repeat Customers

We believe that the percentage of revenue that we generate from both new and repeat customers is an indicator of our ability to drive adoption of our products amongst existing customers while also generating a robust pipeline of new customers. We define a repeat customer as any customer who has purchased products or services from us more than once in the current fiscal year.

	Year ended September 30,	
	2025	2024
Revenue from repeat customers	99 %	98 %

Results of Operations

Comparison of the Years Ended September 30, 2025 and 2024

Revenues

We generate revenue from the sales of synthetic biology tools, such as synthetic genes, oligo pools, NGS tools, DNA libraries and biopharma services for antibody discovery, optimization and development. Our ability to increase our revenues will depend on our ability to further penetrate the domestic and international markets, generate sales through our direct sales force, distributors, and over time, from our e-commerce digital platform and the launch of new products.

(in thousands, except percentages)	Year ended September 30,			
	2025	2024	Change	%
Revenues	\$ 376,572	\$ 312,974	\$ 63,598	20%

Revenues by Geography

We have one reportable segment from the manufacturing of synthetic DNA products. The following table shows our revenues by geography, based on our customers' shipping addresses. Americas consists of United States, Canada, Mexico and South America; EMEA consists of Europe, Middle East and Africa; and APAC consists of Japan, China, South Korea, India, Singapore, Malaysia, Australia, New Zealand, Thailand and Taiwan.

(in thousands, except percentages)	Year ended September 30,			
	2025	%	2024	%
Americas	\$ 225,580	60%	\$ 193,884	62%
EMEA	124,240	33%	92,567	30%
APAC	26,752	7%	26,523	8%
Total revenues	\$ 376,572	100%	\$ 312,974	100%

Revenues by Products

The table below sets forth revenues by products:

(in thousands, except percentages)	Year ended September 30,			
	2025	%	2024	%
Synthetic genes	\$ 113,602	30%	\$ 92,679	30%
Oligo pools	20,230	6%	16,906	5%
DNA libraries	11,184	3%	13,933	4%
Antibody discovery	23,452	6%	20,328	7%
NGS tools	208,104	55%	169,128	54%
Total revenues	\$ 376,572	100%	\$ 312,974	100%

Revenues by Industry

The table below sets forth revenues by industry:

(in thousands, except percentages)	Year ended September 30,			
	2025	%	2024	%
Industrial chemicals/materials	\$ 93,246	25%	\$ 83,472	26%
Academic research	65,861	17%	58,452	19%
Healthcare	215,092	57%	168,959	54%
Food/agriculture	2,373	1%	2,091	1%
Total revenues	\$ 376,572	100%	\$ 312,974	100%

Revenues increased 20% to \$376.6 million for the year ended September 30, 2025, as compared to \$313.0 million for the year ended September 30, 2024. The increase in revenue primarily reflects growth in NGS tools revenue of \$39.0 million, growth in synthetic genes revenue of \$20.9 million and growth in antibody discovery revenue of \$3.1 million. These improvements in revenues from NGS tools and synthetic gene are largely due to higher sales to our customers in the healthcare, industrial chemicals/materials and academic research industries, as well as an increase in the number of customers. The number of our genes shipped for the year ended September 30, 2025 increased to approximately 938,000 genes, compared to approximately 772,000 genes for the year ended September 30, 2024, an increase of 22%.

Cost of Revenues

Cost of revenues reflects the aggregate cost incurred in the production and delivery of our products and consists of production materials, personnel costs, cost of expensed equipment and consumables, laboratory supplies, consulting costs, depreciation, production overhead costs, information technology (“IT”), maintenance and facility costs. Personnel costs consist of salaries, employee benefit costs, bonuses, and stock-based compensation expense. In addition, cost of revenue includes royalty costs for licensed technologies included in the Company’s products and provisions for slow-moving and obsolete inventory. We expect that our cost of revenues will vary with changes in our revenues and our revenue mix.

(in thousands, except percentages)	Year ended September 30,			
	2025	2024	Change	%
Cost of revenues	\$ 185,570	\$ 179,625	\$ 5,945	3%
Gross profit	\$ 191,002	\$ 133,349	\$ 57,653	43%
Gross margin	50.7 %	42.6 %	8.1%	

Cost of revenues increased 3% to \$185.6 million for the year ended September 30, 2025, as compared to \$179.6 million for the year ended September 30, 2024. The increase is primarily attributable to an increase in material costs of \$9.4 million, due to higher sales volume and an increase in stock-based compensation expense of \$3.0 million. These cost increases were partially offset by decreases in depreciation and amortization of \$4.6 million and a decrease in outside service costs of \$2.2 million. Gross margin increased 8.1% to 50.7% for the year ended September 30, 2025, as compared to 42.6% for the year ended September 30, 2024, mainly due to an increase in revenue, holding fixed manufacturing costs relatively flat, and driving additional cost savings through continuous process improvement initiatives.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for the development of our products, which include personnel costs, laboratory equipment and supplies, consulting costs, depreciation, rent, IT, maintenance and facility costs. Personnel costs consist of salaries, employee benefit costs, bonuses, and stock-based compensation expense. We expense our research and development expenses in the period in which they are incurred.

(in thousands, except percentages)	Year ended September 30,			
	2025	2024	Change	%
Research and development	\$ 80,285	\$ 90,852	\$ (10,567)	(12)%

Research and development expenses decreased 12% to \$80.3 million for the year ended September 30, 2025, as compared to \$90.9 million for the year ended September 30, 2024. This reduction is primarily attributed to lower personnel costs of \$4.9 million and a decrease in stock-based compensation expense of \$2.2 million, both driven by the sale of DNA digital data storage business. The remaining decrease is attributable to a reduction in outside services costs of \$1.1 million and a reduction of depreciation and amortization of \$1.8 million. The decrease in depreciation and amortization is mainly due to impairment of Biopharma assets in 2024 and the sale of DNA digital data storage business in the current year.

Selling, General and Administrative Expenses

Selling expenses consist of personnel costs, customer service expenses, direct marketing expenses, educational and promotional expense, market research and analysis. General and administrative expenses are incurred for executive, finance and accounting, legal and human resources functions and consist of personnel costs, audit and legal expenses, consulting costs, depreciation, insurance costs, travel expenses, rent, IT, maintenance and facility costs. Personnel costs consist of salaries, employee benefit costs, bonuses, commissions and stock-based compensation expense. We expense all selling, general and administrative expenses as incurred. We expect our selling costs will continue to increase in absolute dollars, primarily driven by our efforts to expand our commercial capability, with an increased presence both within and outside the United States, and to expand our brand awareness and customer base through targeted marketing initiatives.

(in thousands, except percentages)	Year ended September 30,			
	2025	2024	Change	%
Selling, general and administrative	\$ 246,976	\$ 218,398	\$ 28,578	13%

Selling, general and administrative expenses increased 13% to \$247.0 million for the year ended September 30, 2025, as compared to \$218.4 million for the year ended September 30, 2024. The increase is primarily due to increases in stock-based compensation expense of \$12.7 million, personnel costs of \$6.8 million, IT services costs of \$4.0 million, marketing costs of \$1.5 million and other outside service costs of \$3.1 million.

Impairment of Long-lived Assets

(in thousands, except percentages)	Year ended September 30,			
	2025	2024	Change	%
Impairment of long-lived assets	\$ —	\$ 44,930	\$ (44,930)	(100)%

We recognized an impairment of intangible assets and property and equipment of \$44.9 million related to the Biopharma asset group during the year ended September 30, 2024.

Gain on Sale of Business

(in thousands, except percentages)	Year ended September 30,			
	2025	2024	Change	%
Gain on sale of business	\$ 48,847	\$ —	\$ 48,847	100%

We recognized a gain on the sale of business of \$48.8 million related to the sale of our DNA digital data storage business during the year ended September 30, 2025.

Interest and Other Income (Expense), Net

Other income (expense), net, consists of realized foreign exchange gains and losses, loss on disposal of property and equipment, impairment of equity investments, and sub-lease income.

(in thousands, except percentages)	Year ended September 30,			
	2025	2024	Change	%
Interest income	\$ 11,364	\$ 15,344	\$ (3,980)	(26)%
Other income (expense), net	(903)	(2,679)	1,776	(66)%
Total interest, and other income (expense), net	\$ 10,461	\$ 12,665	\$ (2,204)	(17)%

Interest income decreased 26%, to \$11.4 million in the year ended September 30, 2025, as compared to \$15.3 million for the year ended September 30, 2024, due to lower cash equivalents and short-term investments balances and lower interest rates. Other income (expense) was \$0.9 million in fiscal year 2025, as compared to \$2.7 million in fiscal year 2024, mainly due to impairment losses on an equity investment recognized in fiscal year 2024.

Income Tax Expense

(in thousands, except percentages)	Year ended September 30,			
	2025	2024	Change	%
Income tax expense	\$ (719)	\$ (560)	\$ (159)	28 %

For the years ended September 30, 2025 and 2024, we recognized income tax provisions of \$0.7 million and \$0.6 million, respectively, mainly attributable to our foreign operations.

Liquidity and Capital Resources

To date, we have financed our operations principally through public equity raises, private placements of our convertible preferred stock, borrowings from credit facilities and revenue from our commercial operations. As of September 30, 2025, we had a balance of \$183.0 million of cash and cash equivalents and \$49.4 million in short-term investments.

On October 21, 2024, the Company executed the Royalty Purchase Agreement with XOMA (US) LLC ("XOMA Royalty"). Under the Royalty Purchase Agreement, XOMA Royalty provided Twist Bioscience an upfront payment of \$15.0 million in cash in exchange for the right to receive half of the future potential milestone and royalty payments resulting from certain antibody discovery and biopharma services agreements between the Company and its customers (see note 17 of the consolidated financial statements included elsewhere in this Form 10-K).

On May 2, 2025, the Company executed the Contribution Agreement with Atlas for the sale and transfer of its DNA digital data storage assets including the related intellectual property, equipment and contracts and the license of certain other intellectual property and the license of certain other intellectual property for a consideration of 73.0 million shares of Series Seed-1 Preferred Shares of Atlas, upfront cash consideration of \$2.5 million, promissory notes of \$2.0 million issued by Atlas, contingent manufacturing and commercial milestone payments of up to \$75.0 million, and royalty payments based on a percentage of Atlas sales of the DNA data storage products (see note 6 of the consolidated financial statements included elsewhere in this Form 10-K).

Our primary cash needs are for operating expenses, working capital and capital expenditures to support the growth in our business. We believe that our existing cash, cash equivalents, restricted cash and short-term investments and anticipated cash flows from operations, will be sufficient to meet our anticipated cash requirements for more than 12 months from the date of this Form 10-K. In the future, we may still need to obtain additional financing to fund operations beyond this period, and there can be no assurance that we will be successful in raising additional financing on terms which are acceptable to us. In addition, our operating plans may change as a result of factors currently unknown to us, and we may need to seek additional funds sooner than planned. Such financing may result in dilution to stockholders, imposition of debt covenants and repayment obligations, or other restrictions that may adversely affect our business. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Our future capital requirements will depend on many factors. See "Risk Factors—We may require additional financing to achieve our goals, and such additional financing may not be available acceptable terms, or at all, which could have an adverse effect on our business".

Operating Capital Requirements

Our primary uses of capital are, and we expect will continue to be for the near future, compensation and related expenses, manufacturing costs, laboratory and related supplies, legal and other regulatory expenses, and general overhead costs and the capital expenditures. We had \$17.5 million in commitments for capital expenditures as of September 30, 2025.

Cash Flows

The following table summarizes our sources and uses of cash and cash equivalents:

(in thousands)	Year ended September 30,	
	2025	2024
Net cash used in operating activities	\$ (47,628)	\$ (64,094)
Net cash provided by (used in) investing activities	(24,762)	(3,071)
Net cash provided by financing activities	28,540	6,890

Operating Activities

Net cash used in operating activities was \$47.6 million in fiscal year 2025, which resulted from a net loss of \$77.7 million and changes in our operating assets and liabilities of \$12.6 million, partially offset by non-cash adjustments of \$42.6 million. Non-cash adjustments primarily consisted of stock-based compensation expense

of \$64.5 million, depreciation and amortization expenses of \$24.9 million, and gain on sale of business of \$48.8 million. The change in operating assets and liabilities was mainly due to increases in accounts receivable of \$22.4 million, inventory of \$4.2 million, prepaid and other current assets of \$3.7 million, and other non-current assets of \$1.6 million, offset by increases in accounts payable, accrued expenses, and accrued compensation of \$12.7 million and other liabilities \$6.6 million.

Net cash used in operating activities was \$64.1 million in fiscal year 2024 and consisted primarily of a net loss of \$208.7 million adjusted for non-cash items including depreciation and amortization expenses of \$31.4 million, stock-based compensation expense of \$50.9 million, impairment of long-lived assets of \$44.9 million, non-cash lease expense of \$0.9 million, and a change in operating assets and liabilities of \$15.4 million. The change in operating assets and liabilities was mainly due to decreases in accounts receivable of \$8.4 million, inventory of \$8.0 million, prepaid and other current assets of \$0.4 million, other non-current assets of \$0.4 million, accounts payable of \$11.8 million and other liabilities \$2.3 million, offset by increases in accrued expenses of \$4.4 million and accrued compensation of \$7.9 million.

Investing Activities

In fiscal year 2025, our net cash used in the investing activities was \$24.8 million primarily as a result of purchases of property and equipment of \$28.0 million, offset by the proceeds from the sale of our data storage business of \$2.5 million, and the net result of purchases and maturity of investments of \$0.7 million.

In fiscal year 2024, our net cash used in the investing activities was \$3.1 million primarily as a result of the net result of purchases and maturity of investments of \$2.0 million and purchases of property and equipment of \$5.1 million.

Financing Activities

Net cash provided by financing activities was \$28.5 million in fiscal year 2025, which consisted of \$15.0 million from XOMA for the sale of future revenue, \$9.3 million from the exercise of stock options, and \$4.2 million from proceeds from issuance of shares under our employee stock purchase plan.

Net cash provided by financing activities was \$6.9 million in fiscal year 2024, which consisted of \$7.1 million from the exercise of stock options and \$3.8 million from proceeds from issuance of shares under our employee stock purchase plan, offset by \$4.0 million in repurchases of common stock for income tax withholdings.

Off-balance Sheet Arrangements

We do not have any off-balance sheet arrangements other than our indemnification agreements as described in Note 10 of the consolidated financial statements included elsewhere in this Form 10-K.

Contractual Obligations and Other Commitments

As of September 30, 2025, our operating lease obligation was \$75.6 million related to various operating lease arrangements for facilities. See Note 9, Leases, of the notes to the consolidated financial statements included elsewhere in this Form 10-K for further discussion relating to these lease obligations.

On November 13, 2025, we entered into a lease amendment for our facilities in South San Francisco, California. This amendment increases the leased premises by approximately 33,000 square feet in order to consolidate other offices in South San Francisco into a single location and extends the termination date of the lease until June 30, 2036. The amendment also gives us the right, on or before December 31, 2026, to elect to expand the premises to include the entire fourth floor of the building containing approximately 33,000 square feet. For more information, please see Part II, Item 9B and Note 19, Subsequent Events of the notes to our consolidated financial statements included elsewhere in this Form 10-K.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our audited consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an ongoing basis, management evaluates the reasonableness of its estimates. Management bases its estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily available from other sources. Actual results may differ materially from these estimates under different assumptions or conditions.

We believe the following critical accounting policies require that we make significant judgments and estimates in preparing our consolidated financial statements.

Revenue Recognition

Our revenue is generated through the sale of synthetic biology tools, such as synthetic genes, or clonal genes and fragments, oligonucleotide pools, or oligo pools, NGS tools, DNA libraries, and biopharma services for antibody discovery, optimization and development ("Biopharma").

We recognize revenue for synthetic biology tools, NGS tools, and DNA libraries when control of the products is transferred to the customer and at a transaction price that is determined based on the agreed upon rates in the applicable order or master supply agreement. Our sales are primarily subject to Ex Works delivery terms and is recorded at the point in time when products are picked up by the customer's freight forwarder, as we have determined that this is the point in time that product control transfers to the customer. Shipping and handling are considered fulfillment costs and included in revenue. Taxes are excluded, and no significant financing components exist due to short payment terms.

Our Biopharma revenue consists of research and development agreements that may include up-front payments, milestone payments, or payments based on the timing of the development activities. Our research and development agreements may include more than one performance obligation. At the inception of the agreement, we assess whether each obligation represents a separate performance obligation or whether such obligations should be combined as a single performance obligation. The transaction price for each agreement is determined based on the amount of consideration we expect to be entitled to for satisfying all performance obligations within the agreement. We assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. In agreements where we satisfy performance obligation(s) over time, we recognize development revenue typically using an input method based on our costs incurred relative to the total expected cost which determines the extent of our progress toward completion. As part of the accounting for these arrangements, we must develop estimates and assumptions that require judgment to determine the transaction price and progress towards completion. We review our estimate of the transaction price and progress toward completion based on the best information available to recognize the cumulative progress toward completion as of the end of each reporting period and make revisions to such estimates as necessary.

Stock-based Compensation

We have granted stock-based awards, consisting of restricted stock and stock options, to our employees, certain non-employee consultants and certain members of our board of directors. We measure stock-based compensation expense for restricted stock and stock options granted to our employees and directors on the date of grant and recognize the corresponding compensation expense of those awards over the requisite service period, which is generally the vesting period of the respective award. We measure stock-based compensation expense for restricted stock and stock options granted to non-employee consultants on the date of grant and recognize the corresponding compensation expense of those awards over the period in which the related services are received. We adjust for actual forfeitures as they occur.

We grant performance-based restricted stock units (PRSUs) to employees. We value PRSUs using a grant date fair value equal to the closing share price of our common stock on the date of grant and the probability of the achievement of the performance conditions.

We did not grant any options during the years ended September 30, 2025 and 2024.

Goodwill

We test goodwill for impairment in our fourth quarter each year, or more frequently if indicators of an impairment exist. Evaluating goodwill for impairment involves the determination of the fair value of our reporting unit in which goodwill is recorded using a qualitative or quantitative analysis. If the fair value of the reporting unit exceeds its carrying value, goodwill is considered not impaired. If the carrying value of the reporting unit exceeds its fair value, we would record an impairment loss up to the difference between the carrying value and implied fair value.

We have an unconditional option to bypass the qualitative assessment in any period and proceed directly to performing the first step of the goodwill impairment test. For 2025, we elected to proceed directly to the step-one assessment which indicated that the fair value of our reporting unit substantially exceeded the carrying value.

Valuation of Long-lived Assets

We recorded impairment charges totaling \$44.9 million related to property and equipment and finite-lived intangible assets which are included in "Impairment of long-lived assets" on our consolidated statements of operations and comprehensive loss for the year ended September 30, 2024.

During the year ended September 30, 2024, we identified an impairment indicator with respect to an asset group associated with our antibody discovery services product line ("Biopharma asset group") due to lower than forecasted revenues. Therefore, we performed a recoverability test of long-lived assets by comparing the net book value of the Biopharma asset group, to the future undiscounted net cash flows attributable to such assets. We concluded that the carrying value of the asset group was not recoverable as it exceeded the future undiscounted cash flows the assets are expected to generate from the use and eventual disposition of the asset group.

To measure the impairment loss, we estimated the fair value of the Biopharma asset group by applying a discounted cash flow method. Calculating the fair value of an asset group involves making certain estimates and assumptions. These estimates and assumptions include, among others, the level and timing of revenues, operating expenses, working capital and discount rates, we believe to be consistent with the inherent risks associated with the Biopharma asset group, which was approximately 14%. Changes in these factors and assumptions used can materially affect the amount of impairment loss recognized in the period the asset group was considered impaired.

The implied allocated impairment loss to any individual asset within the long-lived asset group shall not reduce the carrying amount of that asset below its fair value. We estimated the fair value of the developed technology intangible asset and the customer relationships intangible assets using an excess earnings model (income approach). We estimated the fair value of the trade name intangible asset using a relief from royalty approach. Key assumptions include the level and timing of expected future revenue, conditions and demands specific to each intangible asset over its remaining useful life. The fair value of these intangible assets is primarily affected by the projected revenues, gross margins, operating expenses, and the anticipated timing of the projected income associated with each intangible asset coupled with the discount rates used to derive their estimated present values.

After consideration of the impairment charge recorded during the year ended September 30, 2024, the remaining carrying amount of long-lived assets within the Biopharma asset group was approximately \$11.6 million, which primarily comprises of operating lease right-of-use assets.

Calculation of the fair value of investment in equities

On May 2, 2025, we measured the fair value of our investment in Series Seed-1 Preferred Stock of Atlas using the backsolve method with consideration for a lack of marketability. The backsolve method was used to solve for the implied total equity value based on the May 2025 financing by Atlas to third parties. Consideration was given to the rights and preferences of each of the classes of equity of Atlas and the expected time to a liquidity event. An option pricing allocation method, or OPM, was selected to allocate the total equity value. The OPM treats ordinary shares and preferred shares as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes.

Equity investments held by the Company lack readily determinable fair values and therefore the securities are measured at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar equity securities of the same issuer. We review the carrying value of our equity investments for impairment whenever events or changes in business circumstances indicate the carrying amount of such asset may not be fully recoverable. Impairments, if any, are based on the excess of the carrying amount over the recoverable amount of the asset.

Recently Issued Accounting Pronouncements

For a description of accounting changes and recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our consolidated financial statements, see Note 2, "Summary of Significant Accounting Policies" in the notes to consolidated financial statements included elsewhere in this Form 10-K.

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

Interest Rate Sensitivity

We are exposed to market risk related to changes in interest rates. We had cash, cash equivalents and marketable securities of \$232.4 million as of September 30, 2025, which consisted primarily of money market funds and marketable securities, largely composed of investment grade, short term fixed income securities.

The primary objective of our investment activities is to preserve capital to fund our operations. We also seek to maximize income from our investments without assuming significant risk. To achieve our objectives, we maintain a portfolio of investments in a variety of securities of high credit quality and short-term duration, according to our board-approved investment policy. Our investments are subject to interest rate risk and could fall in value if market interest rates increase. However, because of the short-term nature of the instruments in our portfolio, a sudden change in market interest rates would not be expected to have a material impact on our financial condition or results of operations. For example, a hypothetical 10% relative change in interest rates during any of the periods presented would not have a material impact on future interest income, fair values of portfolio of investments and related cash flows.

Foreign Currency Sensitivity

The majority of our transactions occur in U.S. dollars. However, we do have certain transactions that are denominated in currencies other than the U.S. dollar, primarily the Euro, Chinese Yuan, and British Pound, and we therefore are subject to foreign exchange risk. The fluctuation in the value of the U.S. dollar against other currencies affects the reported amounts of expenses, assets and liabilities primarily associated with a limited number of manufacturing activities.

We currently do not use derivative financial instruments for speculative trading purposes, nor do we hedge foreign currency exchange rate exposure in a manner that entirely offsets the effects of changes in foreign currency exchange rates. The counterparties to these forward foreign currency exchange contracts are creditworthy multinational commercial banks, which minimizes the risk of counterparty nonperformance. We regularly review our exposure and may, as part of this review, make changes to it.

Item 8. Consolidated Financial Statements and Supplementary Data

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm - PCAOB ID 42	<u>59</u>
Consolidated Balance Sheets	<u>61</u>
Consolidated Statements of Operations and Comprehensive Loss	<u>62</u>
Consolidated Statements of Stockholders' Equity	<u>63</u>
Consolidated Statements of Cash Flows	<u>64</u>
Notes to Consolidated Financial Statements	<u>66</u>

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Twist Bioscience Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Twist Bioscience Corporation (the Company) as of September 30, 2025 and 2024, the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended September 30, 2025, 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 September 30, 2025 and 2024, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2025, 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 September 30, 2025, 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 November 17, 2025 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

As described in Note 3 to the consolidated financial statements, the Company's revenue for certain products is generated through the sale of synthetic biology tools, such as synthetic genes, oligo pools, DNA libraries and next generation sequencing tools. Management recognizes revenue for these products when control of the product is transferred to the customer and at a transaction price that is determined based on the agreed upon rates in the applicable order. The Company's revenue for products generated from synthetic genes, oligo pools, DNA libraries and next generation sequencing tools was \$353 million for the year ended September 30, 2025. The accuracy and occurrence of revenues is dependent on customer orders being accurately recorded, shipped, and invoiced, and involves several applications and data sources needed for the initiation, processing, and recording of transactions.

Auditing the Company's accounting for this revenue from contracts with customers was challenging and complex primarily due to the high volume of transactions, as well as the multiple applications and data sources associated with the revenue recognition process.

How We Addressed the Matter in Our Audit

We evaluated and tested the design and operating effectiveness of the Company's internal controls over the recognition of revenue for these products, including testing the completeness and accuracy of data utilized in these controls.

To test the Company's accounting for revenue from contracts with customers for these products, we performed substantive audit procedures that included, among others, performing testing of sales transactions on a sample basis and tracing such transactions to supporting documentation, performing data analytics to test recorded revenue amounts, testing a sample of cash collections, and testing credit memo activity.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2022.
San Mateo, California
November 17, 2025

Twist Bioscience Corporation
Consolidated Balance Sheets

(In thousands except per share data)	September 30, 2025	September 30, 2024
Assets		
Current assets:		
Cash and cash equivalents	\$ 183,049	\$ 226,316
Short-term investments	49,385	50,083
Accounts receivable, net ^[1]	57,019	34,903
Inventories	28,309	24,078
Prepaid expenses and other current assets ^[2]	15,204	11,396
Total current assets	\$ 332,966	\$ 346,776
Property and equipment, net	102,283	102,520
Operating lease right-of-use assets	49,377	58,829
Investment in equity securities ^[3]	54,337	1,525
Goodwill	82,195	85,811
Intangible assets, net	13,425	14,478
Restricted cash, non-current	2,376	2,816
Other non-current assets ^[4]	4,902	1,568
Total assets	<u>\$ 641,861</u>	<u>\$ 614,323</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 11,094	\$ 1,630
Accrued expenses	23,053	15,104
Accrued compensation	31,288	33,650
Current portion of operating lease liability	13,822	14,805
Other current liabilities	12,149	5,817
Total current liabilities	\$ 91,406	\$ 71,006
Operating lease liability, net of current portion	61,750	70,221
Liability related to the sale of future revenue	15,000	—
Other non-current liabilities ^[5]	747	407
Total liabilities	<u>\$ 168,903</u>	<u>\$ 141,634</u>
Commitments and contingencies (Note 10)		
Stockholders' equity		
Common stock, \$0.00001 par value — 200,000 and 100,000 shares authorized at September 30, 2025 and 2024, respectively; 60,631 and 58,877 shares issued and outstanding at September 30, 2025 and 2024, respectively	\$ —	\$ —
Additional paid-in capital	1,793,163	1,715,119
Accumulated other comprehensive loss	(627)	(522)
Accumulated deficit	(1,319,578)	(1,241,908)
Total stockholders' equity	<u>\$ 472,958</u>	<u>\$ 472,689</u>
Total liabilities and stockholders' equity	<u>\$ 641,861</u>	<u>\$ 614,323</u>

[1] Including related parties' balances of \$1.3 million and \$0.5 million as of September 30, 2025 and 2024, respectively.

[2] Including related party balances of \$0.3 million and \$— million as of September 30, 2025 and 2024, respectively.

[3] Including related party balances of \$53.9 million and \$— million as of September 30, 2025 and 2024, respectively.

[4] Including related party balances of \$1.8 million and \$— million as of September 30, 2025 and 2024, respectively.

[5] Including related party balances of \$0.2 million and \$— million as of September 30, 2025 and 2024, respectively.

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

Twist Bioscience Corporation
Consolidated Statements of Operations and Comprehensive Loss

(In thousands, except per share data)	Year ended September 30,		
	2025	2024	2023
Revenues ^[1]	\$ 376,572	\$ 312,974	\$ 245,109
Costs and expenses:			
Cost of revenues	\$ 185,570	\$ 179,625	\$ 155,380
Research and development expenses	80,285	90,852	106,894
Selling, general and administrative expenses	246,976	218,398	189,738
Restructuring and other costs	—	—	9,384
Change in fair value of contingent considerations and holdbacks	—	—	(5,913)
Impairment of long-lived assets	—	44,930	6,785
Total costs and expenses	<u>\$ 512,831</u>	<u>\$ 533,805</u>	<u>\$ 462,268</u>
Loss from operations	\$ (136,259)	\$ (220,831)	\$ (217,159)
Gain on sale of business	48,847	—	—
Interest income	11,364	15,344	14,365
Other income (expense), net ^[2]	(903)	(2,679)	(672)
Loss before income taxes	<u>\$ (76,951)</u>	<u>\$ (208,166)</u>	<u>\$ (203,466)</u>
Income tax expense	(719)	(560)	(1,152)
Net loss attributable to common stockholders	<u>\$ (77,670)</u>	<u>\$ (208,726)</u>	<u>\$ (204,618)</u>
Other comprehensive income (loss):			
Change in unrealized gain (loss) on investments	\$ (50)	\$ 203	\$ 1,510
Foreign currency translation adjustment	(55)	31	(423)
Comprehensive loss	<u>\$ (77,775)</u>	<u>\$ (208,492)</u>	<u>\$ (203,531)</u>
Net loss per share attributable to common stockholders—basic and diluted	\$ (1.30)	\$ (3.60)	\$ (3.60)
Weighted average shares used in computing net loss per share attributable to common stockholders—basic and diluted	59,808	58,016	56,885

[1] Including revenues from related parties of \$12.2 million, \$12.1 million and \$5.9 million during the year end September 30, 2025, 2024 and 2023, respectively.

[2] Including sublease income from a related party of \$1.1 million, \$— million and \$— million during the year end September 30, 2025, 2024 and 2023, respectively.

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

Twist Bioscience Corporation
Consolidated Statements of Stockholders' Equity

(In thousands)	Common stock		Additional paid-in capital	Accumulated other comprehensive income / (loss)	Accumulated deficit	Total stockholders' equity
	Shares	Amount				
Balances as of September 30, 2022	56,523	\$ —	\$ 1,619,644	\$ (1,843)	\$ (828,416)	\$ 789,385
Vesting of restricted stock units	648	\$ —	\$ —	\$ —	\$ —	\$ —
Issuance of shares under the employee stock purchase plan	217	—	3,937	—	—	3,937
Exercise of stock options	118	—	1,379	—	—	1,379
Business acquisition	277	—	5,860	—	—	5,860
Stock-based compensation expense	—	—	30,821	—	—	30,821
Other comprehensive income	—	—	—	1,087	—	1,087
Repurchase of common stock for income tax withholdings	(226)	—	(4,419)	—	—	(4,419)
Net loss	—	—	—	—	(204,618)	(204,618)
Balances as of September 30, 2023	57,557	\$ —	\$ 1,657,222	\$ (756)	\$ (1,033,034)	\$ 623,432
Impact of ASU 2016-13 adoption	—	\$ —	\$ —	\$ —	\$ (148)	\$ (148)
Vesting of restricted stock units	896	—	—	—	—	—
Issuance of shares under the employee stock purchase plan	177	—	3,765	—	—	3,765
Exercise of stock options	384	—	7,100	—	—	7,100
Stock-based compensation expense	—	—	51,007	—	—	51,007
Other comprehensive loss	—	—	—	234	—	234
Repurchase of common stock for income tax withholdings	(137)	—	(3,975)	—	—	(3,975)
Net loss	—	—	—	—	(208,726)	(208,726)
Balances as of September 30, 2024	58,877	\$ —	\$ 1,715,119	\$ (522)	\$ (1,241,908)	\$ 472,689
Restricted common stock canceled	(137)	\$ —	\$ —	\$ —	\$ —	\$ —
Vesting of restricted stock units	1,260	—	—	—	—	—
Issuance of shares under the employee stock purchase plan	144	—	4,213	—	—	4,213
Exercise of stock options	488	—	9,343	—	—	9,343
Stock-based compensation expense	—	—	64,504	—	—	64,504
Other comprehensive loss	—	—	—	(105)	—	(105)
Repurchase of common stock for income tax withholdings	—	—	(16)	—	—	(16)
Net loss	—	—	—	—	(77,670)	(77,670)
Balances as of September 30, 2025	60,632	\$ —	\$ 1,793,163	\$ (627)	\$ (1,319,578)	\$ 472,958

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

Twist Bioscience Corporation
Consolidated Statements of Cash Flows

(in thousands)	Year ended September 30,		
	2025	2024	2023
Operating activities			
Net loss	\$ (77,670)	\$ (208,726)	\$ (204,618)
Adjustments to reconcile net loss to net cash used in operating activities			
Depreciation and amortization expense	\$ 24,853	\$ 31,432	\$ 29,310
Impairment of long-lived assets	—	44,930	6,785
Non-cash lease expense, net of tenant improvement allowance	(20)	940	2,573
Stock-based compensation expense	64,459	50,925	30,278
Change in fair value of contingent considerations and holdbacks	—	—	(5,913)
Gain on sale of business	(48,847)	—	—
Other non-cash adjustments	2,203	994	120
Changes in assets and liabilities:			
Accounts receivable, net ^[1]	(22,382)	8,444	(4,320)
Inventories	(4,229)	7,986	7,238
Prepaid expenses and other current assets ^[2]	(3,717)	382	(4,166)
Other non-current assets	(1,568)	431	1,376
Accounts payable	9,332	(11,805)	(2,508)
Accrued expenses	5,751	4,415	2,578
Accrued compensation	(2,405)	7,875	(1,099)
Other liabilities ^[3]	6,612	(2,317)	(108)
Net cash used in operating activities	\$ (47,628)	\$ (64,094)	\$ (142,474)
Investing activities			
Purchases of property and equipment	\$ (28,004)	\$ (5,076)	\$ (27,779)
Purchases of investments	(49,393)	(51,905)	(76,345)
Proceeds from maturity of investments	50,135	53,910	154,736
Proceeds from sale of business	2,500	—	—
Net cash provided by (used in) investing activities	\$ (24,762)	\$ (3,071)	\$ 50,612
Financing activities			
Proceeds from exercise of stock options	\$ 9,343	\$ 7,100	\$ 1,379
Proceeds from the issuance of liability related to sale of future revenue	15,000	—	—
Proceeds from issuance under employee stock purchase plan	4,213	3,765	3,937
Repurchases of common stock for income tax withholding	(16)	(3,975)	(4,405)
Net cash provided by financing activities	\$ 28,540	\$ 6,890	\$ 911
Effect of exchange rates on cash, cash equivalents and restricted cash	\$ 143	\$ 126	\$ (27)
Net increase (decrease) in cash, cash equivalents and restricted cash	(43,707)	(60,149)	(90,978)
Cash, cash equivalents, and restricted cash at beginning of year	229,132	289,281	380,259
Cash, cash equivalents, and restricted cash at end of year	\$ 185,425	\$ 229,132	\$ 289,281
Supplemental disclosure of cash flow information			
Income taxes paid, net of refunds	\$ 683	\$ 344	\$ 420
Non-cash investing and financing activities			
Property and equipment additions included in accrued expenses and accounts payable	\$ 2,408	\$ 92	\$ 772

Table of Contents

(in thousands)	Year ended September 30,		
	2025	2024	2023
Operating lease right-of-use assets obtained in exchange for operating lease liabilities	—	—	6,676
Issuance of common stock in connection with the business acquisition	—	—	5,860
Tenant improvement allowance capitalized in property and equipment	—	2,719	—
Equity securities received as consideration for sale of business	53,890	—	—
Promissory note receivable received as consideration for sale of business	1,696	—	—
Conversion of convertible notes	—	—	3,711

[1] Including changes in the related parties' balances of \$(0.8) million, \$1.2 million and \$(1.7) million for the years ended September 30, 2025, 2024 and 2023, respectively.

[2] Including changes in a related party balances of \$(0.3) million, \$— million and \$— million for the years ended September 30, 2025, 2024 and 2023, respectively.

[3] Including changes in a related party' balances of \$0.2 million, \$— million and \$— million for the years ended September 30, 2025, 2024 and 2023, respectively.

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

Twist Bioscience Corporation
Notes to Consolidated Financial Statements

1. Organization and Description of Business

Twist Bioscience Corporation (the "Company") was incorporated in the state of Delaware on February 4, 2013. The Company is a leading, rapidly growing synthetic biology company that has developed a disruptive DNA synthesis platform to industrialize the engineering of biology.

The core of the Company's platform is a proprietary technology that pioneers a new method of manufacturing synthetic DNA by "writing" DNA on a silicon chip. The Company has combined our silicon-based DNA writing technology with proprietary software, scalable commercial infrastructure and an e-commerce platform to create an integrated technology platform that enables us to achieve high levels of quality, precision, automation, and manufacturing throughput at a significantly lower cost than our competitors. The Company has applied its unique technology to manufacture a broad range of synthetic DNA-based products, including synthetic genes, tools for next generation sequencing ("NGS"), sample preparation, and antibody libraries for drug discovery and development, all designed to enable its customers to conduct research more efficiently and effectively. The Company has leveraged the same technology to expand its footprint beyond DNA synthesis to manufacture synthetic RNA as well as antibody proteins to disrupt and innovate within larger market opportunities, in addition to discovery partnerships for biologic drugs.

On May 2, 2025, the Company executed the Contribution Agreement (the "Contribution Agreement") pursuant to which the Company sold its DNA Data Storage business to Atlas Data Storage, Inc. ("Atlas"), a newly formed company, that will focus solely on DNA data storage technology and commercialization (see note 6).

The Company has recognized annual losses from operations since inception and has an accumulated deficit of \$1,319.6 million as of September 30, 2025. The Company incurred net losses of \$77.7 million, \$208.7 million and \$204.6 million for the years ended September 30, 2025, 2024, and 2023, respectively.

As of September 30, 2025, the Company had cash and cash equivalents of \$183.0 million and short-term investments of \$49.4 million. The Company expects that its current cash, cash equivalents, and short-term investments will be sufficient to fund its operations for a period of at least one year from the date the Consolidated Financial Statements are issued.

2. Summary of Significant Accounting Policies

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 balances and accounts are eliminated in consolidation.

To conform with current fiscal year 2025 presentation, the Company reclassified \$1.5 million of investment in equity securities included within other non-current assets to investment in equity securities in the consolidated balance sheet as of September 30, 2024.

Use of Estimates

The presentation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Such estimates include the valuation of deferred tax assets, stock-based compensation expense, transaction price and progress toward completion of performance obligation under the contracts with customers, determination of the net realizable value of inventory, useful life of developed technology, valuation assumptions used in the calculation of the impairment of long-lived assets, restructuring costs and incremental borrowing rate for operating leases. Actual results could differ from those estimates.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash and cash equivalents, short-term investments and accounts receivable. Substantially all of the Company's cash and

cash equivalents, short-term investments are held with two financial institutions that management believe are of high credit quality. Such deposits may, at times, exceed federally insured limits. The Company's investment policy addresses the level of credit exposure by establishing a minimum allowable credit rating and by limiting the concentration in any one investment.

The Company's accounts receivable is derived from customers located principally in the United States, Europe and Asia-Pacific region ("APAC"). The Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses on customers' accounts when deemed necessary. The Company does not typically require collateral from its customers. Credit losses historically have not been material. See Note 3, Revenues, for more information for customer concentration.

Cash and Cash Equivalents and Restricted Cash

Cash equivalents that are readily convertible to cash are stated at cost, which approximates fair value. The Company considers all highly liquid investments with an original or remaining maturity of three months or less at the time of purchase to be cash equivalents. Cash equivalents consist of investments in money market funds as of September 30, 2025 and 2024.

Restricted cash represents cash held at financial institutions that are pledged as collateral for stand-by letters of credit for lease commitments. The lease related letters of credit will lapse at the end of the respective lease terms through 2044.

(in thousands)	September 30,	
	2025	2024
Cash and cash equivalents	\$ 183,049	\$ 226,316
Restricted cash, non-current	2,376	2,816
Total cash, cash equivalents and restricted cash	<u>\$ 185,425</u>	<u>\$ 229,132</u>

Short-term Investments

The Company invests in various types of securities, including United States government, commercial paper, and corporate debt securities. The Company classifies its investments as available-for-sale and records them at fair value based upon market prices at period end.

The Company regularly reviews its short-term investments to identify and evaluate investments that have indications of possible impairment from credit losses or other factors. For available-for-sale debt securities in an unrealized loss position, the Company evaluates whether a current expected credit loss exists based on available information relevant to the credit rating of the security, current economic conditions and supportable forecasts. The allowance for credit loss is recorded in other income (expense), net, on the consolidated statements of operations and comprehensive loss, not to exceed the amount of the unrealized loss. Any excess unrealized loss other than the credit loss is recognized in accumulated other comprehensive income or loss in the stockholders' equity section of the consolidated balance sheets. The Company made an accounting policy election to not measure an allowance for credit losses for accrued interest receivable. The accrued interest balance as of September 30, 2025 and 2024 was \$1.2 million and \$1.1 million. There was no allowance for credit losses relating to the short-term investments recognized as of September 30, 2025.

The cost of securities sold is based on the specific identification method and realized gains and losses are included in other income (expense), net. Dividend and interest income are recognized when earned. The Company may sell these securities at any time for use in current operations.

Accounts Receivable and Allowance for Credit Losses

Accounts receivables include amounts billed and currently due from customers, recorded at the net invoice value and are not interest bearing. The Company has a short order-to-invoice lifecycle, as most products can be manufactured within one month. Upon delivery of the products to the customer, the Company invoices the customer. The typical timing of payment is net 30 days. If the right to payment for services performed was conditional on something other than the passage of time, the unbilled amount would be recorded as a separate contract asset.

The Company is exposed to credit losses primarily through accounts receivable from sales of its products and services. The Company maintains an allowance for credit losses for expected uncollectible accounts receivable and contract assets, which is recorded as an offset to accounts receivable or contract assets and provisions for credit losses are recorded in selling, general and administrative expense in the consolidated statements of operations and comprehensive loss.

The allowance for current expected credit losses is based on a review of customer accounts and considers historical credit loss information that is adjusted for current economic and business conditions and anticipated future economic events that may impact collectability. In developing its expected credit loss estimate, the Company evaluated the appropriate grouping of accounts receivable and contract assets based upon its evaluation of risk characteristics, including consideration of region and industries of the customers. Specific allowance amounts are established to record the appropriate provision for customers that have a higher probability of default. The allowance for credit losses is reviewed on a regular basis to assess the adequacy of the allowance and once a receivable is deemed to be uncollectible, such balance is charged against the allowance.

Fair Value of Financial Instruments

The Company applies fair value accounting for all financial and non-financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis. The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities which are required to be recorded at fair value, we consider the principal or most advantageous market in which we would transact and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability, such as risks inherent in valuation techniques, transfer restrictions and credit risks. See Note 5, Fair value measurements, for more information. The carrying amounts of the Company's financial instruments including cash equivalents, short term investments, and accounts receivable approximate fair value due to their relatively short maturities.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost which approximates actual cost on a first-in, first-out basis. The Company periodically reviews its inventories to identify obsolete, slow-moving, excess or otherwise unsaleable items. If obsolete, slow-moving, excess or unsaleable items are observed and there are no alternate uses for the inventory, the Company records a write-down to net realizable value through a charge to cost of revenues on our consolidated statements of operations and comprehensive loss. The determination of net realizable value requires judgment, including consideration of many factors, such as estimates of future product demand, past experience, product net selling prices, current and future market conditions, the age and nature of inventories, and potential product obsolescence, among others.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets or the lesser of the useful life and the remaining lease term of the respective leasehold improvements assets, if any. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation are eliminated from the accounts and any resulting gain or loss is credited or charged to operations in the period recognized. Repairs and maintenance costs are expensed as incurred.

Estimated lives of property and equipment are as follows:

Laboratory equipment	5 Years
Furniture, fixtures and other equipment	5 Years
Computer equipment	3 Years
Vehicles	5 Years
Computer software	3 Years
Leasehold improvements	Lesser of useful life or lease term

Capitalized Software Held for Internal Use

Costs associated with internal-use software systems during the application development stage are capitalized. Capitalization of costs begins when the preliminary project stage is completed, management has committed to funding the project, and it is probable that the project will be completed and the software will be used to perform the function intended. Costs include external direct costs of services and applicable personnel costs of employees devoted to specific software application development. Personnel costs consist of salaries, employee benefit costs, bonuses and stock-based compensation expense. The capitalized amounts are included in property and equipment, net on the consolidated balance sheets.

Capitalization ceases at the point when the project is substantially complete and is ready for its intended purpose. Capitalized costs are amortized from the project completion date, using the straight-line method over an estimated useful life of the assets.

Finite-lived Intangible Assets

Finite-lived intangible assets are recorded at cost, net of accumulated amortization, and, if applicable, impairment charges. Amortization of finite-lived intangible assets is recorded over the assets' estimated useful lives on a straight-line basis or based on the pattern in which economic benefits are consumed, if reliably determinable. The Company reviews the finite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. See "Impairment of long-lived assets" for additional information.

Impairment of Long-lived Assets

The Company's long-lived assets consists of property and equipment, right of use assets and finite-lived intangible assets. The Company evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If indicators of impairment are present, the Company tests for recoverability by comparing the estimated undiscounted future cash flows expected to result from the use of the asset over its remaining useful life to the carrying amount of the asset or asset group. If the asset or asset group is determined to be impaired, any excess of the carrying value of the asset or asset group over its estimated fair value is recognized as an impairment loss. Impairment assessments inherently involve judgment as to assumptions about expected future cash flows and the impact of market conditions on those assumptions. See Note 18, *Impairment of long-lived assets* for the additional information and disclosures related to impairment of long-lived assets.

Leases

The Company determines if an arrangement is or contains a lease at inception and classifies each lease as operating or financing. Operating lease right-of-use 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 made during the lease term, net of any tenant improvement allowance. Operating lease right-of-use assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. In determining the present value of committed lease payments, the Company uses its incremental borrowing rate based on the information available at the lease commencement date which includes significant assumptions made including the Company's estimated credit rating, annual percentage yields from corporate debt financings of companies of similar size and credit rating over a loan term approximating the remaining term of each lease, and government bond yields for terms approximating the remaining term of each lease in countries where the leased assets are located. Certain leases include payments of operating expenses that are dependent on the landlord's estimate, and these variable payments are therefore excluded from the lease payments used to determine the operating lease right-of-use asset and lease liability. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise any such options. Operating lease right-of-use assets are adjusted for prepaid lease payments, lease incentives and initial direct costs incurred. Lease expense is recognized on a straight-line basis over the expected lease term.

The Company elected to not apply the recognition requirements of Topic 842 to short-term leases with terms of 12 months or less which do not include an option to purchase the underlying asset that the Company is reasonably certain to exercise. For short-term leases, lease payments are recognized as operating expenses on a straight-line basis over the lease term. The Company elected to account for lease and non-lease components as a single lease component.

Additional information and disclosures required by Topic 842 are contained in Note 9, *Leases*.

Goodwill

The company assesses goodwill for impairment at the reporting unit level annually and whenever events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Such events or circumstances generally include the occurrence of operating losses or a significant decline in earnings associated with one or more of the company's reporting units. The company is permitted to first assess qualitative factors to determine whether the quantitative goodwill impairment test is necessary. If the qualitative assessment results in a determination that the fair value of a reporting unit is more likely than not less than its carrying amount, the company performs a quantitative goodwill impairment test. The company may bypass the qualitative assessment for the reporting unit in any period and proceed directly to the quantitative goodwill impairment test. The company estimates the fair value of its reporting unit by using forecasts of discounted future cash flows and peer market multiples. The company would record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value (limited to the amount of goodwill). For 2025 and 2024, the Company elected to proceed directly to the step-one assessment which indicated that the fair value of its single reporting unit substantially exceeded the carrying value.

Segment Information

The Company is a synthetic biology and genomics company that has developed a disruptive DNA synthesis platform to industrialize the engineering of biology and manufactures synthetic genes, tools for next-generation sequencing preparation, and antibody libraries for drug discovery and development and operates as one reportable and operating segment. The Company's chief operating decision-maker, its Chief Executive Officer (CEO), reviews the Company's operating results on an aggregate basis for purposes of allocating resources and evaluating financial performance.

Foreign Currency Transactions and Translation

The Company's consolidated financial statements are presented in U.S. dollars. The functional currency for certain foreign subsidiaries is their local currency. Revenues, expenses, gains and losses for non-U.S. dollar functional currency entities are translated into U.S. dollars using average currency exchange rates for the period. Assets and liabilities for such entities are translated using exchange rates that approximate the rate at the balance sheet date. Foreign currency translation adjustments are recorded as a component of accumulated other comprehensive loss on the Company's consolidated balance sheets. Foreign currency transaction gains and losses on transactions not denominated in functional currency are recorded in Other income (expense), net, on the consolidated statements of operations.

Revenue Recognition

The Company recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. To determine revenue recognition for contracts with customers, the Company performs the following five steps:

- i. identification of the promised goods or services in the contract;
- ii. determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract;
- iii. measurement of the transaction price, including the constraint on variable consideration;
- iv. allocation of the transaction price to the performance obligations based on estimated selling prices; and
- v. recognition of revenue when (or as) the Company satisfies each performance obligation. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account.

See Note 3, Revenue recognition, for detailed discussions of revenue recognition, and how the five steps described above are applied.

Cost of Revenue

Cost of revenues primarily consists of cost incurred in the production and delivery of the Company's products and consists of production materials, personnel costs, cost of expensed equipment and consumables, laboratory supplies, consulting costs, depreciation, production overhead costs, information technology, maintenance and facility costs. Personnel costs consist of salaries, employee benefit costs, bonuses, and stock-based compensation expense. In addition, cost of revenue includes royalty costs for licensed technologies included in the Company's products, and provisions for slow-moving and obsolete inventory.

Research and Development

Research and development expenses consist of compensation costs, employee benefits, subcontractors, research supplies, allocated facility related expenses and allocated depreciation and amortization. All research and development costs are expensed as incurred.

Advertising Costs

Costs related to advertising and promotions are expensed to sales and marketing as incurred. Advertising and promotion expenses for the years ended September 30, 2025, 2024 and 2023, were \$7.0 million, \$5.2 million and \$2.9 million, respectively.

Stock-based Compensation

The Company maintains performance incentive plans under which incentive and nonqualified stock options, performance-based stock options, restricted stock units, performance-based stock units and through employer purchase plan are granted primarily to employees and may be granted to members of the board of directors and certain non-employee consultants, and employees may participate in an employee stock purchase plan.

The Company recognizes stock compensation in accordance with the Accounting Standard Codification ("ASC") 718, *Compensation—Stock Compensation*. ASC 718 requires the recognition of compensation expense, using a fair value-based method, for costs related to all stock-based payments including stock options, restricted stock units and employee stock purchase plan.

The Company recognizes fair value of stock options granted to employees and non-employees as a stock-based compensation expense over the period in which the related services are received. The Company recognizes forfeitures as they occur. The Company believes that the estimated fair value of stock options is more readily measurable than the fair value of the services rendered.

For performance-based awards, expense is recognized over the period from the grant date to the estimated attainment date, which is the derived service period of the award, if management determines that it is probable that the performance-based vesting conditions will be achieved.

Net Loss Per Share Attributable to Common Stockholders

The Company calculates its basic and diluted net loss per share attributable to common stockholders in conformity with the two-class method required for companies with participating securities. In computing diluted net loss attributable to common stockholders, undistributed earnings are re-allocated to reflect the potential impact of dilutive securities. For purposes of the calculation of diluted net loss per share attributable to common stockholders, unvested shares of common stock issued upon the early exercise of stock options, shares issuable for employee stock purchase plan contributions received, warrants to purchase common stock, unvested restricted common stock, unvested restricted stock units and stock options to purchase common stock are considered potentially dilutive securities but have been excluded from the calculation of diluted net loss per share attributable to common stockholders as their effect is antidilutive.

Basic and diluted net loss per share of common stock attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, less shares subject to repurchase, and excludes any dilutive effects of employee stock-based awards and warrants. Because the Company has reported a net loss for the years ended September 30, 2025, 2024 and 2023, diluted net loss per common share is the same as the basic net loss per share for those years.

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.

Liability Related to the Sale of Future Revenue

The Company accounts for the proceeds received from the monetization of future milestone and royalty payments from its contracts with certain customers as a debt instrument, which is amortized using the effective interest rate method over the estimated term of the arrangement. The Company recognizes interest expense thereon using the effective rate, which is based on its current estimates of future milestone and royalty payments under its customer contracts to be paid to the counterparty over the term of the arrangement. The Company periodically assesses these future estimated payments to impute interest on the carrying value of the liability. To the extent its estimates of future payments to the counterparty are greater or less than previous estimates or the estimated timing of such payments is materially different than previous estimates, the Company will account for any such changes by adjusting the effective interest rate on a prospective basis, with a corresponding impact to the liability. The assumptions used in determining the expected repayment term of the liability also requires that the Company makes estimates that could impact the classification of the liability, interest recorded on such liability, as well as the period over which such interest will be incurred. For further discussion, please see Note 17, Liability related to the sale of future revenue liability.

Investment in equity securities

The Company determines at the inception of each arrangement whether an investment or other interest is considered a variable interest entity ("VIE"). If the investment or other interest is determined to be a VIE, the Company evaluates whether it is considered the primary beneficiary. The primary beneficiary of a VIE is the party that meets both of the following criteria: (i) has the power to direct the activities that most significantly impact the VIE's economic performance; and (ii) has the obligation to absorb losses or the right to receive benefits from the VIE. For investments in VIEs in which the Company is considered the primary beneficiary, the assets, liabilities and results of operations of the VIE are included in the Company's consolidated financial statements.

For investments in common stock or in-substance common stock where the Company has significant influence over the financial and operating policies of the investee are accounted for as equity-method investments.

If the Company's equity investment does not meet the requirements of equity method of accounting, the Company accounts for the investment at fair value and has elected to account for its equity investments without a readily determinable fair value using a measurement alternative. Equity investments without readily determinable fair values are recorded using the measurement alternative of cost less impairment, if any, adjusted for observable price changes in orderly transactions for identical or similar investments of the same issuer. Any impairments or adjustments are recorded in Other (income) expense, net on our consolidated statements of operations and comprehensive income (loss).

Contingent Consideration

The Company elected to account for the contingent consideration receivable under the Contribution Agreement with Atlas as a gain contingency in accordance with ASC 450, Contingencies (Subtopic 450-30). Under this approach, the Company recognizes the contingent consideration receivable in earnings after the contingency is resolved. Accordingly, to determine the initial gain on the sale of business, the Company did not include any amount related to the contingent consideration arrangement as part of the consideration received.

Business Combinations

The Company accounts for business combinations using the acquisition method. Under the acquisition method, the purchase price of the acquisition is allocated to the acquired tangible and identifiable intangible assets and assumed liabilities based on their estimated fair values at the time of the acquisition. This allocation involves a number of assumptions, estimates, and judgments that could materially affect the timing or amounts recognized in the Company's financial statements. As a result, the Company may record adjustments to the fair values of assets acquired and liabilities assumed within the measurement period (up to one year from the acquisition date) with the corresponding offset to goodwill. The most subjective areas of the acquisition accounting method include determining the fair value of the following:

- identifiable intangible assets, including the valuation methodology, estimates of projected revenues, technology obsolescence, and discount rates, as well as the estimated useful life of the intangible assets;
- contingent consideration; and
- goodwill, as measured as the excess of consideration transferred over the acquisition date fair value of the assets acquired, including the amount assigned to identifiable intangible assets, and the liabilities assumed.

The assumptions and estimates are based upon comparable market data and information obtained from the management of the acquired business.

Goodwill is assigned to reporting units that are expected to benefit from the synergies of the business combination as of the acquisition date.

Identifiable intangible assets with finite lives are amortized over their estimated useful lives in a pattern in which the asset is consumed. Acquisition-related costs, including advisory, legal, accounting, valuation, and other similar costs, are expensed in the periods in which those costs are incurred. The results of operations of acquired businesses are included in the Company's consolidated financial statements from the acquisition date.

Restructuring and Other Costs

Restructuring and other costs are comprised of employee separation costs and other associated costs primarily related to implementing a plan. Employee separation costs principally consist of one-time termination benefits and contractual termination benefits for severance, other termination benefit costs, and stock-based compensation expense for the acceleration of stock awards.

The Company records restructuring charges based on whether the termination benefits are provided under an on-going benefit arrangement or under a one-time benefit arrangement. The Company accounts for on-going benefit arrangements, such as those documented by employment agreements, in accordance with ASC 712, Nonretirement Postemployment Benefits. Under ASC 712, liabilities for post employment benefits are recorded at the time the obligations are probable of being incurred and can be reasonably estimated. The Company accounts for one-time employment benefit arrangements in accordance with ASC 420 Exit or Disposal Cost Obligations. One-time termination benefits are expensed at the date the entity notifies the employee, unless the employee must provide future service, in which case the benefits are expensed ratably over the future service period. Other associated costs are recognized in the period in which the liability is incurred.

Recent Accounting Pronouncements

New Accounting Guidance Adopted

In November 2023, the FASB issued ASU No. 2023-07 "Segment Reporting (Topic 280)". The amendments in this ASU improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. The amendments in this update are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. The Company adopted this ASU for our fiscal year ended September 30, 2025 and provided required disclosure in Note 16. Segment Information.

New Accounting Guidance Issued but Not Yet Effective

In December 2023, the FASB issued ASU No. 2023-09 "Income Taxes (Topic 740)". The amendments in this ASU require that public business entities on an annual basis (1) disclose specific categories in the rate reconciliation and (2) provide additional information for reconciling items that meet a quantitative threshold. The amendments in this update are effective for annual periods beginning after December 15, 2024. The standard is not expected to have a material impact to the Company's consolidated financial statements.

In November 2024, the FASB issued ASU 2024-03, Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures, which will require additional expense disclosures for all public entities. The amendments require that at each interim and annual reporting period, an entity will disclose certain disaggregated expenses included in each relevant expense caption, as well as the total amount of selling expenses and, in annual periods, an entity's definition of selling expenses. ASU 2024-03 is effective for fiscal years beginning after December 15, 2026, and interim periods within fiscal years beginning after December 15, 2027, with early adoption permitted. The Company is currently evaluating the incremental disclosures that will be required in its consolidated financial statements.

In September 2025, the FASB issued ASU 2025-06, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Targeted Improvements to the Accounting for Internal-Use Software ("ASU 2025-06"), which became effective and simplifies the capitalization guidance by removing all references to software development project stages so that the guidance is neutral to different software development methods. The standard is effective for all entities for annual periods beginning after December 15, 2027, with early adoption permitted. The Company is currently evaluating the impact of this standard to its consolidated financial statements.

The Company has evaluated other recently issued accounting pronouncements and has concluded that the impact of recently issued standards that are not yet effective will not have a material impact on the Company's financial position or results of operations upon adoption.

3. Revenues

The Company's revenue is generated through the sale of synthetic biology tools, such as synthetic genes, oligo pools, NGS tools, DNA libraries and biopharma services for antibody discovery, optimization and development ("Biopharma").

Contract Balances

The following table summarizes our contract balances:

(in thousands)	September 30,	
	2025	2024
Contract assets ⁽¹⁾	\$ 3,857	\$ 2,031
Contract liabilities ⁽²⁾	6,884	2,131

(1) Consists of unbilled amounts primarily related to Biopharma contracts which consists of research and development agreements with third parties.

(2) Consists of receipt of advance payments before our performance obligations related to revenue contracts are met.

Contracts with customers are in the written form of a purchase order or a quotation, which outline the promised goods and the agreed upon price. Such orders may be accompanied by a Master Supply or Distribution Agreement that establishes the terms and conditions, rights of the parties, delivery terms, and pricing. The

Company assesses collectability based on a number of factors, including past transaction history and creditworthiness of the customer.

Synthetic Genes, Oligo Pools, NGS Tools, and DNA Libraries

The Company recognizes revenue when control of the products is transferred to the customer and at a transaction price that is determined based on the agreed upon rates in the applicable order or master supply agreement applied to the quantity of synthetic DNA that was manufactured and shipped to the customer. The transaction price is determined based on the agreed upon rates in the quotation, the purchase order, or the master supply agreements applied to the quantity of all the products that were manufactured and shipped to the customer. The Company's contracts may include one or more ordered products, and the shipment of these products comprises the performance obligation (s) under the contract. Accordingly, all of the transaction price, net of any discounts, is allocated to the performance obligation (s). The Company's sales are primarily subject to Ex Works (as defined in Incoterms 2010) delivery terms and revenue, other than Biopharma revenue, is predominantly recorded at the point in time when products are picked up by the customer's freight forwarder, as the Company has determined that this is the point in time that control transfers to the customer. The Company's shipping and handling activities are considered a fulfillment cost. Shipping and handling fees charged to our customers are recognized as product revenue in the period shipped and the related costs for providing these services are recorded as a cost of revenue. The Company has elected to exclude all sales and value added taxes from the measurement of the transaction price. The Company has not adjusted the transaction price for significant financing since the time period between the transfer of goods and payment is less than one year. The Company has elected the practical expedient to not disclose the consideration allocated to remaining performance obligations and an explanation of when those amounts are expected to be recognized as revenue since the duration of the contracts is less than one year.

Biopharma

The Company's Biopharma revenue primarily consists of research and development agreements with third parties that provide for up-front and milestone-based payments. The Company also enters into research and development agreements that do not include up-front or milestone-based payments and recognizes revenue on these types of agreements based on the timing of development activities. The Company's research and development agreements may include more than one performance obligation. At the inception of the agreement, the Company assesses whether each obligation represents a separate performance obligation or whether such obligations should be combined as a single performance obligation. The transaction price for each agreement is determined based on the amount of consideration the Company expects to be entitled to for satisfying all performance obligations within the agreement. The Company assesses the nature of each performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. In agreements where the Company satisfies performance obligation(s) over time, the Company recognizes development revenue typically using an input method based on costs incurred relative to the total expected cost which determines the extent of progress toward completion. As part of the accounting for these arrangements, the Company must develop estimates and assumptions that require judgment to determine the transaction price and progress towards completion. The Company reviews its estimate of the transaction price and progress toward completion based on the best information available to recognize the cumulative progress toward completion as of the end of each reporting period and makes revisions to such estimates as necessary. Also, these research and development agreements may include license payments. The Company recognizes revenue from functional license agreements when the license is transferred to the customer and the customer is able to use and benefit from the license. A functional license has significant standalone functionality because it can be used as is for performing a specific task.

For the years ended September 30, 2025, 2024 and 2023 the Company recognized revenue of \$1.4 million, \$1.7 million and \$2.8 million, respectively, from the amount that was included in the contract liability balance at the beginning of each year.

In addition, for all periods presented, there was no revenue recognized in a reporting period from performance obligations satisfied in previous periods. The aggregate amount of the transaction price allocated to the performance obligations that are unsatisfied as of September 30, 2025 was \$15.1 million. The Company expects to recognize revenue over the next twelve months relating to performance obligations unsatisfied as of September 30, 2025.

Based on the nature of the Company's contracts with customers which are recognized over a term of less than 12 months, the Company has elected to use the practical expedient whereby costs to obtain a contract are

expensed as they are incurred. The Company states its revenues net of any taxes collected from customers that are required to be remitted to various government agencies. The amount of taxes collected from customers and payable to governmental entities is included on the balance sheet as part of “Accrued expenses and other current liabilities.”

Disaggregation of Revenues

The table below sets forth revenues by geographic region, based on ship-to destinations. Americas consists of the United States, Canada, Mexico and South America; EMEA consists of Europe, the Middle East, and Africa; and APAC primarily consists of Japan, China, South Korea, India, Singapore, Malaysia and Australia.

(in thousands)	Year ended September 30,		
	2025	2024	2023
Americas	\$ 225,580	\$ 193,884	\$ 151,263
EMEA	124,240	92,567	71,389
APAC	26,752	26,523	22,457
Total	<u>\$ 376,572</u>	<u>\$ 312,974</u>	<u>\$ 245,109</u>

The table below sets forth revenues by products.

(in thousands)	Year ended September 30,		
	2025	2024	2023
Synthetic genes	\$ 113,602	\$ 92,679	\$ 73,541
Oligo pools	20,230	16,906	14,489
DNA libraries	11,184	13,933	10,201
Antibody discovery	23,452	20,328	23,172
NGS tools	208,104	169,128	123,706
Total	<u>\$ 376,572</u>	<u>\$ 312,974</u>	<u>\$ 245,109</u>

The table below sets forth revenues by industry.

(in thousands)	Year ended September 30,		
	2025	2024	2023
Industrial chemicals/materials	\$ 93,246	\$ 83,472	\$ 59,321
Academic research	65,861	58,452	45,847
Healthcare	215,092	168,959	137,148
Food/agriculture	2,373	2,091	2,793
Total revenues	<u>\$ 376,572</u>	<u>\$ 312,974</u>	<u>\$ 245,109</u>

Revenue from the United States represented 58%, 60% and 60% of the total revenue for the years ended September 30, 2025, 2024 and 2023, respectively.

Customer Concentration

There are no major customers who accounted for 10% or more of the Company’s revenue for the fiscal year ended September 30, 2025, September 30, 2024 and September 30, 2023.

There was one major customer who accounted for 10% or more of the net accounts receivable as of September 30, 2025. There were no major customers who accounted for 10% or more of the net accounts receivable as of September 30, 2024.

4. Cash, Cash Equivalent and Short-term Investments

The following table sets forth the cash and cash equivalents, and investments as of September 30, 2025:

(in thousands)	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Cash	\$ 32,677	\$ —	\$ —	\$ 32,677
Cash equivalents - money market funds	150,372	—	—	150,372
Total cash and cash equivalents	<u>\$ 183,049</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 183,049</u>
Short-term investments:				
U.S. government treasury bills	\$ 49,316	\$ 69	\$ —	\$ 49,385
Total short-term investments	<u>\$ 49,316</u>	<u>\$ 69</u>	<u>\$ —</u>	<u>\$ 49,385</u>
Total cash, cash equivalents and short-term investments	<u><u>\$ 232,365</u></u>	<u><u>\$ 69</u></u>	<u><u>\$ —</u></u>	<u><u>\$ 232,434</u></u>

The following table sets forth the cash and cash equivalents, and investments as of September 30, 2024:

(in thousands)	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Cash	\$ 26,458	\$ —	\$ —	\$ 26,458
Cash equivalents - money market funds	199,858	—	—	199,858
Total cash and cash equivalents	<u>\$ 226,316</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 226,316</u>
Short-term investments:				
U.S. government treasury bills	\$ 49,964	\$ 119	\$ —	\$ 50,083
Total short-term investments	<u>\$ 49,964</u>	<u>\$ 119</u>	<u>\$ —</u>	<u>\$ 50,083</u>
Total cash, cash equivalents and short-term investments	<u><u>\$ 276,280</u></u>	<u><u>\$ 119</u></u>	<u><u>\$ —</u></u>	<u><u>\$ 276,399</u></u>

During the years ended September 30, 2025, 2024 and 2023, gross realized gains and losses related to our short-term investments were not material.

During the years ended September 30, 2025, 2024 and 2023, the Company did not recognize any credit losses.

5. Fair Value Measurement

The Company determines the fair value of financial and non-financial assets and liabilities using the fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

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

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

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

In determining fair value, the Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible as well as considering counterparty credit risk in its assessment of fair value.

Assets Measured at Fair Value on a Recurring Basis

As of September 30, 2025, financial assets measured and recognized at fair value are as follows:

(in thousands)	Level 1	Level 2	Level 3	Fair value
Assets				
Money market funds	\$ 150,372	\$ —	\$ —	\$ 150,372
U.S. government treasury bills	49,385	—	—	49,385
Total financial assets	<u>\$ 199,757</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 199,757</u>

As of September 30, 2024, financial assets measured and recognized at fair value are as follows:

(in thousands)	Level 1	Level 2	Level 3	Fair value
Assets				
Money market funds	\$ 199,858	\$ —	\$ —	\$ 199,858
U.S. government treasury bills	50,083	—	—	50,083
Total financial assets	<u>\$ 249,941</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 249,941</u>

Contractual maturities of short-term investments, as of September 30, 2025, were less than 12 months. The Company does not intend to sell the money market funds and short term investments and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost basis.

As of September 30, 2025 and 2024, there are no financial liabilities measured and recognized at fair value.

6. Investment in Equity Securities

On May 2, 2025, the Company executed and consummated the Contribution Agreement with Atlas for the sale and transfer of its DNA digital data storage assets, including the related intellectual property, equipment and contracts and the license of certain other intellectual property for a consideration of 73.0 million shares of Series Seed-1 Preferred Stock of Atlas, upfront cash consideration of \$2.5 million, promissory notes of \$2.0 million, contingent manufacturing and commercial milestone payments of up to \$75.0 million, and royalty payments based on a percentage of Atlas sales of the DNA data storage products or services. As part of this transaction, certain employees of the Company were transitioned to Atlas.

The Company concluded that its investment in shares of preferred stock of Atlas are not in substance common stock and accounted for the investment at fair value at its acquisition date of \$53.9 million. The Company measured the fair value of our investment in Series Seed-1 Preferred Stock of Atlas using the backsolve method with consideration for a lack of marketability. The backsolve method was used to solve for the implied total equity value based on the recent Series Seed financing round by Atlas to third-party investors. Consideration was given to the rights and preferences of each of the classes of equity of Atlas and the expected time to a liquidity event. An option pricing allocation method, or OPM, was selected to allocate the total equity value. The following table lists the assumptions used to calculate the fair value of the investment:

	As of May 2, 2025
Discount for lack of marketability	10.0 %
Risk-free interest rate	3.8 %
Time of exit	3 years
Volatility	76.5 %

Subsequent to the acquisition date, the Company elected to account for its investment in the preferred stock of Atlas using the measurement alternative method since Atlas is a private company, these securities do not have readily determinable fair value.

The promissory notes are secured by the patents owned by Atlas and any income and royalties from such patents. The promissory note together with accrued interest at an interest rate of 4% per annum, is payable on the earliest of: (i) at Atlas' election, on or after December 31, 2028, (ii) the closing of the issuance and sale of

shares of common stock in Atlas' first underwritten public offering, (iii) the 10 year anniversary from May 2, 2025, or (iv) Atlas' insolvency, dissolution, or bankruptcy.

The Company accounted for the promissory note receivable at its fair value of \$1.7 million and recognized immaterial interest income on the promissory notes during the year ended September 30, 2025. Promissory note receivable is carried at amortized cost and reduced by a valuation allowance for estimated credit losses, as necessary. The Company recognizes interest income on loans, including the amortization of discounts and premiums, using the effective interest method. As of September 30, 2025, the carrying value of the promissory note receivable is \$1.8 million.

The sale of DNA digital data storage assets to Atlas constitutes a disposition of a business. The Company concluded the disposition does not represent a strategic shift, and therefore, the Company has not accounted for the disposition as a discontinued operation. The Company recorded a \$48.8 million gain on sale of business on the consolidated statements of operations and comprehensive income (loss) for the year ended September 30, 2025. The Company allocated goodwill to the DNA Data Storage business disposed and the remaining business based on their relative fair values. The gain consists of the following assets transferred in accordance with the Contribution Agreement:

(in thousands)	As of May 2, 2025
Sale consideration:	
Fair value of Series Seed-1 Preferred Stock	\$ 53,890
Fair value of promissory note receivable	1,696
Upfront cash consideration	2,500
	<u>\$ 58,086</u>
Net assets sold:	
Property and equipment	\$ (5,623)
Goodwill	(3,616)
	<u>\$ (9,239)</u>
Gain on sale of business	<u>\$ 48,847</u>

The Company concluded that Atlas is a variable interest entity. While the Company holds one of the seven board of director seats in Atlas, the Company does not have the power, whether through contractual relationships or other factors, to direct the activities that most significantly impact the economic performance of Atlas. Therefore, the Company concluded it is not its primary beneficiary. The Company's maximum exposure to loss from this VIE consist of investment in equity securities, promissory note receivable and other receivables for amounts billed under the transition services agreement and the sublease agreement aggregating to \$56.0 million. There were no impairments during the year ended September 30, 2025.

The Company agreed to provide transitional support services to Atlas in the areas of accounting, payroll, and IT in return for payment on a time and material basis to Atlas in furtherance of its obligations under the Transition Services Agreement ("TSA") executed as part of the Contribution Agreement. The TSA also provides for continued access to relevant systems and other relevant premises on a transitional basis and reimbursement of third-party vendor costs for procurement of goods and services on behalf of Atlas. The Company's obligations under the TSA are expected to be completed within a year from the transaction date.

Further, as part of the Contribution Agreement, the Company subleased specific office and lab space to Atlas in South San Francisco (see note 11).

The Company holds an equity investment in another privately held company which is accounted for as an equity security without a readily determinable fair value using a measurement alternative. The privately held company is a VIE, but the Company is not the primary beneficiary. The Company does not have the power to direct the activities that most significantly impact the economic performance of the investee. The Company's maximum exposure to loss from this VIE consist of an equity investment of \$0.4 million. The Company impaired \$1.1 million and \$2.2 million during the year ended September 30, 2025 and September 30, 2024, respectively.

7. Balance Sheet Components

Allowance for Credit Losses

Allowance for credit losses related to accounts receivable were \$0.6 million and \$0.7 million as of September 30, 2025 and 2024, respectively.

Inventories

Inventories consist of the following:

<u>(in thousands)</u>	September 30,	
	2025	2024
Raw Materials	\$ 20,191	\$ 17,316
Work-in-process	2,265	2,146
Finished Goods	5,853	4,616
	<u>\$ 28,309</u>	<u>\$ 24,078</u>

Property and Equipment, net

Property and equipment, net consists of the following:

<u>(in thousands)</u>	September 30,	
	2025	2024
Laboratory equipment	\$ 101,583	\$ 99,528
Furniture, fixtures and other equipment	2,905	2,944
Vehicles	211	211
Computer equipment	3,176	3,249
Computer software	11,009	10,095
Leasehold improvements	58,277	57,448
Construction in progress	20,116	4,688
	<u>\$ 197,277</u>	<u>\$ 178,163</u>
Less: Accumulated depreciation and amortization	(94,994)	(75,643)
	<u>\$ 102,283</u>	<u>\$ 102,520</u>

Construction in progress mainly represents equipment costs, leasehold improvements, and internal use software development costs. For the year ended September 30, 2025 and 2024 the total depreciation and amortization expense was \$23.8 million and \$27.3 million, respectively. During the year ended September 30, 2024, the Company recognized impairment of property and equipment of \$44.9 million, (see Note 18).

The net book value of capitalized computer software held for internal use included in property and equipment, net were \$3.2 million and \$5.2 million as of September 30, 2025 and 2024, respectively. For the year ended September 30, 2025 and 2024, the amortization expense of capitalized computer software held for internal use was \$2.9 million and \$2.6 million, respectively.

Property and equipment, net located in the United States were \$102.3 million and \$102.3 million as of September 30, 2025 and 2024, respectively. Property and equipment, net located outside of the United States were immaterial and \$0.2 million as of September 30, 2025 and 2024, respectively.

Other Current Liabilities

Other current liabilities consist of the following:

(in thousands)	September 30,	
	2025	2024
Income and other taxes payable	\$ 4,543	\$ 2,725
Contract liabilities	6,884	2,131
Other current liabilities	722	961
	<u>\$ 12,149</u>	<u>\$ 5,817</u>

8. Goodwill and Intangible Assets

Total amortization expense related to intangible assets was \$1.1 million, \$4.1 million, and \$5.3 million for the years ended September 30, 2025, 2024 and 2023, respectively.

The goodwill balance is presented below:

(in thousands)	September 30,	
	2025	2024
Balance at beginning of year	\$ 85,811	\$ 85,811
Sale of business (see note 6)	(3,616)	—
Balance at end of year	<u>\$ 82,195</u>	<u>\$ 85,811</u>

The finite-lived intangible assets balances are presented below:

(in thousands, except for years)	September 30, 2025			
	Weighted average Amortization period in years	Gross carrying amount	Accumulated amortization	Net book value
Developed Technology	17	\$ 17,900	\$ (4,475)	\$ 13,425
Total finite-lived intangible assets		<u>\$ 17,900</u>	<u>\$ (4,475)</u>	<u>\$ 13,425</u>

(in thousands, except for years)	September 30, 2024				
	Weighted average Amortization period in years	Gross carrying amount	Impairment	Accumulated amortization	Net book value
Developed Technology	17	\$ 50,020	\$ (25,198)	\$ (10,344)	\$ 14,478
Customer Relationships	—	15,210	(10,541)	(4,669)	—
Tradenames & Trademarks	—	900	(125)	(775)	—
Total finite-lived intangible assets		<u>\$ 66,130</u>	<u>\$ (35,864)</u>	<u>\$ (15,788)</u>	<u>\$ 14,478</u>

Future annual amortization expense is as follows (in thousands):

Years ending September 30,	
2026	\$ 1,053
2027	1,053
2028	1,053
2029	1,053
2030	1,053
Thereafter	8,160
	<u>\$ 13,425</u>

9. Leases

The Company leases certain of its facilities under non-cancellable operating leases expiring at various dates through 2044. The Company is also responsible for utilities, maintenance, insurance, and property taxes under these leases. Our lease payments consist primarily of fixed rental payments for the right to use the underlying leased assets over the lease terms, as well as payments for common-area-maintenance and administrative services. We often receive customary incentives from our landlords, such as reimbursements for tenant improvements and rent abatement periods, which effectively reduce the total lease payments owed for these leases. Leases are classified as operating or financing at commencement. We do not have any material financing leases.

Certain leases include options to renew or terminate at the Company's discretion. The lease terms include periods covered by these options if it is reasonably certain the Company will renew or not terminate. The Company's lease agreements do not contain any material residual value guarantees or restrictive covenants.

As part of the sale of DNA data storage business, the Company subleased specific office and lab space to Atlas in South San Francisco (see note 6).

Future minimum lease payments and sublease income under all non-cancelable operating leases as of September 30, 2025 are as follows:

(in thousands)	Operating leases	Sublease income
Years ending September 30:		
2026	\$ 13,963	\$ 1,918
2027	8,450	1,975
2028	8,510	2,035
2029	6,609	—
2030	6,787	—
Thereafter	74,618	—
Total minimum lease payments	<u>\$ 118,937</u>	<u>\$ 5,928</u>
Less: imputed interest	(43,365)	
Total operating lease liabilities	<u>\$ 75,572</u>	
Less: current portion	(13,822)	
Operating lease liabilities, net of current portion	<u>\$ 61,750</u>	

The components of lease expense and supplemental information were as follows:

(in thousands except years and percentage)	September 30,	
	2025	2024
Operating lease costs	\$ 15,127	\$ 15,637
Variable lease costs	8,656	7,724
Sublease income	1,068	—
Weighted-average remaining lease term (in years) - operating leases	15.18 years	15.21 years
Weighted-average discount rate - operating leases	6.49 %	6.52 %

Supplemental cash flow information related to leases are as follows:

(in thousands)	September 30,	
	2025	2024
Cash payments included in the measurement of operating lease liabilities	\$ 14,853	\$ 14,707

10. Commitments and Contingencies

Legal Proceedings

The Company may be subject to litigation, claims and disputes in the ordinary course of business. Certain significant matters are described below. We recognize accruals for matters to the extent that we conclude that a loss is both probable and reasonably estimable. If we determine that a material loss is reasonably possible and the loss or range of loss can be estimated, we disclose the possible loss.

Securities Class Action

On December 12, 2022, a putative securities class action lawsuit captioned Peters v. Twist Bioscience Corporation, et al., Case No. 22-cv-08168 (N.D. Cal.) (“Securities Class Action”) was filed in federal court in the Northern District of California (“Court”) against the Company, its Chief Executive Officer, and its Chief Financial Officer (the “Defendants”) alleging violations of federal securities laws. The Securities Class Action’s claims are based in large part on allegations made in a report issued on November 15, 2022 by Scorpion Capital (“Scorpion Report”) concerning, among other things, the Company’s DNA chip technology and accounting practices. The initial complaint filed in the Securities Class Action alleges that various statements that the Defendants made between December 13, 2019 and November 14, 2022 were materially false and misleading in light of the allegations in the Scorpion Report. The plaintiff who initiated the lawsuit sought to represent a class of shareholders who acquired shares of the Company’s common stock between December 13, 2019 and November 14, 2022 and sought damages as well as certain other costs. On July 28, 2023, the Court appointed a new plaintiff, not the original plaintiff who filed the case, as lead plaintiff in the case and appointed a new law firm as lead counsel. On October 11, 2023, the lead plaintiff filed an amended complaint. The amended complaint is purportedly brought on behalf of all persons other than the Defendants who acquired the Company’s securities between December 20, 2018 and November 15, 2022. The amended complaint alleges that certain statements regarding, among other things, the Company’s DNA products and accounting practices were false and misleading. On December 6, 2023, the Company filed a motion to dismiss the amended complaint and a hearing on the motion to dismiss was held on November 13, 2024. On September 3, 2025, the Court issued an order granting in part and denying in part Defendants’ motion to dismiss and granted the plaintiff leave to further amend by September 24, 2025. The plaintiff did not file a second amended complaint. The Company is engaged in discovery and intends to continue vigorously defending the remaining claims under this action in all respects.

Given the inherent uncertainty of litigation and the legal standards that must be met, including class certification and success on the merits, the Company cannot express an opinion on the likelihood of an unfavorable outcome or on the amount or range of any potential loss.

Derivative Action

On September 25, 2023, a shareholder derivative suit captioned Shumacher vs. Leproust et al., No. 1:23-cv-01048-UNA, was filed in the United States District Court for the District of Delaware against directors of the Company and an employee (the “Derivative Action”). The suit is based on substantially the same allegations in the Securities Class Action and seeks to recover, on behalf of the Company, damages to the Company arising

from, among other things, the Securities Class Action. On November 13, 2023, the parties to the Derivative Action entered into a stipulation staying the Derivative Action pending resolution of the anticipated motion to dismiss the defendants have filed in the Securities Class Action.

Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend the indemnified parties for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third-party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. To date, the Company has not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. From time to time, the Company has entered into indemnification agreements with its directors and officers that requires it to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by law. The Company also has directors' and officers' insurance.

11. Related Party Transactions

During the years ended September 30, 2025, 2024 and 2023, the Company purchased raw materials from related parties in the amount of \$— million, \$4.4 million and \$6.8 million, respectively.

During the years ended September 30, 2025, 2024 and 2023, the Company recognized revenues from the related parties in the amount of \$12.2 million, \$12.1 million and \$5.9 million, respectively.

Payable balances with the related parties were immaterial as of September 30, 2025 and 2024.

Receivable balances with the related parties were \$1.3 million and \$0.5 million as of September 30, 2025 and 2024, respectively.

Subsequent to the investment in Atlas, the Company concluded that Atlas is a related party. The following are the transactions with Atlas:

During the years ended September 30, 2025, the Company recognized less than \$0.1 million revenue from the Atlas.

During the year ended September 30, 2025, the Company received sublease income accounted for as other income in the amount of \$1.1 million.

As of September 30, 2025 investment in Atlas included in the investment in equity securities was \$53.9 million (see note 6).

As of September 30, 2025 other receivable balance primarily related to sublease income (see note 6) included in prepaid and other current assets was \$0.3 million.

As of September 30, 2025, the carrying value of the promissory note receivable included in other non-current assets was \$1.8 million. The Company recognized immaterial amount of interest income during the year ended September 30, 2025.

As of September 30, 2025 sublease security deposit balance included in other non-current liabilities was \$0.2 million.

12. Income Taxes

The Company recorded income tax expense of \$0.7 million, \$0.6 million and \$1.2 million for the years ended September 30, 2025, 2024 and 2023, respectively.

The domestic and foreign components of pre-tax loss for the years ended September 30, 2025, 2024, and 2023 are as follows:

(in thousands)	Year ended September 30,		
	2025	2024	2023
US	\$ (78,490)	\$ (209,545)	\$ (205,389)
Foreign	1,539	1,379	1,923
Total	\$ (76,951)	\$ (208,166)	\$ (203,466)

The components of the income tax expense for the years ended September 30, 2025, 2024, and 2023 are as follows:

(in thousands)	Year ended September 30,		
	2025	2024	2023
Current			
Federal	\$ —	\$ —	\$ —
State	27	20	9
Foreign	692	540	1,143
Total current	\$ 719	\$ 560	\$ 1,152
Deferred			
Federal	\$ —	\$ —	\$ —
State	—	—	—
Foreign	—	—	—
Total deferred	\$ —	\$ —	\$ —
Total provision (benefit)	\$ 719	\$ 560	\$ 1,152

The following is a reconciliation of the statutory federal income tax rate to the Company's effective tax rate for the years ended September 30, 2025, 2024, and 2023:

	Year ended September 30,		
	2025	2024	2023
Tax expense computed at the federal statutory rate	21 %	21 %	21 %
Change in valuation allowance	(22)%	(22)%	(25)%
Research and development credit benefit	7 %	3 %	5 %
Section 162(m) limitation on compensation	(9)%	(1)%	— %
Stock-based compensation	1 %	(1)%	(1)%
Change in fair value of contingent consideration and holdbacks	— %	— %	1 %
Gain on sale of intangible assets	1 %	— %	— %
Others	— %	— %	(2)%
Total income tax expense	(1)%	— %	(1)%

Table of Contents

The significant components of the Company's deferred tax assets and liabilities are as follows for the years ended September 30, 2025, and 2024:

(in thousands)	September 30,	
	2025	2024
Net operating loss carryforwards	\$ 232,380	\$ 226,959
Research and development credit carryforwards	67,626	59,578
Capitalized research and development	54,438	43,232
Operating lease liability	18,657	21,377
Stock-based compensation	13,359	13,384
Other	12,333	14,310
Gross deferred tax assets	\$ 398,793	\$ 378,840
Less: Valuation allowance	(383,378)	(360,594)
Net deferred tax assets	\$ 15,415	\$ 18,246
Operating lease right-of-use asset	\$ (12,174)	\$ (14,786)
Intangible assets	(3,241)	(3,460)
Gross deferred tax liabilities	\$ (15,415)	\$ (18,246)
Total net deferred tax asset	\$ —	\$ —

Based on the available evidence, management believes it is more likely than not that the deferred tax assets will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its deferred tax assets at September 30, 2025 and 2024. The valuation allowance was \$383.4 million and \$360.6 million as of September 30, 2025 and 2024, respectively. The change in the valuation allowance was mainly due to an increase in the current year net operating loss, research and development credits and capitalized research and development during the fiscal year 2025.

The Company intends to continue maintaining a full valuation allowance on the Company's deferred tax assets until there is sufficient evidence to support the reversal of all or some portion of the allowance. The release of all, or a portion, of the valuation allowance would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period the release is recorded.

As of September 30, 2025, the Company had net operating loss carryforwards of approximately \$915.6 million and \$621.2 million available to reduce future taxable income, if any, for federal and state income tax purposes, respectively. Of the total federal net operating loss carryforwards, \$714.8 million never expires and the remaining carryforwards of \$200.8 million expire at various dates beginning in 2032 through 2038. Of the total state net operating loss carryforwards, the California State tax loss carryforwards of \$310.0 million begin to expire in 2033 and the remaining carryforwards of \$311.2 million for other states begin to expire at various dates beginning 2026 and beyond.

The Company also had federal and state research and development credit carryforwards of approximately \$58.1 million and \$38.8 million, respectively, at September 30, 2025. The federal credits will expire starting in 2033 if not utilized. The California research and development credits have no expiration date. Utilization of the net operating losses and tax credits is subject to annual limitation due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. Such annual limitations may result in the expiration of the net operating losses and tax credits before utilization.

The provisions of ASC 740-10, *Accounting for Uncertainty in Income Taxes*, prescribe a comprehensive model for the recognition, measurement, and presentation and disclosure in financial statements of any uncertain tax positions that have been taken or expected to be taken on a tax return. The Company has identified uncertain tax positions related to federal and state research and development credits and foreign jurisdictions.

The aggregate changes in the balance of gross unrecognized tax benefits are as follows:

(in thousands)	Federal and state		
	September 30,		
	2025	2024	2023
Unrecognized tax benefits at beginning of year	\$ 22,412	\$ 19,185	\$ 13,383
Increase related to tax positions taken during year	2,617	3,354	5,043
Increase/(decrease) related to tax positions taken in the prior year	259	(127)	759
Unrecognized tax benefits at end of year	<u>\$ 25,288</u>	<u>\$ 22,412</u>	<u>\$ 19,185</u>

The Company does not expect a material change in unrecognized tax benefits in the next twelve months. As of September 30, 2025 and 2024, approximately \$0.6 million and \$0.4 million of unrecognized tax benefit would, if recognized, impact the Company's effective income tax rate, respectively.

It is the Company's policy to include penalties and interest expense related to income taxes as a component of other expense and interest expense, respectively, as necessary. The Company's management determined that no accrual for interest and penalties was required as of September 30, 2025 and 2024.

The Company's files federal and state income tax returns with varying statutes of limitations. All tax years remain open to examination due to the carryover of net operating losses or tax credits. The Company currently has no federal, state or foreign tax examinations in progress.

In fiscal year 2022, the Company began recognizing an additional component of total Federal tax expense, the tax on Global Intangible Low-Taxed Income ("GILTI") provision of the Tax Act, which became applicable to the Company in fiscal year 2022. The Company elected to account for GILTI as a period cost, and therefore included GILTI expense in the effective tax rate calculation. This provision did not have a material effect on the effective tax rate for the years ended September 30, 2025, 2024 and 2023.

On July 4, 2025, H.R. 1, commonly referred to as the One Big Beautiful Bill Act, was enacted in the U.S., which includes a broad range of tax reform provisions, including extending and modifying certain key Tax Cuts and Jobs Act provisions (both domestic and international). The legislation has multiple effective dates, with certain provisions effective in 2025 and others to be implemented through 2027. The Company has evaluated the impact of the guidance provided to date and determined that it did not have a material impact related to fiscal year ended September 30, 2025. The Company will continue to evaluate the impact of changes to various provisions that could affect our income tax payable and deferred tax liability.

13. Common Stock

As of September 30, 2025, the Company had reserved sufficient shares of common stock with a par value of \$0.00001 per share for issuance upon exercise of outstanding stock options. Each share of common stock is entitled to one vote. The holders of shares of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the board of directors.

In February 2025, the Company amended its Amended and Restated Certificate of Incorporation to provide for an increase in its authorized share capital. The authorized common stock increased to 200.0 million shares at a par value of \$0.00001 per share.

14. Stock-based Compensation

2018 Equity Incentive Plan

On September 26, 2018, the board of directors adopted the 2018 Equity Incentive Plan (the 2018 Plan) as a successor to the 2013 Stock Plan (the 2013 Plan). In February 2025, as approved at the Annual Shareholders meeting, the Company amended its 2018 Plan, to increase the authorized shares issuable under the 2018 Plan by 3.7 million shares and eliminate the "evergreen" provision which provides for an automatic annual increase in the number of shares reserved for issuance of future awards under the Plan. The maximum aggregate number of shares that may be issued under the 2018 Plan was 10,068,911 of the Company's common stock.

On August 22, 2023, the board of directors adopted an inducement equity incentive plan (the "Inducement Plan"). In February 2025, as approved at the Annual Shareholders meeting, the Company amended its Inducement Plan to increase the authorized shares issuable under the Inducement Plan by 700,000 shares. The maximum aggregate number of shares that may be issued under the Inducement Plan is 1,400,000 of the Company's common stock. The Inducement Plan permits the grant of non-statutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares.

As of September 30, 2025, a total of 5,260,083 shares of the Company's common stock have been reserved for issuance in connection with grant of future awards under the 2018 Plan and the Inducement Plan.

Any shares subject to outstanding awards under the 2013 Plan that are canceled or repurchased subsequent to the 2018 Plan's effective date are returned to the pool of shares reserved for issuance under the 2018 Plan. Awards granted under the 2018 Plan may be non-statutory stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, and performance units.

Stock-based Compensation

Total stock-based compensation expense recognized were as follows:

(in thousands)	Year ended September 30,		
	2025	2024	2023
Cost of revenues	\$ 6,985	\$ 4,012	\$ 4,562
Research and development	9,020	11,199	13,944
Selling, general and administrative	48,454	35,714	11,772
Total stock-based compensation expense	<u>\$ 64,459</u>	<u>\$ 50,925</u>	<u>\$ 30,278</u>

An immaterial amount of stock-based compensation expense was capitalized to inventories attributable to employees who support the manufacturing of the Company's products for the years ended September 30, 2025, 2024, and 2023. The balance sheet as of September 30, 2025 and 2024 includes \$1.3 million and \$1.3 million, respectively, of stock-based compensation expense primarily related to internal use software development costs was capitalized in property and equipment.

The total amount of share-based liabilities settled was \$5.9 million for the year ended September 30, 2023. The settlement of the liabilities related to the issuance of contingent consideration and indemnity holdbacks associated with Abveris and iGenomX acquisition.

Restricted Stock Units

Restricted stock consists of restricted stock unit awards (RSUs) which have been granted to employees and non-employee directors. The value of an RSU award is based on the Company's stock price on the date of grant. Employee grants generally vest over four years and non-employee director grants generally vest over one year. Forfeitures of RSUs are recognized as they occur. The shares underlying the RSU awards are not issued until the RSUs vest. Upon vesting, each RSU converts into one share of the Company's common stock.

Activity with respect to the Company's restricted stock units during the year ended September 30, 2025 is as follows:

(In thousands, except per share data)	Shares	Weighted average grant date fair value per share
Nonvested shares at September 30, 2024	1,964	\$ 32.13
Granted	1,266	\$ 45.75
Vested/Issued	(947)	39.12
Forfeited	(401)	34.74
Nonvested shares at September 30, 2025	<u>1,882</u>	<u>\$ 37.21</u>

As of September 30, 2025, there was \$64.8 million of total unrecognized compensation cost related to these issuances that is expected to be recognized over a weighted average period of 2.7 years. The total grant date fair value of RSUs awarded during the year ended September 30, 2025, 2024 and 2023 were \$57.9 million, \$42.7 million and \$32.2 million, respectively. The total grant date fair value of RSUs vested during the year ended September 30, 2025, 2024 and 2023 were \$37.0 million, \$31.0 million and \$33.7 million, respectively.

Performance-based Restricted Stock Units

During the year ended September 30, 2025, the Company granted additional performance-based restricted stock units to executives and employees that will vest upon achievement of multiple year revenue, gross margin, and profitability metrics as determined by the board of directors. Stock compensation expense for these awards is recorded over the vesting period based on the grant date fair value of the awards and probability of the achievement of specified performance targets. The grant date fair value is equal to the closing share price of the Company’s common stock on the date of grant. These awards will vest from a minimum of 10 months to a maximum of 34 months service period following the grant date, provided that the recipient is a Company employee at the time of vesting and the performance targets applicable to each award are achieved. The actual number of awards that ultimately vest will depend on the achievement of specified performance targets at the end of the performance period and can range from 0% to 140% of the number of units granted.

Activity under the PSUs during the year ended September 30, 2025 is summarized below:

(In thousands, except per share data)	Shares	Weighted average grant date fair value per share
Nonvested shares at September 30, 2024	1,166	\$ 27.01
Granted	1,422	\$ 47.07
Vested/Issued	(311)	44.90
Forfeited	(343)	32.82
Nonvested shares at September 30, 2025	1,934	\$ 37.85

As of September 30, 2025, the unrecognized compensation costs related to these awards was \$37.8 million, based on the maximum achievement of the performance targets. The Company expects to recognize those costs over a weighted average period of 1.6 years. The total grant date fair value of PSUs awarded during the year ended September 30, 2025, 2024 and 2023 were \$66.9 million, \$11.5 million and \$21.2 million, respectively. The total grant date fair value of PSUs vested during the year ended September 30, 2025, 2024 and 2023 were \$14.0 million, \$6.9 million and \$1.8 million, respectively.

Options

Options are generally granted to employees and were granted to non-employee directors until fiscal year 2022. Stock options entitle the holder to purchase, at the end of the vesting term, a specified number of shares of Company common stock at an exercise price per share equal to the closing market price of the common stock on the date of grant. Stock options have a contractual life from the date of the grant and a vesting schedule as established by the board of directors. The maximum term of stock options granted under the 2018 Plan is 10 years and the awards generally vest over a four-year period. Forfeitures of options are recognized as they occur. The fair value of each services based stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The Company historically had been a private company and lacked company-specific historical and implied volatility information for its stock. Therefore, it estimated its expected stock price volatility based on the historical volatility of publicly traded peer companies and utilized the “simplified” method for awards that qualify as “plain-vanilla” options. As determined under the simplified method, the expected term of stock options granted is calculated based on contractual and vesting terms of the option award, the risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award and the expected dividend yield is zero based on the fact that the Company has never paid cash dividends on common stock and does not expect to pay any cash dividends in the foreseeable future.

Options activity during the year ended September 30, 2025 is summarized below:

(In thousands, except per share and contractual term data)	Shares	Weighted average exercise price per share	Weighted average remaining contractual term (years)	Aggregate intrinsic value
Outstanding at September 30, 2024	1,892	\$ 29.60	4.57	\$ 37,840
Forfeited	(132)	55.78	—	\$ —
Exercised	(484)	19.31	—	10,571
Outstanding at September 30, 2025	1,276	\$ 30.80	3.59	\$ 6,616
Vested and exercisable at September 30, 2025	1,275	\$ 30.79	3.59	\$ 6,616

As of September 30, 2025, the unrecognized compensation costs related to these awards was immaterial. The Company expects to recognize those costs over a weighted average period of 0.2 years. The Company did not grant any options during the year ended September 30, 2025, 2024 and 2023. The aggregate intrinsic value of stock options exercised during the year ended September 30, 2024 and 2023 were \$9.2 million and \$1.1 million, respectively.

2018 Employee Stock Purchase Plan

On September 26, 2018, the board of directors adopted the 2018 Employee Stock Purchase Plan (the 2018 ESPP). A total of 275,225 shares of the Company's common stock were originally reserved for issuance under the 2018 ESPP. The number of shares reserved for issuance under the 2018 ESPP will be increased automatically on the first day of each fiscal year, following the fiscal year in which the 2018 ESPP becomes effective, by a number equal to the least of 249,470 shares, 1% of the shares of common stock outstanding at that time, or such number of shares determined by the Company's board of directors. The number of shares reserved for issuance as of September 30, 2025 is as follows:

(In thousands)	Shares available
As of September 30, 2024	611
Additional shares authorized	249
Shares issued during the period	(144)
As of September 30, 2025	716

Subject to any plan limitations, the 2018 ESPP allows eligible service providers (through qualified and non-qualified offerings) to contribute, normally through payroll deductions, up to 15% of their earnings for the purchase of the Company's common stock at a discounted price per share. The offering periods are beginning in February and August of each year, except the initial offering period which commenced with the initial public offering in October 2018 and ended on August 20, 2019.

Unless otherwise determined by the board of directors, the Company's common stock will be purchased for the accounts of employees participating in the 2018 ESPP at a price per share that is the lesser of 85% of the fair market value of the Company's common stock on the first trading day of the offering period, which for the initial offering period is the price at which shares of the Company's common stock were first sold to the public, or 85% of the fair market value of the Company's common stock on the last trading day of the offering period. During the years ended September 30, 2025 and 2024, the Company recorded \$2.4 million and \$1.6 million expense related to the 2018 ESPP. During the year ended September 30, 2023 activity under the 2018 ESPP was immaterial.

401(k) Savings Plan

During 2018, the Company adopted a 401(k) savings plan for the benefit of its employees. In January 2022, the Company modified its plan to include an employer matching contribution. The Company is required to make matching contributions to the 401(k) plan equal to 50% of the first 6% of wages deferred by each participating employee. For the year ended September 30, 2025 and 2024, the Company incurred expenses for employer matching contributions of \$3.0 million and \$2.6 million, respectively.

15. Net Loss Per Share Attributable to Common Stockholders

The following table sets forth the computation of the Company's basic and diluted net loss per share attributable to common stockholders:

(in thousands, except per share data)	Year ended September 30,		
	2025	2024	2023
Numerator:			
Net loss attributable to common stockholders	\$ (77,670)	\$ (208,726)	\$ (204,618)
Denominator:			
Weighted-average shares used in computing net loss per share, basic and diluted	59,808	58,016	56,885
Net loss per share attributable to common stockholders, basic and diluted	\$ (1.30)	\$ (3.60)	\$ (3.60)

The potentially dilutive common shares that were excluded from the calculation of diluted net loss per share because their effect would have been antidilutive for the periods presented are as follows:

(in thousands)	Year ended September 30,		
	2025	2024	2023
Shares subject to options to purchase common stock	1,276	1,891	2,408
Unvested restricted stock units and performance stock units	3,816	3,130	2,552
Shares subject to employee stock purchase plan	100	69	118
Total	5,192	5,090	5,078

16. Segment Information

The Company's Chief Executive Officer has been identified as the chief operating decision maker (CODM). The CODM reviews the Company's operating results on a consolidated basis for purposes of allocating resources and evaluating financial performance. Specifically, the CODM evaluates the Company's financial performance and decides how to allocate resources based on consolidated net income (loss), which enables the CODM to assess both the overall level of resources available and optimize distribution of resources across functions, product lines, regions and research and development programs in line with our long-term corporate-wide strategic goals. The CODM also reviews disaggregated revenue by product line, geographic regions, and industry (see Note 3).

The following table presents entity-wide significant expense categories and net loss details provided to the CODM:

(In thousands)	Year ended September 30,		
	2025	2024	2023
Revenues	\$ 376,572	\$ 312,974	\$ 245,109
Costs and expenses:			
Cost of revenues ^[1]	\$ 161,545	\$ 154,030	\$ 132,417
Research and development expenses ^[1]	69,950	76,605	88,937
Selling, general and administrative expenses ^[1]	192,024	175,883	171,070
Depreciation and amortization	24,853	31,432	29,310
Stock-based compensation expense	64,459	50,925	30,278
Restructuring and other costs	—	—	9,384
Change in fair value of contingent considerations and holdbacks	—	—	(5,913)
Impairment of long-lived assets	—	44,930	6,785
Total costs and expenses	\$ 512,831	\$ 533,805	\$ 462,268
Loss from operations	\$ (136,259)	\$ (220,831)	\$ (217,159)
Gain on sale of business	\$ 48,847	\$ —	\$ —
Interest income	11,364	15,344	14,365
Other income (expense), net	(903)	(2,679)	(672)
Income (loss) before income taxes	\$ (76,951)	\$ (208,166)	\$ (203,466)
Income tax expense	(719)	(560)	(1,152)
Net loss	\$ (77,670)	\$ (208,726)	\$ (204,618)

^[1] Excludes depreciation and amortization and stock-based compensation expense

Asset information is not regularly provided to the CODM for assessing performance and allocating resources other than consolidated cash and cash equivalents and short-term investments, which can be found on our Consolidated Balance Sheets.

17. Liability Related to the Sales of Future Revenue

On October 21, 2024, the Company executed the Royalty Purchase Agreement with XOMA (US) LLC ("XOMA Royalty"). Under the Royalty Purchase Agreement, XOMA Royalty provided Twist Bioscience an upfront payment of \$15.0 million in cash in exchange for the right to receive half of the future potential milestone and royalty payments resulting from certain antibody discovery and biopharma services agreements between the Company and its customers ("underlying customer agreements"). The terms of the underlying customer agreements provide for milestone and royalty payments to the Company contingent upon the Company's customers achieving certain clinical, regulatory, development and commercial milestones. Under the terms of the underlying customer agreements, the Company has significant continuing involvement as the Company has ongoing obligations such as services to support the generation of these milestone and royalty payments. As such, the Company applied the guidance under ASC 470, Debt, and recorded the upfront payment of

\$15.0 million as a liability related to the sale of future revenue, which will be amortized using the effective interest method over the estimated term of the Royalty Purchase agreement.

As milestone and royalty payments are remitted to XOMA Royalty, the balance of the liability related to the sale of future revenue will be effectively repaid over the term of the Royalty Purchase Agreement. In addition, in accordance with ASC 470, Debt, the Company will account for any milestone and royalty payments received in the future as revenue.

The estimate of the effective interest rate contains significant assumptions regarding the timing and amount of expected milestone and royalty payments, which are considered Level 3 fair value inputs, and impact the interest expense that will be recognized over the term of the Royalty Purchase Agreement. As of September 30, 2025, the Company's estimate of aggregate future milestone and royalty payments expected to be paid to XOMA Royalty over the term of the Royalty Purchase Agreement did not exceed \$15.0 million, therefore, no imputed interest expense has been recorded during the year ended September 30, 2025.

18. Impairment of Long-lived Assets

On June 30, 2024, the Company identified an impairment indicator with respect to an asset group associated with our antibody discovery services product line ("Biopharma asset group") due to lower than forecasted revenues. Therefore, the Company performed a recoverability test of long-lived assets by comparing the Biopharma asset group's net book value to its future undiscounted net cash flows. The Company concluded that the carrying value of the Biopharma asset group was not recoverable as it exceeded the future undiscounted cash flows the assets are expected to generate from their use and eventual disposition.

To measure the impairment loss, the Company estimated the fair value of the Biopharma asset group by applying a discounted cash flow method. In applying the discounted cash flow method, the Company made certain estimates and assumptions including, among others, the level and timing of revenues, operating expenses, working capital and discount rate. The Company used a discount rate of approximately 14%, which considers the inherent risks associated with the Biopharma asset group.

The allocated impairment loss to any individual long-lived asset within the long-lived asset group cannot reduce the carrying amount of that long-lived asset below its fair value. Accordingly, the Company determined the fair value of the long-lived assets within the Biopharma asset group based on their highest and best use. These assets include intangible assets, property and equipment, and right-of use assets. The Company estimated the fair value of the developed technology intangible asset and the customer relationships intangible asset using an excess earnings model (income approach). The Company estimated the fair value of the trade name intangible asset using a relief from royalty approach. In applying these valuation methods to the intangible assets, the Company made certain estimates and assumptions including the level and timing of expected cash flows and discount rate, which is consistent with the 14% discount rate noted above. The Company determined the fair value of property and equipment based on a market approach. The Company determined the fair value of the lease right-of-use assets by applying a present value technique to the estimated market rate rental cash flows.

Assumptions used to determine the fair values of certain lease right-of-use assets included estimated market rent and the discount rate.

These fair value measurements were based on significant inputs not observable in the market and thus represent a Level 3 measurement. The Company believes the level and timing of expected future cash flows appropriately reflects market participant assumptions.

As a result of allocating the impairment, the Company recorded an impairment charges, which was included in "Impairment of long-lived assets" on our consolidated statements of operations and comprehensive loss for the year ended September 30, 2024.

The impairment charges recorded for the year ended September 30, 2024 and September 30, 2023 are as follows:

(in thousands)	Year ended September 30,	
	2024	2023
Property and equipment	\$ 9,066	\$ 6,785
Finite-lived intangible assets	35,864	—
Total	\$ 44,930	\$ 6,785

No impairment charges were recorded for the year ended September 30, 2025.

19. Subsequent Events

On November 13, 2025, the Company entered into an amendment to a lease agreement for the Company's premises in South San Francisco, California, in order to consolidate other offices in South San Francisco into a single location. This amendment increases the leased premises by approximately 33,000 square feet ("Additional Premises") and extends the termination date of the lease until June 30, 2036. In accordance with the amended lease agreement, the monthly base rent for the entire premises is approximately \$0.5 million at commencement and includes provisions for rent increases by 3% annually and provides for base rent abatement with respect to the original premises for 15 months and base rent abatement with respect to the Additional Premises for 12 months. The Company is also responsible for utilities, maintenance, insurance, and property taxes. The landlord will provide the Company with a tenant improvement allowance in connection with the Company's improvements to the premises of approximately \$24.4 million. The amendment also gives the Company the right, on or before December 31, 2026, to elect to expand the premises to include additional space in the building of approximately 33,000 square feet.

* * * * *

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 our disclosure controls and procedures (as that term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of September 30, 2024, which is the end of the period covered by this Annual Report. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were, in design and operation, effective at the reasonable assurance level as of September 30, 2025.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Internal control over financial reporting consists of policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) are designed and operated to provide reasonable assurance regarding the reliability of our financial reporting and our process for the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Our management evaluated the effectiveness of our internal control over financial reporting using the criteria set forth in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO Framework"). Based on our management's evaluation, our management concluded that our internal control over financial reporting was effective as of September 30, 2025.

The effectiveness of our internal control over financial reporting as of September 30, 2025 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report included in Part II, Item 8 of this Form 10-K.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives, as specified above. Our management recognizes that any control system, no matter how well designed and operated, is based upon certain judgments and assumptions and cannot provide absolute assurance that its objectives will be met.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Twist Bioscience Corporation

Opinion on Internal Control Over Financial Reporting

We have audited Twist Bioscience Corporation's internal control over financial reporting as of September 30, 2025, 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, Twist Bioscience Corporation (the Company) maintained, in all material respects, effective internal control over financial reporting as of September 30, 2025, 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 September 30, 2025 and 2024, the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended September 30, 2025, and the related notes and our report dated November 17, 2025, 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 Mateo, California
November 17, 2025

Item 9B. *Other Information*

Rule 10b5-1 Trading Plans

During the three months ended September 30, 2025, none of our directors or officers (as defined in Rule 16a-1(f) under the Exchange Act) adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K.

We are reporting the following information in lieu of reporting on a Current Report on Form 8-K under Item 1.01 – Entry Into a Material Definitive Agreement.

Second Lease Amendment

On November 13, 2025, the Company entered into a second amendment (the “Second Lease Amendment”), which amends the terms of the lease agreement between the Company and 681 Gateway Center LLC (the “Landlord”), dated March 21, 2018 (as amended from time to time, the “Gateway Center Lease”), in order to consolidate other offices in South San Francisco into a single location. The Second Lease Amendment increases the premises at 681 Gateway Boulevard, South San Francisco, California originally leased under the Gateway Center Lease (the “Original Premises”) by approximately 33,000 square feet (the “Additional Premises” and together with the Original Premises, the “Premises”). The Company intends to use the Additional Premises to expand lab and office space for research and development, general administrative, manufacturing and distribution of products. The Second Lease Amendment also extends the termination date of the Gateway Center Lease until June 30, 2036. Additional rent will be approximately \$119.2 million over the total initial term of the Second Lease Amendment, which is expected to commence the earlier of May 29, 2027 or the date the Company substantially completes the planned improvements (the “Expansion Period”). In addition, the Second Lease Amendment increases the base rental payments relating to the Premises by 3% annually and provides for base rent abatement with respect to the Original Premises for 15 months and base rent abatement with respect to the Additional Premises for 12 months. Following the Expansion Period, the Company is obligated to pay 74% of the operating expenses and utilities applicable to the Premises. The Landlord will provide the Company with a tenant improvement allowance in connection with the Company’s improvements to the Premises of approximately \$24.4 million. The Second Lease Amendment also gives the Company the right, on or before December 31, 2026, to elect to expand the Premises to include the entire fourth floor of the building containing approximately 33,000 square feet.

The foregoing description is a summary of the material terms of the Second Lease Amendment and is qualified in its entirety by reference to the full terms of the Second Lease Amendment, a copy of which is filed as Exhibit 10.7.2 to this Form 10-K

Item 9C. *Disclosure Regarding Foreign Jurisdiction that Prevent Inspections*

Not applicable.

PART III

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

Information responsive to this item is incorporated by reference from our definitive proxy statement to be filed with the SEC within 120 days after the end of the fiscal year covered by this Form 10-K in connection with the 2026 Annual Meeting of Stockholders (the "Definitive Proxy Statement").

Item 11. *Executive Compensation*

Information responsive to this item is incorporated by reference from our Definitive Proxy Statement.

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

Information responsive to this item is incorporated by reference from our Definitive Proxy Statement.

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

Information responsive to this item is incorporated by reference from our Definitive Proxy Statement.

Item 14. *Principal Accounting Fees and Services*

Information responsive to this item is incorporated by reference from our Definitive Proxy Statement.

PART IV

Item 15. *Exhibits, Financial Statement Schedules*

Documents filed as part of this report are as follows:

- (a) Consolidated Financial Statements

Our Consolidated Financial Statements are included in the “Index to Consolidated Financial Statements” under Part II, Item 8 and filed as part of this Form 10-K.

- (b) Consolidated Financial Statement Schedules

All financial statement schedules are omitted because the information called for is not required or is shown either in the consolidated financial statements or in the notes thereto.

- (c) Exhibits

Set forth below is a list of exhibits that are being filed or incorporated by reference into this Form 10-K:

Exhibit Number	Description	Filed / Furnished / Incorporated by Reference from Form	Incorporated by Reference from Exhibit Number	Date Filed
3.1	<u>Amended and Restated Certificate of Incorporation, as amended by the Certificate of Amendment to the Amended and Restated Certificate of Incorporation</u>	Filed herewith		
3.2	<u>Amended and Restated Bylaws</u>	8-K	3.1	11/18/2022
4.1	<u>Form of common stock certificate</u>	S-1/A	4.1	10/17/2018
4.2	<u>Description of Common Stock</u>	10-K	4.5	11/20/2020
+10.1	<u>2013 Stock Plan and forms of agreement thereunder</u>	S-1	10.1	10/3/2018
+10.2	<u>Amended and Restated 2018 Equity Incentive Plan and forms of agreement thereunder</u>	8-K	10.2	2/11/2025
+10.3	<u>2018 Employee Stock Purchase Plan</u>	S-1/A	10.3	10/17/2018
+10.4	<u>Executive Incentive Bonus Plan</u>	S-1	10.4	10/3/2018
+10.5	<u>Form of Indemnification Agreement between Twist Bioscience Corporation and each of its Officers and Directors</u>	S-1/A	10.8	10/17/2018
+10.6	<u>Amended and Restated Inducement Equity Incentive Plan and related forms of award agreements thereunder</u>	S-8	99.2	2/12/2025

Table of Contents

Exhibit Number	Description	Filed / Furnished / Incorporated by Reference from Form	Incorporated by Reference from Exhibit Number	Date Filed
10.7	<u>Lease Agreement by and between Twist Bioscience Corporation and ARE-San Francisco No. 32. LLC dated March 21, 2018</u>	S-1	10.11	10/3/2018
10.7.1	<u>First Amendment to Lease by and between Twist Bioscience Corporation and ARE-San Francisco No. 32, LLC, dated March 21, 2019</u>	10-Q	10.2	5/1/2019
10.7.2	<u>Second Amendment to Lease by and between Twist Bioscience Corporation and ARE-San Francisco No. 32, LLC, dated November 13, 2025</u>	Filed herewith		
10.8*	<u>Lease Agreement by and between Twist Bioscience Corporation and PWII Owner, LLC, dated December 18, 2020</u>	8-K	10.1	12/22/2020
10.8.1*	<u>First Amendment to Lease between Twist Bioscience Corporation and PWII Owner, LLC, dated April 13, 2021</u>	8-K	10.1	4/16/2021
10.9†	<u>End User Supply Agreement by and between Twist Bioscience Corporation and FUJIFILM Dimatix, Inc., dated November 5, 2015</u>	S-1	10.14	10/3/2018
+10.10	<u>Amended and Restated Employment Agreement dated October 26, 2022 between Twist Bioscience Corporation and Patrick Finn</u>	10-Q	10.1	2/7/2023
+10.11	<u>Employment Agreement dated December 18, 2023 between Twist Bioscience Corporation and Adam Laponis</u>	10-Q	10.1	2/2/2024
+10.12	<u>Amended and Restated Employment Agreement dated September 9, 2022 between Twist Bioscience Corporation and Emily Leproust</u>	10-K	10.14	11/18/2024
+10.13	<u>Amended and Restated Employment Agreement dated September 9, 2022 between Twist Bioscience Corporation and Paula Green</u>	10-K	10.16	11/18/2024
+10.14	<u>Amended and Restated Employment Agreement dated September 2, 2024 between Twist Bioscience Corporation and Dennis Cho</u>	10-K	10.18	11/18/2024
+10.15	<u>Employment Agreement dated April 24, 2023 between Twist Bioscience Corporation and Robert Werner</u>	10-K	10.19	11/18/2024

Table of Contents

Exhibit Number	Description	Filed / Incorporated by Reference from Form	Incorporated by Reference from Exhibit Number	Date Filed
10.16*	<u>Contribution Agreement by and between Twist Bioscience Corporation and Atlas Data Storage, Inc., dated May 2, 2025</u>	10-Q	10.1	8/4/2025
10.17*	<u>License Agreement by and between Twist Bioscience Corporation and Atlas Data Storage, Inc., dated May 2, 2025</u>	10-Q	10.2	8/4/2025
10.18*	<u>MES Software License Agreement by and between Twist Bioscience Corporation and Atlas Data Storage, Inc., dated May 2, 2025</u>	10-Q	10.3	8/4/2025
19.1	<u>Insider Trading Compliance Program</u>	Filed herewith		
21.1	<u>List of subsidiaries of the Registrant</u>	Filed herewith		
23.1	<u>Consent of Independent Registered Public Accounting Firm</u>	Filed herewith		
31.1	<u>Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, Rule 13(a)-14(a)/15d-14(a), by President and Chief Executive Officer</u>	Filed herewith		
31.2	<u>Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, Rule 13(a)-14(a)/15d-14(a), by Chief Financial Officer</u>	Filed herewith		
32.1	<u>Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by President and Chief Executive Officer</u>	Furnished herewith		
32.2	<u>Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Chief Financial Officer</u>	Furnished herewith		
97.1	<u>Compensation Recovery Policy</u>	10-K	97.1	11/18/2024
101.INS	XBRL Instance Document	Filed herewith		

Table of Contents

Exhibit Number	Description	Filed / Furnished / Incorporated by Reference from Form	Incorporated by Reference from Exhibit Number	Date Filed
101.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith		
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Filed herewith		
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	Filed herewith		
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	Filed herewith		
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed herewith		
104	Cover page from the Company's Annual Report on Form 10-K for the year ended September 30, 2025, formatted in Inline XBRL			

+ Indicates a management contract or compensatory plan.

* Registrant has omitted schedules and exhibits pursuant to Item 601(a)(5) of Regulation S-K. Registrant agrees to furnish supplementally a copy of the omitted schedules and exhibits to the SEC upon request.

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment that was separately filed with the SEC.

Item 16. **Form of 10-K Summary**

Not applicable

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

November 17, 2025

Twist Bioscience Corporation

By: /s/ Emily M. Leproust

Emily M. Leproust

Chief Executive Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Emily M. Leproust</u> Emily M. Leproust	Chief Executive Officer and Chair of the Board of Directors (principal executive officer)	November 17, 2025
<u>/s/ Adam Laponis</u> Adam Laponis	Chief Financial Officer (principal financial officer)	November 17, 2025
<u>/s/ Robert F. Werner</u> Robert F. Werner	Chief Accounting Officer (principal accounting officer)	November 17, 2025
<u>/s/ Nelson C. Chan</u> Nelson C. Chan	Director	November 17, 2025
<u>/s/ Robert Chess</u> Robert Chess	Director	November 17, 2025
<u>/s/ Keith Crandell</u> Keith Crandell	Director	November 17, 2025
<u>/s/ Jan Johannessen</u> Jan Johannessen	Director	November 17, 2025
<u>/s/ Robert Ragusa</u> Robert Ragusa	Director	November 17, 2025
<u>/s/ Trynka Shineman Blake</u> Trynka Shineman Blake	Director	November 17, 2025
<u>/s/ Melissa Starovasnik</u> Melissa Starovasnik	Director	November 17, 2025



Executive Officers

Emily M. Leproust, Ph.D.
Chief Executive Officer and Chair of the Board

Patrick Finn, Ph.D.
President and Chief Operating Officer

Adam Laponis
Chief Financial Officer

Dennis Cho
Chief Legal Officer and Corporate Secretary

Paula Green
Senior Vice President of Human Resources

Robert Werner
Chief Accounting Officer

Board of Directors

Emily M. Leproust, Ph.D.
Chief Executive Officer; Chair of the Board

Nelson C. Chan
Member of the Audit and Risk Committee and Nominating and Corporate Governance Committee; Lead Director for Corporate Responsibility

Robert Chess
Lead Independent Director; Chair of the Nominating and Corporate Governance Committee; Member of the Compensation Committee

Keith Crandell
Managing Director at ARCH Venture Management, L.P.; Member of the Compensation Committee and Nominating and Corporate Governance Committee

Jan Johannessen
Advisor at iGlobe Partners; Chair of the Audit and Risk Committee; Member of the Nominating and Corporate Governance Committee

Robert Ragusa
Chief Executive Officer at GRAIL, LLC; Member of the Audit and Risk Committee and Compensation Committee

Trynka Shineman Blake
Member of the Audit and Risk Committee

Melissa A. Starovasnik, Ph.D.
Chair of the Compensation Committee