

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the Fiscal Year Ended December 31, 2024

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 No. 001-40720

OMNIAB, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

98-1584818
(IRS Employer
Identification No.)

5980 Horton Street, Suite 600
Emeryville, CA
(Address of Principal Executive Offices)

94608
(Zip Code)

Registrant's telephone number, including area code: (510) 250-7800

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

Title of each class	Trading Symbol	Name of Each Exchange on Which Registered
Common stock, \$0.0001 par value per share	OABI	The Nasdaq Global Market
Warrants to purchase common stock	OABIW	The Nasdaq Capital 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 Section 15(d) of the Securities Exchange Act of 1934. 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 definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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 Exchange Act Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting and non-voting stock held by non-affiliates of the registrant on June 30, 2024, was approximately \$443.1 million.

As of March 11, 2025, the registrant had 122,134,941 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement for the registrant's 2025 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2024 are incorporated by reference in Part III of this Annual Report on Form 10-K. With the exception of those portions that are specifically incorporated by reference in this Annual Report on Form 10-K, such Proxy Statement shall not be deemed filed as part of this report or incorporated by reference herein.

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PART I

FORWARD-LOOKING STATEMENTS AND MARKET DATA

This Annual Report on Form 10-K (“Annual Report”) 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”). All statements other than statements of historical facts contained in this Annual Report, including statements regarding our future results of operations and financial position, our expected cash runway, our business strategy, our expectations regarding the application of, and the rate and degree of market acceptance of, our OmniAb® technology platform and other technologies, our expectations regarding the addressable markets for our technologies, including the growth rate of the markets in which we operate, the potential for and timing of receipt of milestones and royalties under our license agreements with partners, our research and development plans, the potential for our partnered or internal programs to progress in their development, the anticipated timing of the initiation and completion of preclinical studies and clinical trials by our partners, the timing and likelihood of regulatory filings and product approvals by our partners, the potential for and timing and geographic markets of any commercial product launches by our partners and potential for commercial success, our ability to enter into any new, or maintain existing, strategic partnerships or collaborative relationships, our ability to obtain and maintain intellectual property protection for our platform, products and technologies, the timing and likelihood of success, plans and objectives of management for future operations, and future results of anticipated business development and product development efforts, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. This Annual Report also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

In some cases, you can identify forward-looking statements by terms such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “project,” “should,” “will” or “would” or the negative of these terms or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this Annual Report and are subject to a number of risks, uncertainties and assumptions, including, without limitation, the risk factors described in Part I, Item 1A, “Risk Factors.” The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. All forward-looking statements are qualified in their entirety by this cautionary statement, which is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

This Annual Report includes our trademarks as well as trademarks, trade names and service marks that are the property of other organizations. Solely for convenience, trademarks and trade names referred to in this Annual Report appear without the ® and ™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these trademarks and trade names.

Item 1. Business

Overview

OmniAb, Inc. licenses cutting-edge discovery research technology to pharmaceutical and biotech companies and academic institutions to enable the discovery of next-generation therapeutics. Our technology platform creates and screens diverse antibody repertoires and is designed to quickly identify optimal antibodies and other target-binding proteins for our partners' drug development efforts. At the heart of the OmniAb platform is something we call Biological Intelligence™, which powers the immune systems of our proprietary, engineered transgenic animals to create optimized antibody candidates for human therapeutics.

We believe the OmniAb animals comprise the most diverse host systems available in the industry. Our suite of technologies and methods, including computational antigen design and immunization methods, paired with high-throughput single B cell phenotypic screening and mining of next-generation sequencing datasets with custom algorithms, are used to identify fully human antibodies with exceptional performance and developability characteristics. We provide our partners both integrated end-to-end capabilities and highly customizable offerings, which address critical industry challenges and provide optimized discovery solutions. Our business model aligns our interests with the scientific and economic interests of our partners through structured platform license agreements that generally include upfront or annual access fees, service revenue, milestones and royalties on commercial sales.

As of December 31, 2024, we had 91 active partners with 363 active programs using the OmniAb technology platform, including 28 OmniAb-derived antibodies in clinical development by our partners, one under regulatory review, and three approved products developed and commercialized by our partners.

Our proprietary transgenic animals, including OmniRat®, OmniChicken® and OmniMouse® have been genetically modified to generate antibodies with human sequences to streamline the development of human therapeutic candidates. OmniFlic® and OmniClic® are fixed or common light-chain rats and chickens, respectively, designed to facilitate the discovery of bispecific antibodies. OmniTaur™ provides cow-inspired antibodies with unique structural characteristics for challenging targets. OmniAb™ is an in vivo platform for the discovery of single-domain antibodies based upon a human VH scaffold that affinity matures in a chicken host to provide functionally diverse immune repertoires. Our proprietary technologies are joined with and leverage OmniDeep™, which is a suite of *in silico*, artificial intelligence ("AI") and machine learning tools for therapeutic discovery and optimization that are woven throughout our various technologies and capabilities. Additionally, we have an established core competency focused on ion channels and transporters that further differentiates OmniAb's technology and creates opportunities in many important and emerging target classes. OmniAb technologies can be leveraged for the discovery of a variety of next-generation antibody-based therapeutic modalities, including bi- and multi-specific biologics, antibody-drug conjugates, CAR-T therapies, targeted radiotherapeutics and many others.

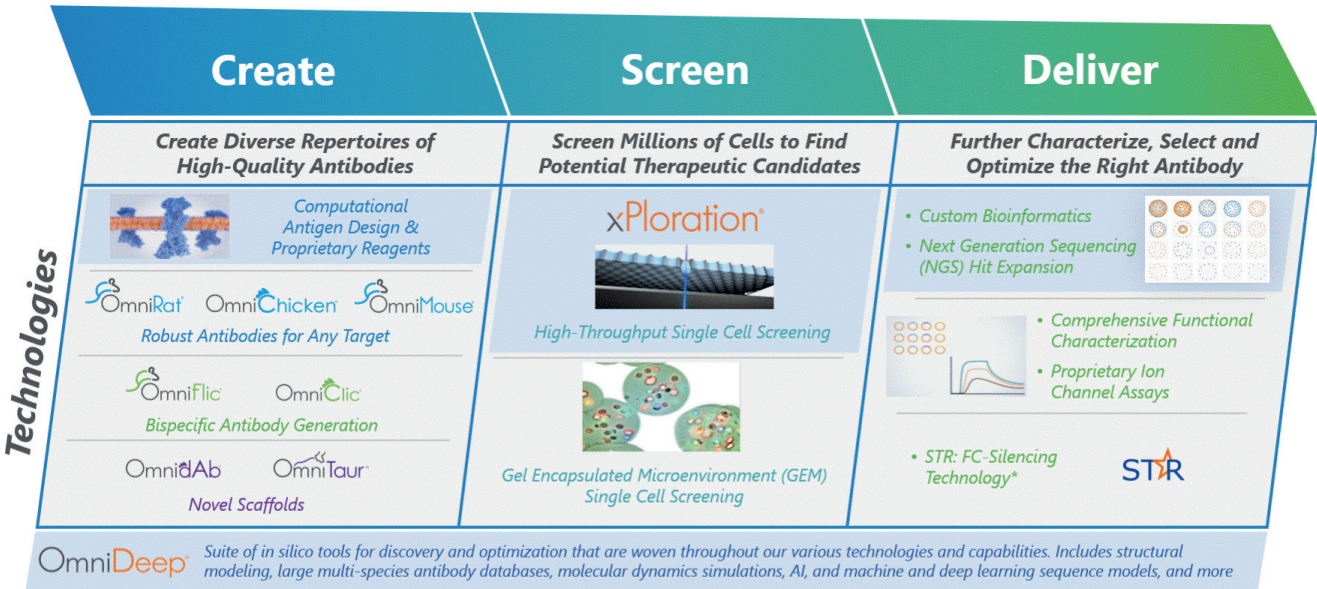
Antibodies are one of the fastest growing class of drugs and are used across multiple therapeutic areas including oncology, immunology, and neurodegeneration. Compared with other modalities like small molecules, antibodies offer favorable drug-like properties such as high on-target specificity, limited off-target toxicity, superior immune stimulation, and the ability to modulate half-life circulation in serum, resulting in less frequent dosing regimens. These benefits have accelerated investment in antibody therapeutics and led to higher success rates for this drug class, according to a study of over 9,000 clinical development programs published by Biotechnology Innovation Organization (BIO). In addition, the Inflation Reduction Act (IRA), United States legislation that was enacted in 2022, provides an incentive to pursue biological (large molecule) products rather than small molecule drugs, as biological products are potentially subject to Medicare price negotiation 11 years after approval, while small molecule drugs become potentially eligible 7 years after approval. These factors have led to substantial investment in antibody development, which we believe will continue to expand the total addressable market for leading antibody discovery technologies. However, the IRA also imposes additional burdens on the pharmaceutical industry, as discussed in the section titled "Risk Factors - *Healthcare reform efforts aimed at lowering the price of biopharmaceutical products may impact our ability to maintain sufficient profits.*"

We believe that our comprehensive, biologically-driven technology platform offers the industry an advanced solution for critical aspects of antibody discovery. By providing leading-edge antibody discovery solutions, we aim to enhance the probability of success, reduce costs, and accelerate development timelines for our partners.

Our cutting-edge technologies are modular, creating highly scalable solutions for antibody discovery. These technologies can be seamlessly integrated into our partners' internal or external workflows, allowing us to offer both comprehensive end-to-end discovery solutions and highly customizable, program-specific offerings. This flexibility enables us to address key industry challenges with optimized discovery solutions.

As part of our efforts to enhance the partner experience, we launched OmniHub™ in December 2024. This high-dimensional unified bioinformatics portal is designed to enable scalable and secure data transfer, advanced visualization, and computational tool access. OmniHub is designed to enhance the efficiency of antibody discovery by automating data handling and enabling machine learning, AI tools and bioinformatics, within a unified interface for collaborative data visualization and analysis.

Our platform integrates technologies designed to discover a wide range of high-quality therapeutic antibodies that leverage the inherent diversity produced by transgenic animals and high-throughput single-cell screening, as depicted in the figure below.



Technologies within the OmniAb platform improve the productivity and efficiency of critical steps of the discovery process:

- Create Diverse Antibody Repertoires.** We believe that generating large and diverse repertoires of naturally optimized antibodies increases the chances of discovering the antibody with the most desirable therapeutic characteristics. We leverage computationally powered antigen design to tackle challenging therapeutic targets. Our antigen solutions team, guided by molecular modeling and protein design capabilities, oversees the cloning, expression, purification, reconstitution, and quality control of purified native-conformation membrane proteins for immunization and screening. Antigens can be prepared in specific conformations using protein or small molecule chaperones. This variety of protein antigen formats enhances the likelihood of generating robust immune responses with desired specificities from any OmniAb antibody platform. Antigen production is integrated with our therapeutic antibody discovery platform, providing access to high-quality membrane protein antigens for immunization campaigns. We have assembled and developed a suite of transgenic animal and antigen technologies that are designed to generate a large and diverse pool of high-quality antibodies. At the heart of the OmniAb technology platform is the Biological Intelligence of our proprietary transgenic animals that have been genetically modified to generate antibodies with human sequences which are naturally optimized through *in vivo* affinity maturation. We offer the industry's only four-species platform, designed to address a wide range of biological challenges encountered by our partners in their antibody discovery efforts. We combine our transgenic animals with our proprietary antigen technology and immunization techniques to generate high-quality antibodies for even the most difficult biological challenges, including but not limited to difficult and complex targets such as ion channels, G protein-coupled receptors ("GPCRs"), transporters, and other transmembrane proteins.

The various OmniAb novel animal-based technologies are depicted in the figure below.



We believe that natural antibodies are superior to other antibody generation methods due to the immune system's ability to naturally select quality, and already-optimized antibodies through a process that has evolved over 500 million years. According to the Antibody Society Database of Antibody Regulatory Approvals, as of December 22, 2024, it is estimated that over 90% of all approved antibody drugs have been derived from natural immune systems, which we believe is due to their ability to make antibodies with superior drug-like properties. The evolutionary divergence of different species has resulted in some animals developing unique mechanisms that increase their immune system effectiveness to certain antigens. Our engineered animal platforms harness these characteristics, while maintaining the human genetic sequences needed to generate diverse repertoires of high-quality, fully human therapeutic antibodies that fit almost any discovery campaign.

Our team of world-renowned scientists uses a variety of gene editing techniques to alter the genomes of animals to produce antibodies that use human sequences, while retaining the animal's ability to produce a strong immune response to a specific target antigen. We then set up multiple breeding colonies of our genetically modified animals for use in partners' discovery efforts. While there are several commercially available options when considering transgenic mice, OmniAb is the only four-species platform, which include transgenic mouse, rat and chicken technologies, in addition to a cow antibody humanization technology. Each animal has unique and complementary characteristics that address key challenges in antibody discovery.

- **Screen Antibody Candidates.** Each antibody is made by an antibody-producing cell, known as a B cell, which contains the genetic sequence that encodes its unique antibody. When presented with an antigen, the immune system will respond by creating millions of alternative antibodies, selecting those that best neutralize the perceived threat. Large antibody repertoires can present a screening challenge in identifying antibodies with the most optimal candidate drug profiles.

While the industry primarily relies on a hybridoma method for antibody discovery, we analyze B cells individually using our proprietary xPloration® and Gel Encapsulated Microenvironment ("GEM") platforms. GEM technology isolates single B cells from an immunized animal into droplets with reporters presenting the target antigen. Secreted antibodies bind to these reporters and are then detected via fluorescent probes. Millions of GEMs can be analyzed simultaneously, and those with desired antibodies can be harvested, cloned, and expressed for further study.

OmniAb's AI-powered xPloration uses microcapillary plates with approximately 1.5 million capillaries to screen individual secreting B cells. Automated imaging and AI algorithms, empowered by the LandingLens™ platform developed by Landing AI, identify B cells with desired binding profiles, and a rapid laser-based recovery process efficiently retrieves B cells for sequencing and expression cloning. xPloration enhances antibody discovery for partner campaigns using the entire suite of OmniAb transgenic animals and is designed to optimize discovery efficiency through new functional screening assays and large-scale repertoire mining. The process can screen up to tens of millions of cells and recover thousands of paired sequences within only a few hours.

We believe the xPloration platform provides industry-leading screening and cell recovery compared to other spatial separation techniques and enables the discovery of rare cells that would be missed with other systems that only evaluate a small percentage of a repertoire.

- **Identify the Right Antibody.** Our discovery teams assist our partners, as needed, to identify the right antibody for a particular target product profile by further characterizing antibody candidates identified through our screening technologies using a series of performance assays including *in silico* and *in vitro* testing.

Our screening technologies identify potentially thousands of therapeutic antibodies which must then be narrowed to a small number of candidates. Our team is positioned to flexibly work directly with partners to develop customized work plans and screening approaches that meet their antibody design specifications. We are also able to assist our partners in their own downstream activities to ultimately find the right antibody for further development. Assays include high-throughput epitope binning and kinetics analysis, and target-specific functional assays. Functional data combined with the large amounts of data generated from screening provide a comprehensive view of the immune response and allow our partners to select antibodies for even the most stringent design criteria.

When using other antibody sources, selecting the right antibody often requires significant modification to enhance certain desired characteristics in a process known as antibody optimization. Introducing changes to enhance one characteristic can be detrimental to others, as it is challenging to co-optimize the multiple parameters that are desirable in a lead candidate. This results in a process that is lengthy, costly, and reliant on trial-and-error experimentation, which can lead to downstream risks. We believe that many of these challenges are averted by using natural immune systems that have evolved over 500 million years to naturally select antibodies that are optimized for their intended function. Our antibody repertoires are large, diverse, and abundant in high-quality antibodies that provide our partners with a significant number of naturally optimized leads, bypassing the need for *ex vivo* engineering. In the most challenging discovery programs, our team can provide hit expansion using xPloration and/or NGS data mining to empower OmniDeep to identify variants with improved affinity, improved manufacturability, or other favorable characteristics, while avoiding the time and technical risk associated with traditional optimization methods.

In situations where characteristics need to be improved beyond what is available in the repertoire, we can filter sequence variants through a battery of OmniDeep *in silico* evaluations to remove sequences with potential liabilities and potentially improve potency. Optimized sequences are then re-expressed in an antibody format of choice and performance is further evaluated in analytical and bioassay evaluation to create a ranked list of potential leads for our partners.

In addition to our antibody discovery solutions, we possess extensive capabilities focused on ion channels and transporters. Ion channels and transporters are key components in a wide variety of biological processes and have broad therapeutic applicability across cancer, metabolic disease, pain, neurological diseases, infectious diseases and others. In the search for new drugs, ion channels are a frequent, but challenging target. We believe our capabilities in the ion channel area can be leveraged for both small molecule and antibody approaches to therapeutic development.

Our Partnership Business Model

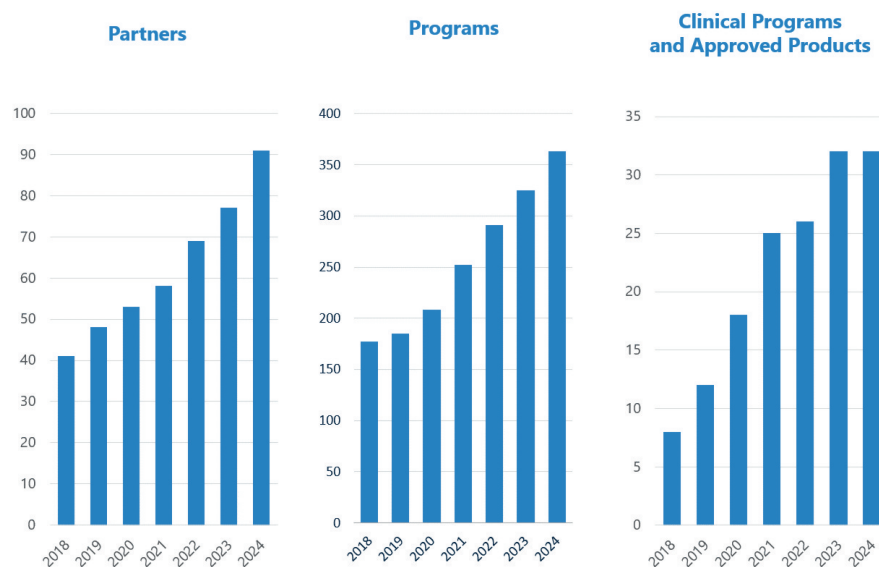
We partner with pharmaceutical and biotechnology companies and leading academic institutions that vary in size, clinical stage, geography and therapeutic focus. Our partners gain access to wide repertoires of antibodies and state-of-the-art screening technologies designed to enable efficient discovery of next-generation novel therapeutics and deliver high-quality therapeutic antibody candidates for a wide range of diseases. Our partners can select a biological target to treat a disease and define the antibody properties needed for therapeutic development or use certain of our technologies directly in their own laboratories.

Our license agreements with pharmaceutical and biotechnology partners generally include: (i) upfront or, in some instances, annual payments for technology access; (ii) payments for performance of research services; (iii) downstream payments in the form of preclinical, intellectual property, clinical, regulatory, and commercial milestones; and (iv) royalties on net sales of our partners' products, if any. License agreements with academic institutions are typically structured with revenue sharing. We succeed when our partners are successful, and our agreements are structured to align economic and scientific interests. Our license agreements typically include reporting requirements, which provide us updates from our partners on the status of their programs. In addition, we track our active partnered programs by reviewing our partners' public announcements and maintaining close communications with our partners to the extent possible. In some instances, a partner may not publicly announce milestones, in which case, we would be generally dependent on our partner to track, report and disclose milestones at the time of achievement. Our license agreements typically grant a perpetual license to our technology and are typically terminable by our partners without penalty with specified notice. However, all milestone payments and royalties survive termination and continue with respect to any OmniAb-derived antibodies. The royalty term is generally the longer of 10 years from the first commercial sale or through the last expiration in any jurisdiction of the patents covering such OmniAb-derived antibody. Importantly, our royalty term is typically linked to the patents that our partners file related to the antibody discovered using our technology, which both lengthens and diversifies the royalty streams we receive. Our typical royalty rates for antibody discovery contracts are currently in the low- to mid-single digits and can vary depending on other economic terms in the agreement. Although our license agreements with pharmaceutical and biotechnology partners typically include technology access fees, milestone payments and royalties, each agreement is negotiated separately and as a result, the financial terms and contractual provisions vary from agreement to agreement. By providing a full suite of antibody discovery technologies with streamlined economics, we believe we offer an attractive option to industry stakeholders.

We believe the long-term value of our business will be driven by royalties given that such payments are based on global sales of potential future partner programs, which generally provide for larger and recurring payments as compared to technology access, research and milestone payments. We believe our revenue will be materially driven by milestones in the shorter term, and by royalties in the longer term, from our partnered programs. However, there is significant uncertainty in timing and likelihood of reaching marketing authorization in drug discovery and development, and we cannot be certain when, if at all, royalty payments will be a material portion of our revenue. Furthermore, we do not control the progression, clinical development, regulatory strategy or eventual commercialization of programs discovered using our platform, and as a result, we are dependent on our partners' efforts and decisions with respect to such programs.

Key Business Metrics

The below graph shows the growth in active partners, active programs and clinical programs and the number of programs that have entered clinical trials. As of December 31, 2024, there were 363 active programs. An active partner is one that has rights to an active program or has executed a license agreement in advance of initiating an active program. A partner is removed from the metric when the partner informs us they are terminating their license or they are no longer in business. An active program is one in which research work has commenced or where an antigen is introduced into our animals and remains so as long as the program is actively being developed or commercialized. Active programs also include active clinical programs and approved products. Active clinical programs represents the number of unique programs for which an Investigational New Drug Application or equivalent under other regulatory regimes has been filed based on an OmniAb-derived antibody and which are in clinical development by our partners. Approved products represents an OmniAb-derived antibody for which our partner has received marketing approval.



Our partners' active clinical programs include monoclonal and bispecific antibodies discovered using OmniRat, OmniMouse, OmniFlic, or OmniChicken and target a range of therapeutic indications including oncology, immunology, and metabolic disorders. As our partners' discovery and preclinical programs continue to mature, we expect the number of OmniAb-derived antibodies in clinical development by our partners to expand to include antibodies discovered using our newer OmniClic, OmniTaur and OmnidAb technologies.

Our business metrics are subject to risk and uncertainties related to our dependence on our partners providing timely and accurate information. In addition, changes in our key business metrics do not directly correlate to current revenues. For more information, see the section titled "Risk Factors - *Our management uses certain key business metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions, and such metrics may not accurately reflect all of the aspects of our business needed to make such evaluations and decisions, in particular as our business continues to grow.*"

Industry Background

Antibodies: 500 Million Years of Immune System Evolution

Antibodies are blood proteins produced by the immune system in response to a specific foreign antigen. Antibodies bind to substances that the body recognizes as foreign, such as bacteria, viruses, cancer cells, and non-self proteins in the blood. Antibodies can also be used to target cell surface proteins critical to biological functions and disease.

The human immune system creates novel antibody sequences through DNA recombination involving V, D and J gene segments, followed by additional diversification mechanisms that introduce random mutations, insertions and deletions. Diversification occurs in both the heavy and light chain genes, which are translated and assembled in B cells to create the classical Y-shaped antibody. These genetic and cellular processes have the potential to create enormous diversity in natural antibody repertoires.

At any one time, the human body typically has approximately one billion different antibodies circulating in the bloodstream. Each antibody is created by one immune B cell. When an antibody-expressing B cell binds to an antigen, the B cell quickly proliferates and differentiates into a family of closely related cells producing slightly differentiated antibodies. These cells undergo a selection process in which B cells expressing antibodies of higher affinity are positively selected. This iterative process preferentially selects antibodies that are naturally optimized to be most effective in neutralizing the specific antigen.

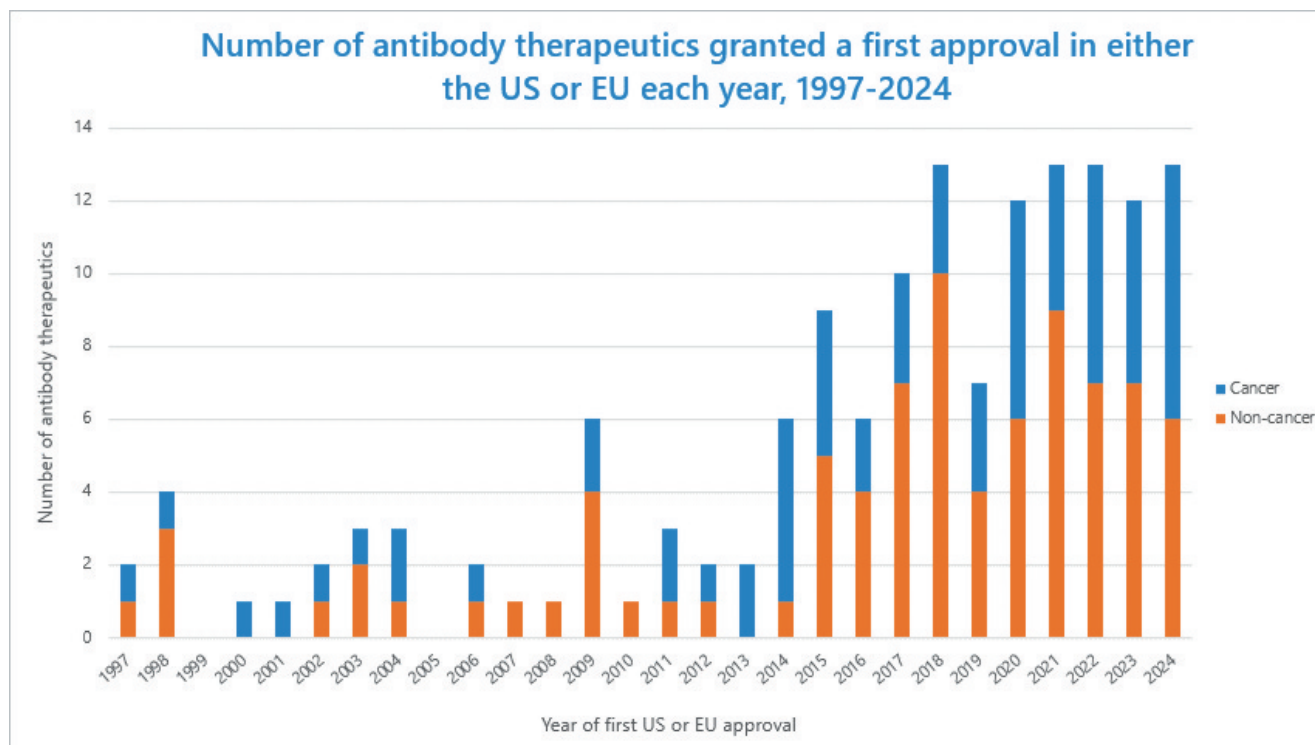
This process, referred to as *in vivo* affinity maturation, has evolved over 500 million years to naturally select antibodies that are optimized for their intended function. Antibodies discovered from natural immune systems generally have favorable therapeutic characteristics, such as high specificity, limited off-target toxicity, superior immune stimulation, and the ability to modulate half-life circulation in serum. Despite man-made technologies that try to imitate the natural selection process, over 90% of approved therapeutics are derived from natural immune systems. Our OmniAb transgenic animals take advantage of the immune system's natural ability to produce high-quality antibodies and have been genetically modified to generate antibodies with human sequences.

The evolutionary divergence of different species has resulted in some animals developing unique mechanisms that increase their immune systems' effectiveness against certain antigens. Each species has a unique way of combining antigen recognition, diversification mechanisms, and distinct structural features that support survival in the face of persistent exposure to evolving environmental threats. Our four-species platform harnesses these complimentary mechanisms for generating antibody diversity, while maintaining the naturally optimized genetic sequences needed to produce high-quality, therapeutic antibodies that fit the needs of almost any discovery campaign.

Market Opportunity

Antibodies are among the fastest growing class of drugs and are used across many therapeutic areas, including oncology, inflammation, metabolic disease and neurodegeneration. EvaluatePharma data indicates that monoclonal antibodies have represented the majority of the top 10 bestselling drugs over the last five years. In 2023, approved antibody-based therapeutics accounted for approximately \$250 billion in sales, according to data published by Clarivate Analytics Cortellis. In 2023, 57 antibody therapeutics reached blockbuster status with sales higher than \$1 billion, up from 54 antibodies in 2022. Furthermore, according to Clarivate, antibody-based therapeutic sales are expected to surpass \$330 billion by 2029.

Investment in antibodies has accelerated over the past decade, which has translated into clinical productivity and ultimately new drug approvals. According to data from the Antibody Society, the number of antibodies in the clinic has increased from 572 in 2018 to 1,430 in 2024, an estimated 17% CAGR. The expansion of clinical development has led to an accelerating pace of regulatory approvals as depicted in the figure below. The FDA approved the first therapeutic antibody in 1986. By 2015, the FDA approved its 50th antibody, and 6 years later in 2021, approved its 100th antibody. The number of antibody therapeutics granted a first approval in the United States or EU is shown in the graph below.



(Source: The Antibody Society Database of Antibody Regulatory Approvals, December 31, 2024)

Much of the success of antibodies as a therapeutic class is attributable to their favorable qualities relative to other therapeutic modalities. Antibodies can offer high affinity, potency and specificity, limited off-target toxicity, low immunogenicity, superior immune stimulation and the ability to modulate half-life circulation in serum. Industry statistics suggest that these properties have also translated to an increased probability of success relative to other modalities. According to BIO's Clinical Development Success Rates and Contributing Factors 2011-2020, which summarizes a study of over 9,000 drugs being developed for the U.S. market, monoclonal antibodies and monoclonal antibody conjugate drugs have had a 12.1% likelihood of receiving market authorization from the start of Phase 1 clinical trials. This is higher than the success rate of small molecule modalities, which had a 7.5% likelihood of receiving market authorization from the start of Phase 1 clinical trials in the United States. Additionally, recent data published by The Antibody Society suggests that the clinical success rate for monoclonal antibodies might be trending higher.

Existing Industry Limitations

Industry momentum has resulted in an overall increase in the number of antibody therapeutic approvals per year, however, both large and small pharmaceutical companies typically prioritize their research investments in novel biology and clinical development over enabling technologies. Reduced large pharmaceutical research investment in foundational discovery technologies has intensified fragmentation and created ripple effects for small biotechnology companies. While many of these biotechnology companies bring a focused approach to science that prioritizes nimble movement and efficient decision making, their biological hypotheses are often tested utilizing suboptimal antibody discovery methods due to reliance on legacy technologies. Many larger companies have also continued to rely on legacy technologies for many processes related to antibody discovery. Key examples of the frequently utilized legacy technologies and their shortcomings include:

- ***Humanized wild-type antibodies.*** This process has been utilized over the last 25 years and attempts to capture the benefits of natural antibody optimization in a non-human species, followed by extensive *ex vivo* engineering steps for humanization, affinity maturation and developability optimization. However, the *ex vivo* engineering steps that convert the animal antibody sequence into a human-like format may impact the desired therapeutic properties of the antibody, while residual non-human sequences may introduce immunogenicity concerns.
- ***First generation transgenics.*** Earlier transgenic systems demonstrated proof-of-concept and delivered a few therapeutic antibodies, however it became apparent that flaws in transgene design limited the robustness of immune responses from these animals. In addition, other technical issues, legacy agreement structures and industry consolidation presented further obstacles for the access to and use of the early platforms.
- ***Display technology.*** The commonly utilized technologies were invented over 35 years ago and do not benefit from *in vivo* affinity maturation and optimization. Some display libraries are engineered to capture benefits from natural immune systems, however they still carry limitations including loss of the heavy and light chain pairing, and the need for high-quality soluble antigen, and they often require downstream sequence optimization for high production in a mammalian manufacturing cell line.
- ***Hybridoma screening.*** This method has been utilized for the last 45 years and results in a loss of over 99% of antibody diversity, drastically reducing the pool of potential therapeutic candidates to choose from.

There is a significant and growing disparity between today's widely used legacy antibody discovery tools and the latest advances in antibody discovery technologies. These existing industry approaches are burdened with critical disadvantages including low antibody diversity, lengthy discovery timelines, limited functional parameter data, excess costs and lack of flexibility.

Our Strategy

Our mission is to enable the rapid development of innovative therapeutics by pushing the frontiers of drug discovery technologies. We pursue this mission by developing and licensing cutting edge discovery and screening technology and by being the partner of choice for pharmaceutical and biotechnology companies and academic institutions. Our strategy to accomplish this includes the following:

- **Enable discovery of high-quality antibody candidates through our platform.** We have a technologically differentiated platform that provides our partners with end-to-end antibody discovery technology or capabilities, as well as customized solutions for individual steps of the antibody discovery process. We believe that pairing the power of Biological Intelligence built into our proprietary transgenic animals with our high-throughput screening technologies will continue to enable the discovery of high-quality, fully human antibody therapeutic candidates for a wide range of indications.
- **Expand upon our existing partnerships.** We have 91 active partners as of December 31, 2024, consisting of pharmaceutical, biotechnology and academic organizations, varying in size, clinical stage, geography and therapeutic focus. We intend to continue to identify and capture new opportunities with existing partners by building upon our trusted relationships. The quality and breadth of our platform enables our partners to succeed in new antibody discovery campaigns and has also enabled them to pursue programs that would otherwise not be pursued due to technical challenges. In addition, collaboration between our scientists and partners has expanded partners' usage to other offerings within our technology platform, such as *in silico* and *in vitro* antibody optimization.
- **Increase the number of our partnerships.** We plan to continue to gain new customers through increased business development activities, and through continued technological expansion. We intend to forge new partnerships with large pharmaceutical and biotechnology companies focused on antibody development. We also intend to increase the number of partnerships with smaller early-stage biotechnology companies and academic institutions by offering flexible deal structures and offerings. Through continual investment and expansion of our capabilities, we believe we have the opportunity to further enable our partners to capture additional value from our technologies.
- **Further our technological differentiation through intelligent expansion and innovation.** We employ a methodical and deliberate approach to expanding our technology platform. Serving a broad partner base has provided us unique insight into the needs and direction of the industry, and we continue to leverage this insight for our decision-making. In recent years, we have successfully integrated a number of technology acquisitions covering antigen generation, additional animal species, deep screening capabilities, and ion channel expertise. As an example, in 2023 we launched our OmniDeep and OmniAb technologies responding to our understanding of pharmaceutical industry needs. And in 2024 we launched OmniHub, a unified interface providing partners secure access to datasets to visualize their discovery campaign data with a variety of custom tools. We intend to continue to invest in enabling technologies and evaluate strategic technology acquisitions to broaden our capabilities in the antibody discovery continuum.
- **Drive partner adoption through a customizable and flexible offering.** We meet our partners' specific needs by offering access to all or certain components of our technology platform. Upon entering into a license to use the OmniAb platform, our partners typically get access to all existing platforms and services, and we tailor the discovery approach and technology use to each specific program. This approach helps increase the partnership funnel and provides an initial forum for us to expand our relationship moving forward.

Our Technology

OmniRat

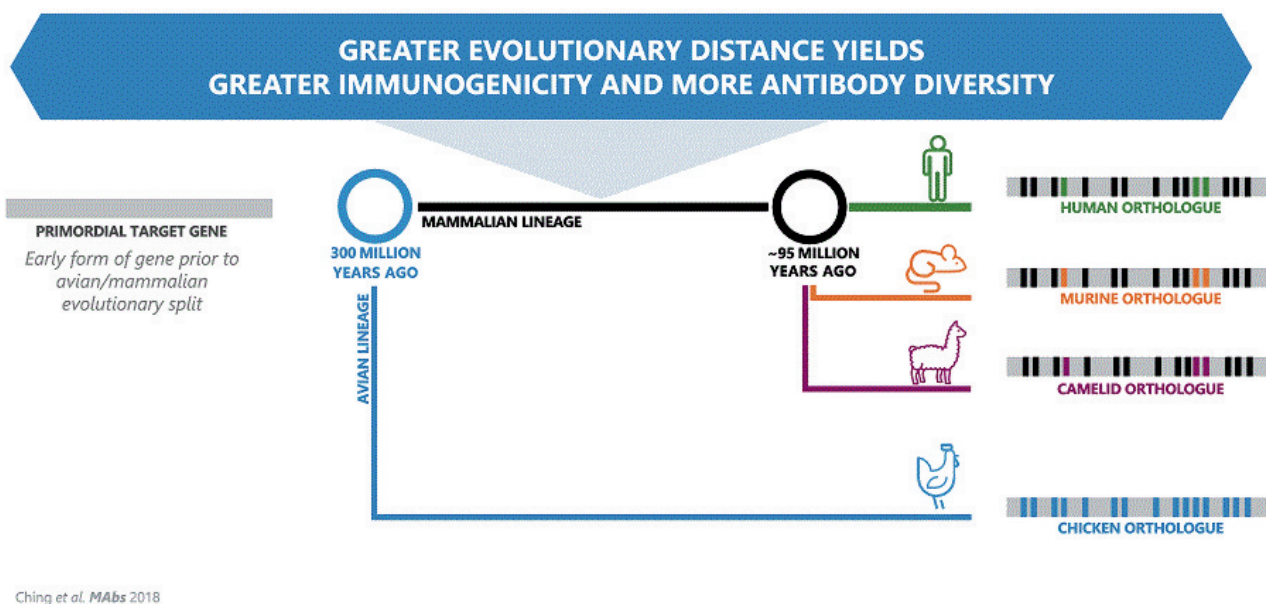
OmniRat was launched in 2012 and is the first example of a successful knock-out of the endogenous rat immunoglobulin genes coupled with transgenesis of human counterparts. OmniRat produces a diverse repertoire of antibodies with human idiotypes and immunological characteristics that are comparable to antibodies from wildtype animals. OmniRat provides cross-reactivity against mouse orthologs of human therapeutic targets, which may streamline preclinical development by obviating the need for surrogate antibodies and thereby may decrease clinical risks. The OmniRat has been engineered to contain functional recombinant immunoglobulin loci, use the full repertoire of human germline genes with similar frequency as humans, and rearrange functional human immunoglobulin genes. The animals are bred on a mixed genetic background to further diversify the antibody repertoire and feature different light chain isotypes designed to provide flexibility around partners' needs and technology. The OmniRat shows high expression, normal human CDR-H3 length distribution, and normal hypermutation and affinity maturation. As of December 31, 2024, there are three approved products based on an OmniRat-derived antibody and 24 additional programs based on an OmniRat-derived antibody in clinical development by our partners.

OmniMouse

OmniMouse was launched in 2014 and was developed using the same transgenes as OmniRat to deliver fully human antibodies utilizing standard mouse-based protocols. OmniMouse expands the sequence diversity of our rat-based platforms (OmniRat and OmniFlic), offering easy conversion from wildtype mice while utilizing the same protocols. OmniMouse produces a diverse repertoire of antibodies with human idiotypes and provides a complementary murine system for additional sequence diversity. Like OmniRat, OmniMouse is currently bred to generate a mixed genetic background to further increase sequence diversity. For partners who prefer to work with mice, OmniMouse provides a rapid solution to deliver fully human antibodies. As of December 31, 2024, there is one program based on an OmniMouse-derived antibody in clinical development by our partners.

OmniChicken

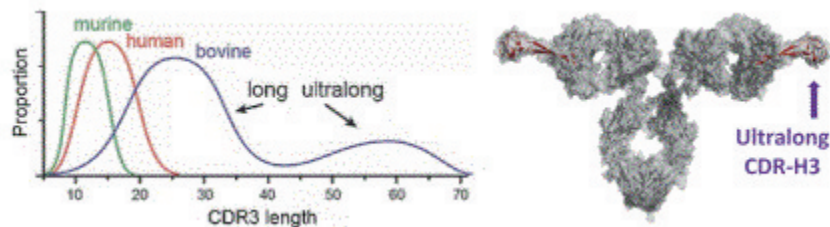
OmniChicken was launched in 2016 and is the first successfully engineered bird with an immune system that can efficiently generate human sequence antibody repertoires for the discovery of therapeutic antibodies. OmniChicken and OmniClic, our bispecific transgenic chicken platform, offer naturally affinity-matured antibodies in an evolutionarily distant chicken host. As depicted in the figure below, more than 300 million years of evolutionary distance drives divergence between mammalian and avian orthologs, which are genes in different species that evolved from a common ancestral gene by speciation. This evolutionary distance enables generation of a diverse repertoire of antibody panels to highly conserved therapeutic target antigens that are not immunogenic in mammals.



OmniChicken features a high level of functional diversity, with sequence diversity focused on the CDR regions, while maintaining conserved, well-validated human framework regions. OmniChicken antibodies bind to diverse epitopes on human targets with high affinity and additionally offer excellent developability profiles. As of December 31, 2024, there are two programs based on an OmniChicken-derived antibody in clinical development by our partners.

OmniTaur

OmniTaur was launched in 2020 and provides cow-derived ultralong CDR-H3 antibodies with a human framework. CDR-H3 is the region of the antibody that makes primary contact with the target and ultralong CDR-H3 antibodies have been shown to bind to targets with deep or cryptic epitopes. We believe these antibodies could be leveraged for a variety of targets with epitopes which may be difficult to reach with conventional antibodies, including ion channels, transporters, and viral proteins. As depicted in the figure below, OmniTaur features a fully human variable framework, and an ultralong CDR-H3 region, which we believe makes OmniTaur antibodies well suited for targeting unique, disease-relevant epitopes.



Bispecific antibody platforms

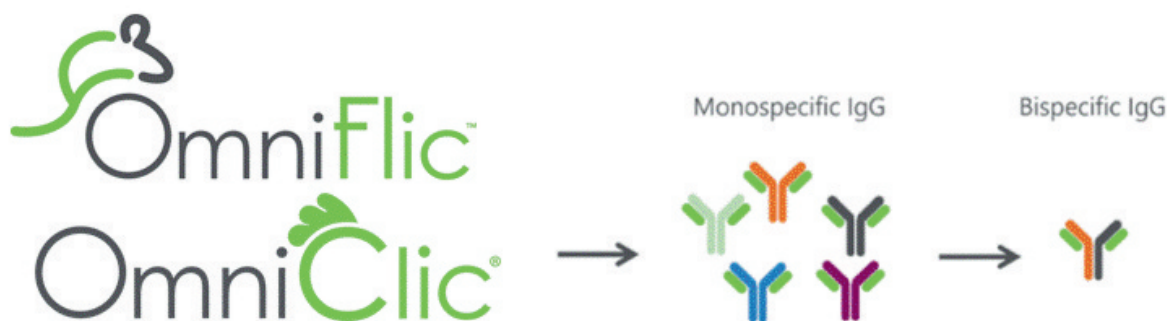
We offer the only rat and chicken platform for generation of bispecific antibodies. We believe that the characteristics of our common and fixed light-chain platforms offer several advantages over current generation bispecific antibody technologies. To generate these antibodies, we conduct parallel immunizations with two antigens and then engineer the two targeting arms of the antibody. We then use functional screening to identify heavy chain pairs with balanced affinities for their targets, enabling robust purification of the bispecific antibodies for manufacturing purposes. Our technology is designed to simplify and improve the efficiency of the production and purification of a classical asymmetric IgG like bispecific antibody. This process is depicted in the figure below. Our bispecific antibodies are IgG antibodies with a common or fixed light chain and different heavy chains. Common light chain antibodies allow the pairing of targeting arms for bispecific and multi-specific antibodies without the complexity of ensuring correct heavy and light chain pairing. Using this IgG format, the bispecific function can be introduced while maintaining the natural IgG-like format of the antibody. Both OmniFlic, our bispecific rat, and OmniClic, our bispecific chicken, express either a common or fixed VK3-15 light chain which enables the formation of bispecific therapeutics through the combination of antibodies generated from either platform.

OmniFlic (Bispecific rat platform)

OmniFlic was launched in 2014 and is a fixed light-chain variation of OmniRat. While the OmniFlic transgenic rat expresses the same heavy chain transgene as OmniRat and generates diverse repertoires upon immunization, it also features the fixed VK3-15 light chain, allowing antibodies generated using these platforms to be combined to form a bispecific human antibody. As of December 31, 2024, there are two programs based on an OmniFlic-derived antibody in clinical development by our partners.

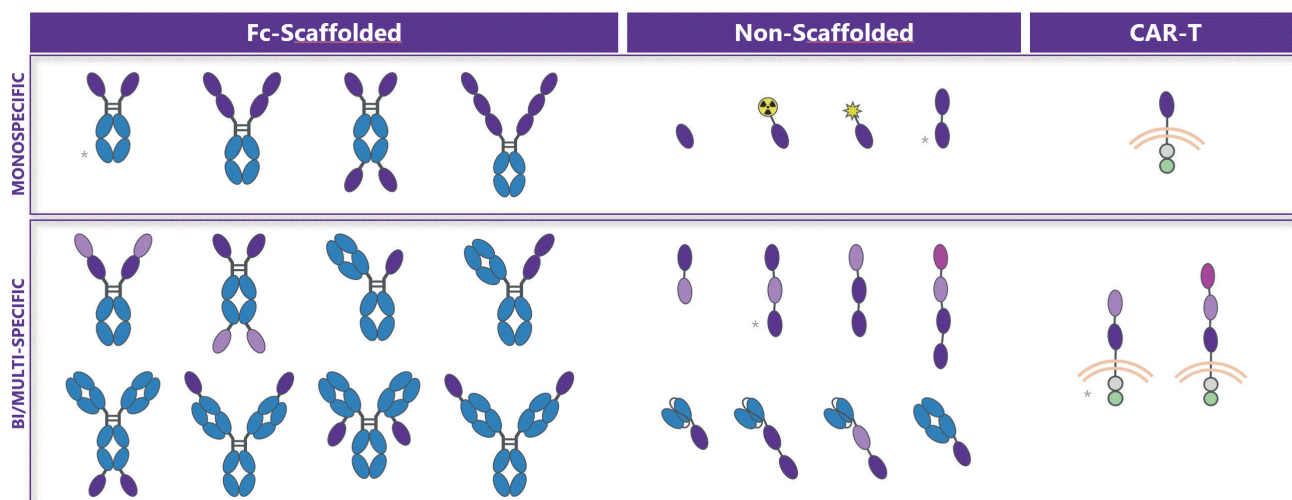
OmniClic (Bispecific chicken platform)

OmniClic was launched in 2019 and is a common light-chain transgenic chicken developed to facilitate the generation of bispecific antibodies. OmniClic was engineered to focus sequence diversity on the CDRs of the VH domain. OmniClic expresses the heavy chain and VK3-15 light chains, with a modified light chain transgene to minimize diversification.



OmnidAb (sdAb chicken)

OmnidAb was launched in 2023 and is a next-generation engineered chicken platform with an optimized human framework for discovering novel high-affinity single-domain antibodies ("sdAbs") that have favorable developability profiles without requiring additional engineering steps. Unlike conventional IgG heavy chains, OmnidAb is designed to express antibodies comprised solely of heavy chains, devoid of light chains. In addition to other unique benefits and uses, sdAbs can be used to target novel epitopes as well as generate bispecific and multispecific antibodies. Small formats enable convenient routes of administration (inhalable and oral), penetration to the brain/CNS and fast clearance, and compatibility with the decay half-life of radio-isotopes used in imaging, diagnostics, and radiotherapy. sdAbs can be assembled into various formats to “fit the biology” of a desired application, with various examples provided in the figure below.



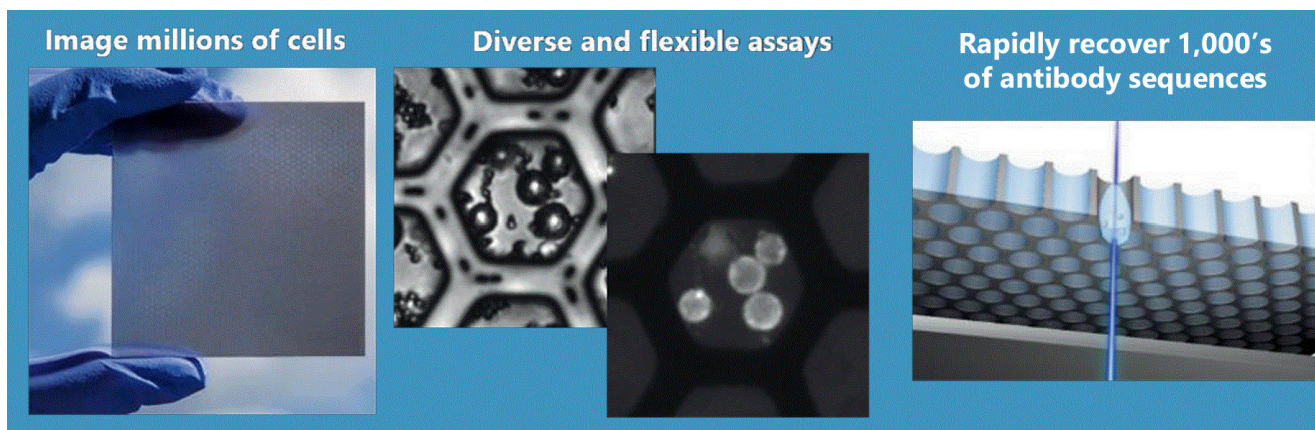
STR Technology

In 2023, OmniAb entered into an agreement with mAbsolve Ltd. for its Fc-silencing platform technology, STR, which is based upon a proprietary engineered human Fc domain. The agreement provides OmniAb with the non-exclusive, sublicensable right to incorporate the STR technology into antibodies that have been generated using OmniAb’s antibody discovery platform.

xPloration Screening Technology

OmniAb’s AI-powered xPloration platform offers superior screening and cell recovery compared to other single-cell profiling technologies. Its high-throughput enables the discovery of rare cells potentially missed by other systems or approaches. Its rapid laser-based recovery process paired with next-generation sequencing enables further mining of immune repertoires for potential hit expansion. These capabilities can save our partners weeks or even months as compared to traditional discovery workflows.

xPloration supports various assay formats and is valuable for high-throughput B cell screening within the OmniAb ecosystem. While mouse hybridoma techniques have existed for decades, methods for other species like chickens and cows are unavailable. OmniAb’s B cell screening platforms enable the discovery of unique antibodies from any host system.



OmniAb scientists and engineers recently developed a next generation xPloration instrument as depicted in the figure below. We believe the xPloration platform has the potential to drive additional efficiencies in our business and further expand our position as the industry leader in speed, throughput, reliability, and ease-of-use for screening activities.



Ion Channel Capabilities

Ion channels and transporters are key components in a wide variety of biological processes that involve rapid changes in cells and have broad therapeutic applicability across multiple therapeutic areas including oncology, metabolic disease, pain, neurological diseases, infectious diseases and others. Ion channels make particularly challenging drug targets due to (i) difficulty with antigen purification (ii) poor immunogenicity (iii) high homology with rodents used in immunization campaigns and (iv) small accessible binding regions with the majority of protein embedded in cell membranes.

Due to these challenges in developing effective therapeutics towards these targets, patients suffering from ion channel and transporter related diseases are severely underserved. We have extensive and differentiated capabilities focused on ion channels and transporters, and decades of experience in novel drug discovery from screening to lead optimization, with an active set of big pharma discovery and asset-based partnerships. The differentiated core capabilities within our ion channel discovery team can provide novel reagent generation and proprietary assays that can also support antibody discovery programs and can be accessed by partners when pursuing ion channels and transporter targets. We believe we are well positioned to provide the tools necessary to discover antibodies and small molecules to target ion channels and transporters. Our computational antigen design technology has been validated in successfully generating, stabilizing, and purifying natively-folded antigen for these targets and our four-species transgenic animal platform is validated in successfully generating antibodies for poorly immunogenic, high homology, and cryptic targets.

In addition to the drug design challenges, it is difficult to develop effective functional assays to test potential therapeutics. OmniAb's proprietary ion channel platform leverages proprietary expertise in the combination of biological assays, medicinal chemistry, and *in silico* and computational chemistry applications to enable the discovery of ion channel targeting therapeutics. We believe this suite of technologies provides a differentiated capability for advancing high value ion channel and transporter drug discovery programs regardless of modality including small molecules, scaffolded peptides or mini-proteins, mono-, bi- and multi-specific antibodies, and antibody-drug conjugates ("ADCs").

Investing in Differentiated Technology

We built the OmniAb technology platform through acquisition, investment, and innovation.

We acquired Open Monoclonal Technology, Inc. ("OMT") in January 2016, Crystal Bioscience, Inc.® in October 2017, Ab Initio Biotherapeutics, Inc. in July 2019, the core assets of Icagen in April 2020, xCella Biosciences, Inc. in September 2020 and Taurus Biosciences, LLC in September 2020. In addition to acquisitions, we have advanced our technology platform through internal investment and innovation. Our investments in technology are based on the continuous feedback loop that we gain from our partner-centric model which provides us critical insights into the current and future needs of the industry.

The key technologies obtained through acquisition are listed below.

Business	Acquisition Date	Technologies Acquired
OMT	January 2016	OmniRat; OmniMouse; OmniFlic
Crystal	October 2017	OmniChicken; GEM screening
Ab Initio	July 2019	Antigen design
Icagen	April 2020	Ion channel technology
xCella	September 2020	xPloration screening
Taurus	September 2020	OmniTaur

Competition

The market for technologies that enable the discovery and development of therapeutic antibodies, such as ours, is global, characterized by intense competition and subject to significant intellectual property barriers. The solutions and applications offered by our competitors vary in size, breadth and scope, and given the broad promise of antibody therapeutics, we face competition from many different sources. These include companies developing antigen design, transgenic animal platforms, single-cell screening technologies and antibody engineering technologies. They employ various business models, such as developing internal therapeutic pipelines, investing financially in partner programs, licensing technology, and selling instruments and devices. We also face competition from integrated contract research organizations that use traditional hybridoma, phage, and yeast display technologies in discovery. Due to the significant interest and growth in antibody therapeutics more broadly, we expect the intensity of this competition to increase.

We seek to provide our partners with the most advanced technologies for antibody drug discovery, including antigen design, transgenic animal platforms, single-cell screening technologies and antibody engineering technologies. Many emerging and established life sciences companies have been built around technologies that focus on one or a limited number of these steps. Examples include:

- in discovery using genetically-engineered rodents, we face technical competition from companies that provide access to similar technologies, such as AbCellera Biologics Inc., Ablexis LLC, Alloy Therapeutics, Inc., Biocytogen Pharmaceuticals (Beijing) Co., Ltd., Nona Biosciences, Leveragen, Inc., Regeneron Pharmaceuticals, Inc. and Twist Bioscience Corporation;
- in the field of single-cell screening, we face technical competition from companies that provide access to similar technologies, such as AbCellera Biologics Inc., Bruker Corporation., HiFiBio Inc., and Sphere Fluidics Ltd.; and
- in ion channel drug discovery, we face technical competition from companies that provide similar technologies, or biological expertise, such as Charles River Labs Inc., Evotec SE, Metrion Biosciences Ltd., and WuXi AppTec.

We also face direct business competition from companies that provide antibody discovery services using technologies such as hybridoma and display. In addition, we compete with a variety of fee-for-service contract research organizations that provide services, in most cases using legacy technologies, that compete with one or more steps in our technology platform.

For a discussion of the risks we face relating to competition, see “Risk Factors—Risks Related to Our Business—The life sciences and biotech platform technology market is highly competitive, and if we cannot compete successfully with our competitors, we may be unable to increase or sustain our revenue, or sustain profitability.”

Intellectual Property

We believe that patents and other proprietary rights are important to our business. Our practice is to file patent applications to protect technology, inventions and improvements to our inventions that are considered important to the development of our business. We also rely upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain our competitive position.

Patents are issued or pending for the technology families described below. The scope and type of patent protection provided by each patent family is defined by the claims in the various patents. Patent term may vary by jurisdiction and depend on a number of factors including potential patent term adjustments, patent term extensions, and disclaimers, and patent terms referenced below do not take into consideration such adjustments, extensions, or disclaimers. The patents and patent applications referenced below are in each case, as of February 28, 2025.

Technology Platform

Transgenic Animals

Our transgenic animal therapeutic antibody platforms, including OmniRat, OmniMouse and OmniChicken, produce naturally optimized antibodies with human sequences in animals. Our OmniAb antibody platform patent portfolio includes patents and applications obtained upon the acquisition of OMT in January 2016 and Crystal Bioscience in October 2017. We own patents directed to OmniAb animals and related inventions, including 26 issued patents in the United States, six issued patents in Europe, seven issued patents in Japan, five issued patents in China, and counterpart patents granted in other countries. These patents include:

- four U.S. patents directed to rodent germ cells, transgenic rodents, methods of generating transgenic rodents, and antibodies produced from transgenic rodents, and foreign counterparts including in Europe, Japan, China, and Canada, all having an expiration date in 2028 without accounting for potentially available patent term adjustments and extensions or disclaimers;
- seven U.S. patents directed to transgenic animals including chickens, B cells isolated from transgenic chickens, and methods of producing antibodies, all having an expiration date in 2030 without accounting for potentially available patent term adjustments and extensions or disclaimers;
- one U.S. patent directed to avian gonocytes and their method of manufacture, having an expiration date in 2031 without accounting for potentially available patent term adjustments and extensions or disclaimers;
- four U.S. patents directed to transgenic chickens and chicken germ cells, methods of modifying chicken germ cells, and foreign counterparts including in Europe and Canada, all having an expiration date in 2032 without accounting for potentially available patent term adjustments and extensions or disclaimers;
- four U.S. patents directed to transgenic chickens, methods of producing antibodies, including heavy chain antibodies, and isolated antibody-producing cells, all having an expiration date in 2032 without accounting for potentially available patent term adjustments and extensions or disclaimers;
- two U.S. patents directed to transgenic rodents, methods of producing antibodies, and chimeric polynucleotides, and foreign counterparts including in Europe, China, and Japan, all having an expiration date in 2033 without accounting for potentially available patent term adjustments and extensions or disclaimers;
- one U.S. patent directed to transgenic chickens and methods of producing antibodies having an expiration date in 2036 without accounting for potentially available patent term adjustments and extensions or disclaimers;
- one U.S. patent directed to transgenic rodents, methods of producing antibodies, and chimeric polynucleotides, and a foreign counterpart in China, both having an expiration date in 2038 without accounting for potentially available patent term adjustments and extensions or disclaimers;

- one U.S. patent directed to transgenic chickens, and a counterpart in Japan, both having an expiration date in 2039 without accounting for potentially available patent term adjustment and extensions or disclaimers; and
- one U.S. patent directed to transgenic chickens having an expiration date in 2039 without accounting for potentially available patent term adjustment and extensions or disclaimers.

We also own nine pending U.S. patent applications, eight pending European patent applications, six pending Japanese patent applications, one pending Chinese patent applications, and counterpart patent applications pending in other countries, all relating to our transgenic animals. Any patents issuing from these applications are expected to expire between 2028 and 2039, without accounting for potentially available patent term adjustments and extensions or disclaimers. We also own several pending international patent applications, U.S. patent applications, and counterpart patent applications pending in other countries, relating to novel antibodies generated with our transgenic animal platforms. Our partners who use the OmniAb patented technology to generate novel antibodies may be entitled to separate, additional patent protection on such antibodies.

Antigen Design

OmniAb's portfolio of issued patents and pending patent applications were acquired through acquisition of Ab Initio in 2019. These are directed to SIRP-gamma polypeptides and include three issued patents in the United States, one issued patent and one pending patent application in Europe, one issued patent and one pending patent application in Japan, and one issued patent and one pending patent application in China. These patents and applications are directed to composition of matter and methods of use. The patents and applications in our portfolio are expected to expire between 2036 and 2040, without accounting for potentially available patent term adjustments and extensions or disclaimers. We also have an exclusive license from Stanford University directed to screening methods using transmembrane and cell-surface proteins and related compositions and kits. This licensed portfolio includes four issued patents in the U.S., issued patents in China and Japan, and a pending application in Japan. The patents and application in the licensed portfolio are expected to expire in 2034 and 2035, without accounting for potentially available patent term adjustments and extensions or disclaimers.

Engineered Antibodies

The acquisition of Taurus Biosciences in 2020 added technologies for discovery and humanization of antibodies from immunized cows or cow-derived libraries to our platform technology platform. These antibodies feature some of the longest CDR-H3s of any species, with unique genetic and structural diversity that can enable binding to challenging antigens with application in therapeutics, diagnostics and research. Through this acquisition, we own issued patents and pending patent applications relating to screening methods and antibody engineering. Our patent portfolio includes five issued U.S. patents and one pending U.S. application, one granted European patent, two granted patents in Japan, one granted patent and one pending patent application in China, and other foreign counterparts. These patents and applications are directed to methods of generating combinatorial human antibody libraries, methods of affinity maturation of antibodies, humanized antibodies with ultralong CDRs, and bovinized human antibodies comprising ultralong CDRs. The patents and applications in our portfolio are expected to expire between 2029 and 2034, without accounting for potentially available patent term adjustments and extensions or disclaimers. We also have an exclusive license from The Scripps Research Institute to technology related to ultralong CDR-H3s. This licensed portfolio includes three issued patents in the U.S., one issued patent in Europe, and one issued patent in Japan, as well as three pending applications in Japan and one in China. These licensed patents have an expected expiry date in 2033, without accounting for potentially available patent term adjustments and extensions or disclaimers.

OmniAb has an exclusive license from the Applied Biomedical Science Institute to a family of patent applications relating to the PicobodyTM technology. The exclusive license is granted pursuant to a Collaborative Research Agreement in order to further the joint research activities contemplated therein related to the Picobody technology. Picobodies are very small immunoglobulin-based binding moieties that can be derived from a subclass of cow antibodies containing ultralong CDR-H3 domains. These licensed applications have an expected expiry date in 2042, without accounting for potentially available patent term adjustments and extensions or disclaimers.

Our xPloration screening technology, obtained through acquisition of xCella Biosciences in 2020, includes a microcapillary platform for high-throughput, automated screening of single B cells for specificity and bioactivity, which expands our existing single B cell assay capabilities in the OmniAb technology platform. The patent portfolio includes six issued patents in the U.S., two granted European patents, one issued patent in China, and six issued patents in Japan, as well as five pending U.S. patent applications, four pending European patent applications, two pending Japanese patent applications, three pending Chinese patent applications, and counterpart patent applications issued and pending in other countries. These patents and applications are directed to methods and apparatus. The patents and applications in our portfolio are expected to expire between 2036 and 2040, without accounting for potentially available patent term adjustments and extensions or disclaimers. We also have a non-exclusive license from Stanford University to two patent families relating to methods for extracting samples from microcapillary arrays, which together include five issued patents in the U.S., two issued patents in Europe, four issued patents in Japan, two issued patents in China, and pending applications in China. These licensed patents and applications have an expected expiry date in 2033 and 2036, without accounting for potentially available patent term adjustments and extensions or disclaimers.

We also have two U.S. patents directed to our GEM assay, including gel microdrops, their use, and their method of manufacture, and foreign counterparts including in Europe, Japan, and Canada, all having an expiration date in 2029 without accounting for potentially available patent term adjustments and extensions or disclaimers.

Ion Channel Platform

In 2020, we acquired the core assets of Icagen, an early-stage drug discovery company focused on ion channel and transporter targets. Our ion channel platform has issued patents and pending patent applications directed to x-ray fluorescence-based detection of binding events and transport across barriers and related inventions, including 24 issued patents in the United States, six issued patents in Europe, seven issued patents in Japan, and three issued patents in China. The portfolio also includes five pending U.S. patent applications, four pending European patent applications, and pending applications in China and Japan. These patents and applications are directed to methods and apparatus. Additional pending applications are directed to biological targets. The patents and applications in our ion channel portfolio are expected to expire between 2027 and 2044, without accounting for potentially available patent term adjustments and extensions or disclaimers.

Trademarks

We also use trademark rights to protect our brand. As of February 28, 2025, we own a total of 19 registered United States trademarks, fourteen pending United States trademarks, 149 registered foreign trademarks in various countries including China, the European Union, and Japan, and six pending foreign trademarks in various countries around the world. Our trademarks include our company name OMNIAB and product-specific names such as OMNICHICKEN, OMNICLIC, OMNIFLIC, OMNIDAB, OMNIMOUSE, OMNIRAT, and OMNITAU, platform technology names such as ICAGEN, OMNIDEEP, PICOBODY, PICOBODIESTM, XPLORATION and XRPRO®, as well as slogans and marketing taglines such as “ABSOLUTELY OMNIAB®,” “BIOLOGICAL INTELLIGENCE,” and “NATURALLY OPTIMIZED HUMAN ANTIBODIES®.”

Government Regulation

Regulation of Drugs and Biological Products and Coverage and Reimbursement

Government authorities in the United States, at the federal, state and local level, and in the European Union (“EU”) and other countries and jurisdictions, extensively regulate, the research, development, testing, manufacturing, quality control, safety, effectiveness, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of drugs and biological products such as those that our partners develop. Our partners must obtain the requisite approvals from the applicable regulatory authority prior to the commencement of clinical studies. In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act (“FDCA”) and biologics under the FDCA and the Public Health Service Act. In the EU, the European Commission and national competent authorities of the EU member states regulate the development and marketing of medicinal products, including biologics. Prior to obtaining approval to commercialize a therapeutic candidate in the United States, EU or otherwise abroad, our partners must demonstrate with substantial evidence from well-controlled non-clinical studies and clinical trials, and to the satisfaction of the FDA, European Medicines Agency (“EMA”) or comparable foreign regulatory agencies, that such drugs are safe and effective, or in the case of biologics in the United States, safe, pure, and potent, for their intended use. FDA approval of a New Drug Application (“NDA”) or Biologics License Application (“BLA”) or supplement, or European Commission or national

competent authority of an EU member state granting of a marketing authorization (“MA”) in the EU, is required before any new drug or biologic can be marketed. If we or our partners fail to comply with applicable laws or regulations at any time, we or our partners may become subject to sanctions or other legal consequences, including among other things, delays in developing therapeutics, restrictions on marketing or manufacturing, withdrawal of products, product recalls, or the imposition of civil or criminal penalties. In addition we and our partners are subject to additional healthcare regulation and enforcement under laws related to, among other things, state, federal and foreign anti-kickback, fraud and abuse, false claims, and transparency laws and regulations related to drug pricing and payments and other transfers of value made to physicians and other healthcare providers.

Sales of therapeutics will depend substantially, both domestically and internationally, on the extent to which the costs of such therapeutics are paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors, including government health programs in the United States, such as Medicare and Medicaid. A primary trend affecting the healthcare industry is cost containment. In the United States, the pharmaceutical industry has been the subject of major legislative initiatives that may affect the ability to profitably commercialize drugs and biological products. Most significantly, in August 2022, the IRA was signed into law. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare, with prices that can be negotiated subject to a cap; imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023); redesigns the Medicare Part D benefit (beginning in 2024); and replaces the Part D coverage gap discount program with a new manufacturer discount program (beginning in 2025). The Centers for Medicare & Medicaid Services has published the negotiated prices for the initial ten drugs, which will first be effective in 2026, and has published the list of the subsequent 15 drugs that will be subject to negotiation. The IRA permits the Secretary of the Department of Health and Human Services (“HHS”) to implement many of these provisions through guidance, as opposed to regulation, for the initial years. HHS has and will continue to issue and update guidance as these programs are implemented, although the Medicare drug price negotiation program is currently subject to legal challenges. While the impact of the IRA on the pharmaceutical industry cannot yet be fully determined, it is likely to be significant. Moreover, individual states in the United States have become increasingly active in developing proposals, passing legislation and implementing regulations designed to control drug pricing, including price or patient reimbursement constraints, discounts, formulary flexibility, marketing cost disclosure, drug price increase disclosure, and other transparency measures. Some states have enacted legislation creating so-called prescription drug affordability boards, which ultimately may attempt to impose price limits on certain drugs in these states. Similar developments affecting the healthcare industry may occur in the EU.

Data Privacy & Security

Numerous state, federal and foreign laws, regulations, and standards govern the collection, use, access to, confidentiality and security of health-related and other personal information, including clinical trial data, and could apply now or in the future to our operations or the operations of our partners. Privacy and security laws, regulations, and other obligations are constantly evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings, or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

For a discussion of the risks associated with government regulations applicable to us and our partners, see “Item 1A. Risk Factors” elsewhere in this Annual Report.

Human Capital Resources

As of December 31, 2024, we have 114 employees, including 82 employees engaged in research and development, and 42 employees with Ph.D. degrees. Our business development team has six dedicated professionals and our marketing team has two dedicated professionals. These business development and marketing functions are complemented with research and development staff attending a variety of scientific conferences, which help to increase the visibility of our technologies and our business development opportunities.

We aim to attract and retain well-qualified and talented employees by offering competitive pay and a range of recognition and benefit programs. We are proud to provide our employees with the opportunity to advance in their careers, investing in their career development as we focus on our corporate mission and objectives. We also have established employee resource groups and committees to further their connection and community engagement. These relate to a variety of initiatives to promote our company culture as well as a sense of community and belonging and are open to all employees who are interested, regardless of their background.

We strive to create an environment where individuals, regardless of background, can excel and achieve their highest potential. This applies across aspects of our company, including hiring, promotion, and development practices. We believe our Company is stronger because of our employees' range of experiences and backgrounds.

We strive to maintain an inclusive environment free from discrimination of any kind, including sexual or other discriminatory harassment. Our employees have multiple channels available to them to report inappropriate behavior. We also have a third-party ethics and compliance hotline system that facilitates anonymous internal and external reporting of complaints or concerns. Any report of inappropriate behavior is promptly investigated with appropriate action taken.

Competitive pay and benefits

We rely on skilled, experienced, and innovative employees to conduct our operations. Our key human capital objectives include identifying, recruiting, retaining, incentivizing and integrating our existing and new employees.

We frequently benchmark our compensation practices and benefits programs against those of comparable companies in our industry and in the geographic areas where our primary facilities are located. We are committed to providing all our employees with a fair and living wage, believing that our competitive compensation and benefits package enables us to attract and retain skilled labor.

Our notable health, welfare and retirement benefits include:

- equity awards;
- subsidized health insurance;
- subsidized health and mental wellness benefits;
- 401(k) Plan with matching contributions;
- education reimbursement program; and
- paid time off.

Employee development and training

We actively engage and incentivize our workforce through various professional development activities. Our commitment to employee development is evident through our continued internal scientific trainings facilitated by subject matter experts including the latest scientific methods, technologies, and instrumentation/equipment. We prioritize attendance at scientific and technological meetings and conferences, providing employees with valuable education and networking opportunities, while increasing the visibility of our technologies. We aim to provide our workforce access to the resources and tools necessary for success in their respective roles. We also provide employees with access to an education reimbursement program to utilize for continual learning courses and relevant certifications.

Corporate History and Background

We were initially incorporated as Avista Public Acquisition Corp. II ("APAC"), an exempted company in the Cayman Islands, on February 5, 2021. On October 31, 2022, APAC deregistered in the Cayman Islands and was domesticated as a corporation under the State of Delaware, and in connection with which APAC changed its name to "OmniAb, Inc.".

On November 1, 2022, in accordance with the terms of the Separation and Distribution Agreement, dated as of March 23, 2022, among APAC, Ligand Pharmaceuticals Incorporated ("Ligand"), OmniAb Operations, Inc. (formerly known as OmniAb, Inc.) ("Legacy OmniAb"), Ligand transferred the Legacy OmniAb business, including certain related subsidiaries of Ligand, to Legacy OmniAb and made a contribution to the capital of Legacy OmniAb. Ligand then distributed on a pro rata basis to its stockholders all of the common stock of Legacy OmniAb held by Ligand, such that each holder of the common stock of Ligand was entitled to receive one share of Legacy OmniAb common stock for each share of Ligand common stock held by such holder as of the record date for the distribution (the "Distribution"). Immediately thereafter, we consummated the merger (the "Merger") pursuant to that certain Merger Agreement, dated as of March 23, 2022, by and among us (formerly known as APAC), Ligand, Legacy OmniAb, and Orwell Merger Sub Inc. ("Merger Sub"), pursuant to which Merger Sub merged with and into Legacy OmniAb, with Legacy OmniAb becoming our wholly owned subsidiary (the "Business Combination").

Unless the context otherwise requires, "we," "us," "our," "OmniAb" and the "Company" refer to OmniAb, Inc., a Delaware corporation (formerly known as APAC), and its subsidiaries following the closing of the Business Combination. Unless the context otherwise requires, references to "APAC" refer to Avista Public Acquisition Corp. II prior to the closing of the Business Combination. All references herein to the "Sponsor" refer to Avista Acquisition LP II, the sponsor of APAC, and to the "Board" refer to the board of directors of OmniAb.

Available Information

Financial and other information about us is available on our website at www.omniab.com. We make available on our website, without charge, copies of our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. You may obtain copies of these documents by visiting the SEC's website at www.sec.gov. In addition, we may use X, formerly known as Twitter (@OmniAbTech), and our investor relations website as a means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. Investors should monitor our X social media account and our website, in addition to following our press releases, SEC filings, public conference calls and webcasts. These website addresses and the information accessible through our X social media account are not intended to function as hyperlinks, and the information contained in our website and in the SEC's website is not intended to be a part of this filing.

Item 1A. Risk Factors

You should carefully consider the risks and uncertainties described below, together with the other information in this Annual Report, including our financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations," before making an investment in our securities. We cannot assure you that any of the events discussed in the risk factors below will not occur. These risks could have a material and adverse impact on our business, results of operations, financial condition and growth prospects. If that were to happen, the trading price of our securities could decline. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations or financial condition. In this section, we first provide a summary of the principal risks and uncertainties we face and then provide a full set of risk factors and discuss them in greater detail.

Summary of Risks Related to our Business:

Our business is subject to numerous risks and uncertainties, including those described below. The principal risks and uncertainties affecting our business include, but are not limited to, the following:

- Our partners may not achieve projected discovery and development milestones and other anticipated key events in the expected timelines or at all, which could have an adverse impact on our business and could cause the price of our common stock to decline.
- Our commercial success depends on the quality of our antibody discovery platform and technological capabilities and their acceptance by new and existing partners in our market.
- Our future success is dependent on the eventual approval and commercialization of products developed by our partners for which we have no control over the clinical development plan, regulatory strategy or commercialization efforts.
- If we cannot maintain and expand current partnerships and enter into new partnerships, our future operating results would be adversely affected.
- We have incurred losses on an as-reported basis for the last several years, and we may not be able to generate sufficient revenue to achieve and maintain profitability.
- Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.
- The life sciences and biotech platform technology market is highly competitive, and if we cannot compete successfully with our competitors, we may be unable to increase or sustain our revenue, or sustain profitability.
- We rely on third parties to host our mouse and rat colonies and to supply laboratory equipment and materials, and these third parties may not perform satisfactorily which could delay, prevent or impair our partnership programs and research and development efforts.
- If we are unable to obtain and maintain sufficient intellectual property protection for our platform and technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technologies or a platform similar or identical to ours, and our ability to successfully sell our platform and services may be impaired.
- We rely on in-licenses from third parties. If we lose these rights, our business may be materially and adversely affected, our ability to develop improvements to our technology platform and antibody discovery platform may be negatively and substantially impacted, and if disputes arise, we may be subjected to future litigation, as well as the potential loss of or limitations on our ability to incorporate the technology covered by these license agreements.
- Unstable market and economic conditions and adverse developments with respect to financial institutions and associated liquidity risk may have serious adverse consequences on our business, financial condition and stock price.

- The market price of our common stock and warrants is likely to be highly volatile, and you may lose some or all of your investment.
- Sales of a substantial number of our securities in the public market by the Selling Securityholders and/or by our existing securityholders could cause the prices of our common stock and warrants to fall.

Risks Related to Our Business

Biopharmaceutical development is inherently uncertain, and it is possible that none, or very few, of the therapeutic candidates discovered using our platform that are further developed by our partners will become viable commercial products, on a timely basis or at all.

We use our platform to offer antibody drug-discovery programs to partners who are engaged in drug research and development. These partners include pharmaceutical and biotechnology companies of all sizes. While we receive upfront payments generated through our receipt of service revenue and technology access fees, we expect that the vast majority of the economic value of the agreements we enter into with our partners is in the downstream payments that we may receive upon achievement of development milestones and royalties on sales of any approved products. As a result, our future growth is dependent on the ability of our partners to successfully develop and commercialize therapies based on antibodies discovered using our platform. Due to our reliance on our partners, the risks relating to product development, regulatory clearance, authorization or approval and commercialization apply to us derivatively through the activities of our partners. While we believe our platform is capable of identifying high-quality antibodies, there can be no assurance that our partners will successfully develop, secure marketing approvals for and commercialize any therapeutic candidates based on the antibodies discovered using our platform. As a result, we may not realize the intended benefits of our partnerships.

Neither we nor our partners are permitted to market any therapeutic candidate until we or they receive regulatory approval of a New Drug Application (“NDA”) or Biologics License Application (“BLA”) from the FDA in the United States or until we or they receive regulatory approval from foreign regulatory authorities in other countries. Prior to obtaining such approval to commercialize a therapeutic candidate in the United States or abroad, our partners must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA, EMA or comparable foreign regulatory agencies, that such therapeutic candidates are safe and effective, or in the case of biologics in the U.S., safe, pure, and potent, for their intended uses. Results from nonclinical studies and clinical trials can be interpreted in different ways. Even if we or our partners believe the nonclinical or clinical data for any therapeutic candidates are promising, such data may not be sufficient to support approval by the FDA and other comparable regulatory authorities.

The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a therapeutic candidate’s clinical development and may vary among jurisdictions. If we or our partners are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies governing clinical trials, development plans may be impacted.

The FDA or comparable foreign regulatory bodies can delay, limit or deny approval of therapeutic candidates or could require our partners to conduct additional nonclinical or clinical testing or abandon a program for a number of reasons. Due to the uncertain, time-consuming and costly clinical development and regulatory approval process, our partners may not successfully develop any therapeutic candidates with the antibodies discovered using our platform, or our partners may choose to discontinue the development of these therapeutic candidates for a variety of reasons, including due to safety, risk versus benefit profile, exclusivity, competitive landscape, commercialization potential, production limitations or prioritization of their resources. It is possible that substantially all of these therapeutic candidates will never receive regulatory approval and, even if approved, such therapeutic candidates may never be successfully commercialized.

In addition, even if these therapeutic candidates receive regulatory approval in the United States, our partners may never obtain approval or commercialize such therapeutic candidates outside of the United States, which would limit their full market potential and therefore our ability to realize their potential downstream value. Furthermore, approved therapeutic candidates may not achieve broad market acceptance among physicians, patients, the medical community and third-party payors, in which case revenue generated from their sales would be limited. Likewise, our partners have to make decisions about which clinical stage and preclinical therapeutic candidates to develop and advance, and our partners may not have the resources to invest in all of the therapeutic candidates that contain antibodies discovered using our platform, or clinical data and other development considerations may not support the advancement of one or more therapeutic candidates. Decision-making about which therapeutic candidates to prioritize involves inherent uncertainty, and our partners' development program decision-making and resource prioritization decisions, which are outside of our control, may adversely affect the potential value of those partnerships. Additionally, subject to its contractual obligations to us, if one more of our partners is involved in a business combination, the partner might deemphasize or terminate the development or commercialization of any drug candidate that utilizes an OmniAb-derived antibody. If one of our strategic partners terminates its agreement with us, we may find it more difficult to attract new partners.

Our partners' failure to effectively advance, market and sell suitable therapeutic candidates with the antibodies that are discovered using our platform could have a material adverse effect on our business, financial condition, results of operations and prospects, and cause the market price of our common stock to decline. In addition to the inherent uncertainty in drug development addresses above, our ability to forecast our future revenues may be limited.

Our partners may not achieve projected discovery and development milestones and other anticipated key events in the expected timelines or at all, which could have an adverse impact on our business and could cause the price of our common stock to decline.

From time to time, we may make public statements regarding the expected timing of certain milestones and key events, as well as regarding developments and milestones under our partnerships, to the extent that our partners have publicly disclosed such information or permit us to make such disclosures. Our partners may from time to time make statements about their goals and expectations for partnerships with us. The actual timing of these events can vary dramatically due to a number of factors such as delays or failures in our or our current and future partners' discovery and development programs, the amount of time, effort, and resources committed by us and our current and future partners, and the numerous uncertainties inherent in the development of therapeutics. As a result, there can be no assurance that our partners' current and future programs will advance or be completed in the time frames we or they expect. If our partners fail to achieve one or more of these milestones or other key events as planned, our business could be materially and adversely affected and the price of our common stock could decline.

The failure of our partners to meet their contractual obligations to us could adversely affect our business.

Our reliance on our partners poses a number of additional risks, including the risk that they may not perform their contractual obligations to us, in compliance with applicable legal or contractual requirements, in a timely manner or at all; they may not maintain the confidentiality of our proprietary information; and disagreements or disputes could arise that could cause delays in, or termination of, the research, development or commercialization of products using our antibodies or result in litigation or arbitration.

In addition, certain of our partners are large, multinational organizations that run many programs concurrently, and we are dependent on their ability to accurately track and make milestone payments to us pursuant to the terms of our agreements with them. Any failure by them to inform us when milestones are reached and make related payments to us could adversely affect our results of operations.

Moreover, some of our partners are located in markets subject to political and social risk, corruption, infrastructure problems and natural disasters, and are often subject to country-specific privacy and data security risk, as well as burdensome legal and regulatory requirements. Any of these factors could adversely impact their financial condition and results of operations, which could impair their ability to meet their contractual obligations to us, which may have a material adverse effect on our business, financial condition and results of operations.

Our partners have significant discretion in determining when and whether to make announcements, if any, about the status of our partnerships or programs, including about clinical developments and timelines for advancement, and the price of our common stock may decline as a result of announcements of unexpected results or developments.

Our partners have significant discretion in determining when and whether to make announcements about the status of our partnerships, including about preclinical and clinical developments and timelines for advancing antibodies discovered using our platform. Based on contractual obligations, we may not be permitted to disclose the development status and progress of individual therapeutic candidates of our partners, unless and until those partners do so first. Our partners may wish to report such information more or less frequently than we desire to or may not wish to report such information at all, in which case we would not report that information either. In addition, if partners choose to announce a collaboration with us, there is no guarantee that we will recognize revenue in that quarter or even the following quarter, as fees are not necessarily payable to us until our partner begins discovery activities. The price of our common stock may decline as a result of the public announcement of unexpected results or developments in our partnerships, or as a result of our partners withholding such information.

Our commercial success depends on the quality of our antibody discovery platform and technological capabilities and their acceptance by new and existing partners in our market.

We utilize our OmniAb technology platform to discover antibodies for further development and potential commercialization by our partners. As a result, the quality and sophistication of our platform is critical to our ability to conduct our research discovery activities and to deliver more promising antibodies and other drugs and to accelerate and lower the costs of discovery as compared to traditional methods for our partnerships. In particular, our business depends, among other things, on:

- our platform's ability to successfully identify antibodies with therapeutic potential on the desired timeframes;
- our ability to execute on our strategy to enter into new partnerships with new or existing partners with economic terms that are acceptable to us;
- our ability to increase awareness of the capabilities of our technology and solutions;
- our partners' and potential partners' willingness to adopt new technologies;
- whether our platform reliably provides advantages over legacy and other alternative technologies and is perceived by partners to be cost effective;
- the rate of adoption of our technologies by pharmaceutical and biotechnology companies of all sizes and capabilities;
- the prices we charge for our technology access and the research services we perform;
- the relative reliability and robustness of our platform;
- our ability to develop new solutions for partners;
- whether competitors develop a platform that enables antibody discovery more effectively than our platform;
- the status of the market for next-generation biologics, which may become less attractive due to business, competitive or regulatory factors;
- the timing and scope of any approval that may be required by the U.S. Food and Drug Administration ("FDA"), European Medicines Agency ("EMA"), comparable foreign authorities or any other regulatory body to commercialize therapeutic candidates that are developed based on antibodies or other drugs discovered using our platform;
- the impact of our investments in innovation and commercial growth; and
- our ability to further validate our technology through research and accompanying publications.

There can be no assurance that we will successfully address any of these or other factors that may affect the market acceptance of our platform. Failure of antibodies discovered using our platform can occur at any stage of discovery, preclinical or clinical development, and any such failures may reduce our partners' confidence in our platform. We also believe that pharmaceutical and biotechnology companies are likely to be particularly sensitive to defects and errors in the use of our platform, including if our platform fails to deliver meaningful acceleration of certain research timelines accompanied by results at least as good as the results generated using legacy or other alternative technologies. There can be no guarantee that our platform will meet the expectations of pharmaceutical and biotechnology companies. If we are unsuccessful in achieving and maintaining market acceptance of our platform, our business, financial condition, results of operations and prospects could be adversely affected.

Our future success is dependent on the eventual approval and commercialization of products developed by our partners for which we have no control over the clinical development plan, regulatory strategy or commercialization efforts.

Our business model is dependent on the eventual progression of therapeutic candidates discovered or initially developed utilizing our platform into clinical trials and commercialization. This requires us to attract partners and enter into agreements with them that contain obligations for the partners to pay us milestone payments as well as royalties on sales of approved products for the therapeutic candidates they develop that are generated utilizing our platform. Given the nature of our relationships with our partners, we do not control the progression, clinical development, regulatory strategy or eventual commercialization, if approved, of these therapeutic candidates. As a result, our future success and the potential to receive milestones and royalties are entirely dependent on our partners' efforts over which we have no control. Additionally, unless publicly disclosed by our partners, we do not have access to information related to our partners' clinical trial results, including serious adverse events, or ongoing communications with the FDA or other foreign regulatory authorities regarding our partners' current clinical programs, which limits our visibility into how such programs may be progressing. If our partners determine not to proceed with the future development of a drug candidate discovered or initially developed utilizing our platform, or if they implement clinical or regulatory strategies that ultimately do not result in the further development or approval of the therapeutic candidates, we will not receive the benefits of our partnerships, which may have a material and adverse effect on our operations.

In addition, biopharmaceutical development is inherently uncertain and very few therapeutic candidates ultimately progress through clinical development and receive approval for commercialization. If our partners do not receive regulatory approval for a sufficient number of therapeutic candidates originating from our partnerships, we may not be able to sustain our business model. Further, we have little control over how diversified our portfolio of potential milestone payments or royalties will end up being.

In addition, we do not control the timing of disclosure by our partners of any milestones or other information related to any therapeutic candidates generated using our platform. Any disclosure by us or our partners of data or other information regarding any such therapeutic candidates that is perceived as negative may have a material adverse impact on our stock price or overall valuation. Our stock price may also decline as a result of negative clinical trial results, including adverse safety events involving any drug candidate that is subject to one of our partnerships.

If we cannot maintain and expand current partnerships and enter into new partnerships, our future operating results would be adversely affected.

We primarily focus our efforts on the discovery of antibodies for our partners, who can select a target and define the antibody properties needed for therapeutic development or use our technology directly in their own labs. As a result, our success depends on our ability to maintain and expand the number and scope of our partnerships. Many factors may impact the success of these partnerships, including our ability to perform our obligations, our partners' satisfaction with our solutions and technologies, our partners' ability to successfully develop, secure regulatory approval for and commercialize therapeutic candidates using antibodies discovered using our platform, our partners' internal priorities (including fluctuations in research and developments budgets), our partners' resource allocation decisions and competitive opportunities, disagreements with partners, the costs required of either party to the partnerships and related financing needs, and operating, legal and other risks in any relevant jurisdiction. Our existing partners may cease to use our technologies depending on their own technological developments, availability of other competing technologies and internal decisions regarding allocation of time and resources to the discovery and development of therapeutic candidates, over which we have no control. Our existing and future partners may have limited bandwidth to initiate new programs, which could limit their adoption or scale of application of our technologies.

We engage in conversations with companies regarding potential partnerships on an ongoing basis. These conversations may not result in a commercial agreement. Even if an agreement is reached, the resulting relationship may not be successful, including due to our inability to discover any usable antibodies for the selected targets or the antibodies that we do discover may not be successfully developed or commercialized by our partners. In such circumstances, we would not generate any substantial revenues from such a partnership in the form of technology access fees, service fees, milestone payments, royalties or otherwise. Speculation in the industry about our existing or potential partnerships may be a catalyst for adverse speculation about us, or our platform, which can adversely affect our reputation and our business.

We cannot assure investors that we will be able to maintain or expand our existing partnerships or that our technologies will achieve adequate market adoption among new partners. Any failure to increase penetration in our existing markets or new markets would adversely affect our ability to improve our operating results.

We may need to raise additional capital to fund our existing operations and achieve our goals. If we are unable to raise additional capital when needed on acceptable terms or generate cash flows necessary to maintain or expand our operations, we may not be able to compete successfully, which would harm our business, results of operations, and financial condition.

Based on our current business plan, we believe our existing cash and cash equivalents, together with our anticipated cash flows from operations, will be sufficient to meet our working capital and capital expenditure needs over at least the next 12 months. If such cash and cash equivalents, together with our anticipated cash flow from operations, are insufficient to satisfy our liquidity requirements including because of increased expenditures or lower demand for our platform, or the realization of other risks described in this report, we may be required to raise additional capital prior to such time through issuances of public or private equity or debt financings or other capital sources. Such additional financing may not be available on terms acceptable to us or at all.

For example, in December 2023, we entered into an Open Market Sale Agreement (the “Sales Agreement”), with Jefferies LLC (the “Sales Agent”) under which we may, from time to time, sell shares of our common stock having an aggregate offering price of up to \$100.0 million through the Sales Agent (the “ATM Offering”). Sales of our common stock made pursuant to the Sales Agreement, are made under our shelf registration statement on Form S-3 which was filed on December 8, 2023 and declared effective by the SEC on December 18, 2023. However, there can be no assurance that the Agent will be successful in consummating future sales based on prevailing market conditions or in the quantities or at the prices that we deem appropriate. In addition, the Sales Agreement may be terminated by the Sales Agent or us at any time. For the year ended December 31, 2024, we sold 2,771,192 shares of our common stock under the ATM Offering, for net proceeds of \$11.4 million, after deducting commissions.

In any event, we may consider raising additional capital in the future to expand our business, to pursue strategic investments or acquisitions, to take advantage of favorable market conditions or financing opportunities or for other reasons, even if we believe we have sufficient funds for our current or future operating plans.

Our future capital requirements will depend on many factors, including, but not limited to those set forth in “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources.”

The various ways we could raise additional capital carry potential risks. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest may be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Such restrictions could adversely impact our ability to conduct our operations and execute our business plan.

If we are unable to obtain adequate financing, if we require it, when needed or on terms acceptable to us, our ability to continue to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances could be significantly limited, and could have a material adverse effect on our business, financial condition, results of operations and prospects.

In recent periods, we have depended on a limited number of partners for our revenue, the loss of any of which could have an adverse impact on our business.

In recent periods, a limited number of partners accounted for a significant portion of our revenue. For the years ended December 31, 2024 and 2023, three of our partners accounted for 48% and 58% respectively, of our revenue, and 30 and 33 partners accounted for the remaining 52% and 42%, respectively, of our revenue. While moving forward we expect to diversify the number of partners and programs, in the near term these partners represent a large portion of potential revenue. Our license agreements are typically terminable by our partners without penalty with specified notice, which would terminate their access to our technology platform, although we would retain downstream economics on any OmniAb-derived antibody. As a result, if we fail to maintain our relationships with these partners or if these partners discontinue their programs, our future results of operations could be materially and adversely affected.

Our revenue has fluctuated from period to period, and our revenue for any historical period may not be indicative of results that may be expected for any future period.

Service and license revenue are generated by research activities that we perform for our partners and technology access fees, the timing and nature of which are dictated by the commencement of discovery campaigns selected by our partners. We also generate milestone payments upon the achievement of development milestones by our partners with respect to the antibodies discovered using our platform and royalties based on the net sales of any products commercialized by our partners. As a result, we will be prone to fluctuations in our revenue depending on the timing of our entry into license agreements with our partners, our partners initiating discovery programs, and our partners achieving development milestones or commercial sales with respect to therapeutic candidates utilizing antibodies discovered using our platform. The timing and likelihood of payments to us under these agreements is dependent on our partners' successful utilization of the antibodies discovered using our platform, which is outside of our control. Because of these factors, our revenue could vary materially from quarter to quarter from our forecasts.

We have incurred losses on an as-reported basis for the last several years, and we may not be able to generate sufficient revenue to achieve and maintain profitability.

Historically, we have incurred net losses, as reported on a consolidated basis. For the years ended December 31, 2024 and 2023, our revenue was \$26.4 million and \$34.2 million, respectively. For the years ended December 31, 2024 and 2023, our net loss was \$62.0 million and \$50.6 million, respectively. We expect to continue to incur losses for the foreseeable future, and we anticipate these losses will increase substantially as we invest in research and development activities to improve our OmniAb technology platform, market and sell our technologies to existing and new partners, add operational, financial and management information systems and personnel to support our operations and incur costs associated with operating as a public company.

Our expenses could increase beyond expectations for a variety of reasons, including as a result of our growth strategy and the expansion of our operations. We will need to generate significant additional revenue to achieve and sustain profitability and even if we achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. We may never be able to generate sufficient revenue to achieve or sustain profitability and our recent and historical growth should not be considered indicative of our future performance. Our failure to become and remain profitable may have an adverse effect on the value of our company and could impair our ability to raise capital, expand our business and maintain our research and development efforts. A decline in the value of our company could also cause you to lose all or part of your investment.

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

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

- the level of demand for our technology platform and solutions, which may vary significantly;
- the timing and cost of, and level of investment in, research, development and commercialization activities relating to our platform and technology and any of our internal development programs, which may change from time to time;
- the start and completion of programs in which our platform is utilized;
- the timing of and the degree to which our partners successfully develop, secure marketing approvals for and commercialize any therapeutic candidates based on the antibodies discovered using our platform;
- the introduction of new technologies, platform features or software, by us or others in our industry;
- expenditures that we may incur to acquire, develop or commercialize additional platform technologies;
- the degree of competition in our industry and any change in the competitive landscape of our industry, including consolidation among our competitors or future partners;
- the level of demand for any products commercialized by our partners, which may vary significantly;
- natural disasters, outbreaks of disease or public health crises;
- the timing and nature of any future acquisitions or strategic partnerships;
- future accounting pronouncements or changes in our accounting policies; and
- changes in general market and economic conditions and adverse developments with respect to financial institutions and associated liquidity risk.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results and revenues. This variability and unpredictability could result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue or earnings guidance we may provide.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

Our ability to utilize our net operating loss and credit carryovers depends on generating future federal and state taxable income. Consequently, certain net operating loss and tax credit carryforwards presented in our financial statements could be limited and may expire unused. Additionally, under Sections 382 and 383 of Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change,” the corporation’s ability to utilize its pre-change net operating losses and other pre-change tax attributes, such as research tax credits, to offset its future post-change taxable income and taxes may be limited. In general, an “ownership change” occurs if there is a cumulative change in ownership by “5% shareholders” that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. We have not experienced such “ownership changes” in the past, but may experience them in the future due to subsequent shifts in our stock ownership.

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

In addition to our financial results, our management regularly reviews a number of operating and financial metrics, including the number of active partners, the number of active programs, the number and progress of active clinical programs, and the number and commercial progress of approved products, to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. We believe that these metrics are representative of our current business; however, these metrics may not accurately reflect all aspects of our business, and we anticipate that these metrics may change or may be substituted for additional or different metrics as our business grows and as we introduce new solutions. For example, while we believe that the number of active partners metric is a key metric for the performance of our business, there is no guarantee that an increase in the number of active partners will lead to additional programs or additional revenue. Furthermore, while we believe the number of active programs is an indication for potential future revenue, given the long development timelines and the uncertainties of product development, there is no guarantee that an increase in the number of active programs will lead to additional revenue. In addition, we are highly dependent on information provided by our partners as to the status of their development programs. To the extent such information is later shown to be inaccurate, our metrics and forecasts could be materially and adversely affected. The Company has not historically been materially impacted by inaccurate information from partners. If our management fails to review other relevant information or change or substitute the key business metrics they review as our business grows, or if our metrics prove inaccurate or unrepresentative based on information provided by our partners or otherwise, their ability to accurately formulate financial projections and make strategic decisions may be compromised and our business, financial results and future growth prospects may be adversely impacted. To date, the metrics disclosed in our historical filings have not been materially impacted by information from partners that was subsequently found to be inaccurate.

The sizes of the markets and forecasts of market growth for the demand of our OmniAb technology platform and other of our key performance indicators are based on a number of complex assumptions and estimates, and may be inaccurate.

We estimate annual total addressable markets and forecasts of market growth for our platform and technologies and for antibody-based therapeutics generally. We have also developed a standard set of key performance indicators in order to enable us to assess the performance of our business in and across multiple markets, and to forecast future revenue. These estimates, forecasts and key performance indicators are based on a number of complex assumptions, internal and third party estimates and other business data, including assumptions and estimates relating to our ability to generate revenue from the development of new workflows. While we believe our assumptions and the data underlying our estimates and key performance indicators are reasonable, there are inherent challenges in measuring or forecasting such information. As a result, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors and indicators. As a result, our estimates of the annual total addressable market and our forecasts of market growth and future revenue from technology access fees, service fees, milestone payments or royalties may prove to be incorrect, and our key business metrics may not reflect our actual performance. For example, if the annual total addressable market or the potential market growth for our platform is smaller than we have estimated or if the key business metrics we utilize to forecast revenue are inaccurate, it may impair our sales growth and have an adverse impact on our business, financial condition, results of operations and prospects.

We may be unable to manage our current and future growth effectively, which could make it difficult to execute our business strategy.

As we continue to execute on our business strategy, we anticipate further growth in our business operations. This growth requires managing complexities across all aspects of our business, including complexities associated with increased research and development and business development and marketing operations. As we seek to increase the number of our partnered programs, expand the scope of our existing partnerships and further develop our technological capabilities, we may need to incorporate new equipment, implement new technology systems and laboratory processes and hire new personnel with specialized qualifications. Failure to manage this growth or transition could result in turnaround time delays, higher technology development costs, declining technology development quality, deteriorating program management success, 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 platform, and could damage our reputation and the prospects for our business.

To manage our anticipated growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Also, our management team may need to divert a disproportionate amount of its attention away from its day-to-day activities and devote a substantial amount of time to managing our growth. If our management is unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance, and our ability to develop and commercialize our platform and compete effectively, will depend, in part, on our ability to effectively manage increased program demand and the growth in our operations.

Our platform utilizes various species of animals that could contract disease or die and could otherwise subject us to controversy and adverse publicity, which may interrupt our business operations or harm our reputation.

Our platform utilizes animals to discover and produce antibodies. We cannot completely eliminate the risks of animals contracting disease, or a natural or man-made disaster that could cause death to valuable production animals, in our vivarium facilities, or those of the CROs that maintain our mouse and rat colonies. We cannot make any assurance that we or our CROs will be able to contain or reverse any such instance of disease. Although we maintain backup colonies of our animals, disease or death on a broad scale could materially interrupt business operations as animals are a key part of our antibody discovery programs, which could have a material adverse effect on our results of operations and financial condition.

Further, genetic engineering and testing of animals has been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals in the United States, the EU and other jurisdictions have attempted to stop animal testing activities by pressing for legislation and regulation in these areas and by disrupting these activities through protests and other means. To the extent the activities of these groups are successful, our research and development activities and the ability for us and our partners to use our technology platform could be interrupted or delayed, our costs could increase and our reputation could be harmed.

The life sciences and biotech platform technology market is highly competitive, and if we cannot compete successfully with our competitors, we may be unable to increase or sustain our revenue, or sustain profitability.

We face significant competition in the market for technologies that enable the discovery and development of therapeutic antibodies. Competing companies address therapeutic antibody discovery challenges in the industry and have a variety of business models, including the development of internal pipelines of therapeutics, financial investment in partner programs, technology licensing, and the sale of instruments and devices. Examples of technical competition at different steps of our technology platform include:

- in discovery using genetically-engineered rodents, we face technical competition from companies that provide access to similar technologies, such as AbCellera Biologics Inc., Ablexis LLC, Alloy Therapeutics, Inc., Biocytogen Pharmaceuticals (Beijing) Co., Ltd., Nona Biosciences, Leveragen, Inc., Regeneron Pharmaceuticals, Inc. and Twist Bioscience Corporation;
- in the field of single-cell screening, we face technical competition from companies that provide access to similar technologies, such as AbCellera Biologics Inc., Bruker Corporation., HiFiBio Inc., and Sphere Fluidics Ltd.; and
- in ion channel drug discovery, we face technical competition from companies that provide similar technologies, or biological expertise, such as Charles River Labs Inc., Evotec SE, Metrion Biosciences Ltd., and WuXi AppTec.

We also face direct business competition from companies that provide antibody discovery services using technologies such as hybridoma and display. In addition, we compete with a variety of fee-for-service contract research organizations that provide services, in most cases using legacy technologies, that compete with one or more steps in our technology platform.

Our competitors and potential competitors may enjoy a number of competitive advantages over us. For example, these may include discount pricing, longer operating histories, larger customer bases, greater brand recognition and market penetration, greater financial resources, greater technological and research and development resources, better system reliability and robustness, greater selling and marketing capabilities, and integrated manufacturing capabilities.

We may encounter challenges in marketing our solutions with our pricing model, which is structured to capture the potential downstream revenues associated with therapeutic candidates that were discovered using our platform. Our partners and potential partners may prefer one or more pricing models employed by our competitors that involve upfront payments rather than downstream revenues. We may not be able to compete effectively against these organizations. In addition, our competitors and potential competitors may be able to respond more quickly to changes in customer requirements, devote greater resources to the development, promotion and sale of their platforms or instruments than we can or sell their platforms or instruments, or offer solutions competitive with our platform and solutions at prices designed to win significant levels of market share.

In addition, competitors may be acquired by, receive investments from or enter into other commercial relationships with larger, well-established and well-financed companies. Certain of our competitors may be able to secure key inputs from vendors on more favorable terms, devote greater resources to marketing and promotional campaigns, adopt more aggressive pricing policies and devote substantially more resources to technology and platform development than we can. If we are unable to compete successfully against current and future competitors, we may be unable to increase market adoption and sales of our platform, which could prevent us from increasing our revenue or sustaining profitability.

We rely on third parties to host our mouse and rat colonies, and these third parties may not perform satisfactorily which could delay, prevent or impair our partnerships, programs and research and technology development efforts.

We do not own or operate vivarium facilities for our mouse and rat colonies and have no plans to expand our vivarium facilities beyond those that house our chickens. We rely, and expect to continue to rely, on third-party CROs to host our mice and rats and to conduct certain research services for us and our partners, such as animal breeding, genotyping and animal distribution. We have limited control over the performance by these third parties, including with respect to maintaining adequate quality control, quality assurance and qualified personnel, and to performing their services in compliance with applicable scientific and regulatory requirements. If these third parties are unable to continue maintaining our mice and rats in accordance with our specifications or on commercially reasonable terms, or otherwise perform in a substandard manner, the discovery activities for our partners may be delayed. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms or at all. Switching or adding additional vivarium facilities involves additional cost and requires our management's time and focus. In addition, there is a natural transition period when a new facility commences work. As a result, delays may occur, which can materially impact our ability to meet our partners' discovery timelines. Though we carefully manage our relationships with these third parties, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, results of operations, financial condition and prospects.

We have invested, and expect to continue to invest, in research and development efforts that further enhance our antibody discovery platform. Such investments in technology are inherently risky and may affect our operating results. If the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

We have historically dedicated a substantial portion of our resources on the development of our platform and the technology that it incorporates. These investments may involve significant time, risks, and uncertainties, including the risk that the expenses associated with these investments may affect operating results and that such investments may not generate sufficient technological advantage relative to alternatives in the market which would, in turn, impact revenues to offset liabilities assumed and expenses associated with these new investments.

The industry in which we operate changes rapidly as a result of technological and drug developments, which may render our solutions less desirable. We believe that we must continue to invest a significant amount of time and resources in our platform and technology to maintain and improve our competitive position. If we do not achieve the benefits anticipated from these investments, if the achievement of these benefits is delayed, or if our technology platform is not able to accelerate the process of antibody drug discovery as quickly as we anticipate, our revenue and operating results may be adversely affected.

Third-party payor coverage and reimbursement status of newly approved therapeutics is uncertain. Failure to obtain or maintain adequate coverage and reimbursement for current or future products and services could limit our partners' ability to fully commercialize therapeutic candidates generated using our platform, which would decrease our ability to generate revenue.

The availability and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford any therapeutics generated using our platform that our partners may develop and sell. In addition, because the therapeutics we generate may represent new classes of treatments for diseases, we and our partners cannot accurately estimate how such therapeutics would be priced, whether reimbursement could be obtained, whether reimbursement (if available) will be at adequate levels, or any potential revenue generated. Sales of such therapeutics will depend substantially, both domestically and internationally, on the extent to which the costs of such therapeutics are paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors, including government health programs in the United States, such as Medicare and Medicaid. If reimbursement is not available, or is available only to limited levels, our partners may not be able to successfully commercialize some therapeutics generated with our technology. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow our partners to establish or maintain pricing sufficient to realize a sufficient return on their investment in such therapeutics, and may lead to discontinuation or deprioritization of marketing and sales efforts for such products. Changes in the reimbursement landscape may occur, which are outside of our control, and may impact the commercial viability of our technology development services and/or therapeutics generated using our technology.

There is significant uncertainty related to the insurance coverage and reimbursement of newly cleared, authorized or approved therapeutics in the United States, the EU and other jurisdictions. Due to the trend toward value-based pricing and coverage, the increasing influence of health maintenance organizations and additional legislative changes, we expect our partners to experience pricing pressures on therapeutics generated using our platform that our partners may commercialize. The downward pressure on healthcare costs in general, particularly novel therapeutics, has increased and may further increase. As a result, increasingly high barriers are being erected to the entry of new products, which would negatively impact our ability to generate revenues.

Healthcare reform efforts aimed at lowering the price of biopharmaceutical products may impact our ability to maintain sufficient profits.

Payors, whether domestic or foreign, or governmental or private, are developing increasingly sophisticated methods of controlling healthcare costs and those methods are not always specifically adapted for new technologies. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably.

In particular, in the United States, in 2010, the Affordable Care Act (“ACA”) was enacted, which, among other things, subjected biologic products to potential competition by lower-cost biosimilars; implemented a new methodology for calculating rebates owed by manufacturers under the Medicaid Drug Rebate Program for drugs that are inhaled, infused, instilled, implanted or injected; increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program; extended the Medicaid rebate obligation to utilization under Medicaid managed care organizations; subjected manufacturers to new annual fees and taxes for certain branded prescription drugs; and provided incentives to programs that increase the federal government’s comparative effectiveness research. Since its enactment, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the ACA. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Thus, the ACA will remain in effect in its current form.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. For example, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminated the statutory Medicaid drug rebate cap, beginning January 1, 2024. The rebate was previously capped at 100% of a drug’s average manufacturer price. Further, in August 2011, the Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2032.

Further, heightened governmental scrutiny is likely to continue over the manner in which product manufacturers set prices for their marketed products, which has already resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. Most recently, in August 2022, the Inflation Reduction Act of 2022 (“IRA”) was signed into law. This statute marks the most significant action by Congress with respect to the pharmaceutical industry since adoption of the ACA in 2010. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare, with prices that can be negotiated subject to a cap; imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023); redesigns the Medicare Part D benefit (beginning in 2024); and replaces the Part D coverage gap discount program with a new manufacturer discount program (beginning in 2025). The Centers for Medicare & Medicaid Services has published the negotiated prices for the initial ten drugs, which will first be effective in 2026, and has published the list of the subsequent 15 drugs that will be subject to negotiation. The IRA permits the Secretary of the Department of Health and Human Services (“HHS”) to implement many of these provisions through guidance, as opposed to regulation, for the initial years. HHS has and will continue to issue and update guidance as these programs are implemented, although the Medicare drug price negotiation program is currently subject to legal challenges. While the impact of the IRA on the pharmaceutical industry cannot yet be fully determined, it is likely to be significant.

Moreover, individual states in the United States have become increasingly active in developing proposals, passing legislation and implementing regulations designed to control drug pricing, including price or patient reimbursement constraints, discounts, formulary flexibility, marketing cost disclosure, drug price increase disclosure, and other transparency measures. Some states have enacted legislation creating so-called prescription drug affordability boards, which ultimately may attempt to impose price limits on certain drugs in these states.

We expect that additional U.S. federal or foreign healthcare reform measures will be adopted in the future, any of which could limit the amounts that the U.S. federal government or foreign governments will pay for healthcare products and services, which could result in reduced demand for our products and therapeutic candidates, if approved, or additional pricing pressures. If efforts to contain the price of biopharmaceutical products are successful, the magnitude of milestone payments and royalties we would expect to receive in connection with our partners' future prioritization and investment in developing novel biologics may be impacted. For instance, on December 13, 2021, Regulation No 2021/2282 on Health Technology Assessment ("HTA") amending Directive 2011/24/EU, was adopted in the EU. This regulation entered into force in January 2022 and has been applicable since January 2025, with phased implementation based on the type of product, i.e., oncology and advanced therapy medicinal products as of 2025, orphan medicinal products as of 2028, and all other medicinal products by 2030. This regulation intends to boost cooperation among EU member states in assessing health technologies, including new medicinal products, and provide the basis for cooperation at the EU level for joint clinical assessments in these areas. It will permit EU member states to use common HTA tools, methodologies, and procedures across the EU, working together in four main areas, including joint clinical assessment of the innovative health technologies with the highest potential impact for patients, joint scientific consultations whereby developers can seek advice from HTA authorities, identification of emerging health technologies to identify promising technologies early, and continuing voluntary cooperation in other areas. Individual EU member states will continue to be responsible for assessing non-clinical (e.g., economic, social, ethical) aspects of health technology, and making decisions on pricing and reimbursement.

U.S. legislation, sanctions, tariffs, trade restrictions and other foreign regulatory requirements could increase costs and adversely impact the supply of material from foreign CROs and CMOs to us and our partners or our partners' ability to secure government commitments to purchase potential therapies.

We and/or our partners or potential partners currently and may in the future rely on foreign CROs and CMOs, such as WuXi Biologics. Such foreign CROs and CMOs may be subject to U.S. legislation, sanctions, tariffs, trade restrictions and other foreign regulatory requirements which could increase the cost or reduce the supply of material available to us or our partners or potential partners, delay the procurement or supply of such material or have an adverse effect on our or our partners' or potential partners' ability to secure significant commitments from governments to purchase potential therapies. For example, in January 2024, there was Congressional activity, including the introduction of the BIOSECURE Act (H.R. 7085) in the House of Representatives and a substantially similar Senate bill (S.3558). The BIOSECURE Act was passed by the House of Representatives in September 2024. If these bills become law, or similar laws are passed, they would have the potential to severely restrict the ability of U.S. biopharmaceutical companies like us or our partners to purchase services or products from, or otherwise collaborate with, certain Chinese biotechnology companies "of concern" without losing the ability to contract with, or otherwise receive funding from, the U.S. government. In addition, changes by the U.S. and foreign governments in trade policies including the imposition of higher tariffs on imports into the U.S. and other governmental regulations affecting trade between the U.S. and other countries where we and/or our partners conduct business, and any retaliatory actions by other governments, could increase costs, impact the supply of materials and adversely impact our business, financial condition and results of operations.

We rely on a limited number of suppliers for laboratory equipment and materials and may not be able to find replacements or immediately transition to alternative suppliers.

We rely on a limited number of suppliers, or in some cases single suppliers, to provide certain consumables and equipment that we use in our laboratory operations, as well as reagents and other laboratory materials involved in the development of our technology. Fluctuations in the availability and price of laboratory materials and equipment could have an adverse effect on our ability to meet our technology development goals with our partners and thus our results from operations as well as future partnership opportunities. An interruption in our laboratory operations or technology transfer could occur if we encounter delays, quality issues or other difficulties in securing these consumables, equipment, reagents or other materials, and if we cannot then obtain an acceptable substitute. In addition, while we believe suitable additional or alternative suppliers are available to accommodate our operations, if needed, any transition to new or additional suppliers may cause delays in our processing of samples or development and commercialization of our technology. Any such interruption could significantly affect our business, financial condition, results of operations and reputation.

We must adapt to rapid and significant technological change and respond to introductions of new products and technologies by competitors to remain competitive.

We provide our antibody discovery solutions and capabilities in industries that are characterized by significant enhancements and evolving industry standards. As a result, our partners' needs are rapidly evolving. If we do not appropriately innovate and invest in new technologies, our platform may become less desirable in the markets we serve, and our partners could move to new technologies offered by our competitors, or engage in antibody discovery themselves. Without the timely introduction of new solutions and technological enhancements, our offerings will likely become less competitive over time, in which case our competitive position and operating results could suffer. Accordingly, we focus significant efforts and resources on the development and identification of new technologies and markets to further broaden and deepen our capabilities and expertise in antibody drug discovery and development. To the extent we fail to timely introduce new and innovative technologies or solutions, adequately predict our partners' needs or fail to obtain desired levels of market acceptance, our business may suffer and our operating results could be adversely affected.

We depend on our information technology systems, and any failure of these systems could harm our business.

We depend on information technology and telecommunications systems for significant elements of our operations, including our laboratory information management system, our computational biology system, our knowledge management system, our customer reporting, our platform, our advanced automation systems, and advanced application software. We have installed, and expect to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including for example, systems handling human resources, financial controls and reporting, contract management, regulatory compliance and other infrastructure operations. These information technology and telecommunications systems support a variety of functions, including laboratory operations, data analysis, quality control, customer service and support, billing, research and development activities, scientific and general administrative activities. A significant risk in implementing these systems, for example, is the integration of separate information technology and telecommunications systems.

Information technology and telecommunications systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious software, bugs or viruses, human acts and natural disasters. Despite network security and back-up measures, our servers are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive problems. Any disruption or loss of information technology or telecommunications systems on which critical aspects of our operations depend could have an adverse effect on our business and our reputation, and we may be unable to regain or repair our reputation in the future.

Our success is dependent on our ability to attract and retain highly qualified management and other scientific and engineering personnel.

Our success depends in part on our continued ability to attract, retain, manage, and motivate highly qualified management, scientific and engineering personnel, and we face significant competition for experienced personnel. We are highly dependent upon our senior management, as well as our senior scientists and engineers and other members of our management team. The individual and collective efforts of these employees will be important as we continue to develop and market our platform and technology. The loss or incapacity of existing members of our senior management team could adversely affect our operations if we experience difficulties in hiring qualified successors. Although we intend to execute employment agreements or offer letters with each member of our senior management team, these agreements will be terminable at will with or without notice and, therefore, we may not be able to retain their services as expected. We do not currently maintain "key person" life insurance on the lives of our executives or any of our employees. This lack of insurance means that we may not have adequate compensation for the loss of the services of these individuals.

We may not be able to attract or retain qualified scientists and engineers in the future due to the competition for qualified personnel among life science businesses. We also face competition from universities and public and private research institutions in recruiting and retaining highly qualified scientific and engineering personnel. We may have difficulties locating, recruiting or retaining qualified salespeople. Recruiting and retention difficulties can limit our ability to support our research and development and sales programs. A key risk in this area, for example, is that certain of our employees are at-will, which means that either we or the employee may terminate their employment at any time.

We have made technology acquisitions and expect to acquire businesses or assets or make investments in other companies or technologies that could negatively affect our operating results, dilute our stockholders' ownership, or cause us to incur debt or significant expense.

Our business includes numerous acquisitions completed by our former parent Ligand, including the acquisition of Crystal Bioscience in October 2017, Ab Initio in July 2019, the ion channel platform through the acquisition of the core assets of Icagen in April 2020, xCella Biosciences in September 2020, and Taurus Biosciences in September 2020. We expect to pursue additional acquisitions of businesses and assets in the future. We may not be able to find suitable partners or acquisition or asset purchase candidates in the future, and we may not be able to complete such transactions on favorable terms, if at all. The competition for strategic partners or acquisition candidates may be intense, and the negotiation process will be time-consuming and complex. If we make any additional acquisitions, we may not be able to integrate these acquisitions successfully into our existing business, these acquisitions may not strengthen our competitive position, the transactions may be viewed negatively by partners or investors, we may be unable to retain key employees of any acquired business, relationships with key suppliers, manufacturers or partners of any acquired business may be impaired due to changes in management and ownership, and we could assume unknown or contingent liabilities. In addition, we will likely experience significant charges to earnings in connection with our efforts, if any, to consummate acquisitions. For transactions that are ultimately not consummated, these charges may include fees and expenses for investment bankers, attorneys, accountants and other advisors in connection with our efforts. Even if our efforts are successful, we may incur, as part of a transaction, substantial charges for closure costs associated with elimination of duplicate operations and facilities and acquired in process research and development charges. In either case, the incurrence of these charges could adversely affect our results of operations for particular quarterly or annual periods. Any future acquisitions also could result in the incurrence of debt, contingent liabilities or future write-offs of intangible assets or goodwill, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects. We cannot guarantee that we will be able to fully recover the costs of any acquisition.

Integration of an acquired company also may disrupt ongoing operations and require management resources that we would otherwise focus on developing our existing business. We may not realize the anticipated benefits of any acquisition, technology license, strategic alliance or joint venture. We also may experience losses related to investments in other companies, which could have a material adverse effect on our business, financial condition, results of operations and prospects. Acquisitions may also expose us to a variety of international and business related risks, including intellectual property, regulatory laws, local laws, tax and accounting.

To finance any acquisitions or asset purchase, we may choose to issue securities as consideration, which would dilute the ownership of our stockholders. Additional funds may not be available on terms that are favorable to us, or at all. If the price of our common stock is low or volatile, we may not be able to acquire companies or assets using our securities as consideration.

If our operating facilities become damaged or inoperable or if we move or are otherwise required to vacate our facilities, our ability to conduct and pursue our research and development efforts may be jeopardized.

Our scientific and engineering research and development and testing is conducted at our facilities located in Emeryville, California, Durham, North Carolina, and Tucson, Arizona. Our facilities and equipment could be harmed or rendered inoperable or inaccessible by natural or man-made disasters or other circumstances beyond our control, including fire, earthquake, power loss, communications failure, war or terrorism, or another catastrophic event, such as a pandemic or similar outbreak or public health crisis, which may render it difficult or impossible for us to support our partners and develop updates, upgrades and other improvements to our platform, advanced automation systems, and advanced application and workflow software for some period of time. The inability to address system issues could develop if our facilities are inoperable or suffer a loss of utilization for even a short period of time, may result in the loss of partners or harm to our reputation, and we may be unable to regain those partners or repair our reputation in the future. Furthermore, our facilities and the equipment we use to perform our research and development work could be unavailable or costly and time-consuming to repair or replace. It would be difficult, time-consuming and expensive to rebuild our facilities, to locate and qualify a new facility or license or transfer our proprietary technology to a third party. Even in the event we are able to find a third party to assist in research and development efforts, we may be unable to negotiate commercially reasonable terms to engage with the third party.

We carry insurance for damage to our property and the disruption of our business, but this insurance may not cover all of the risks associated with damage or disruption to our business, may not provide coverage in amounts sufficient to cover our potential losses and may not continue to be available to us on acceptable terms, if at all.

Our insurance policies are expensive and protect us only from some business risks, which leaves us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter and our policies have limits and significant deductibles. Some of the policies we currently maintain include general liability, property, umbrella and directors' and officers' insurance.

Any additional insurance coverage we acquire in the future, may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. A successful liability claim or series of claims in which judgments exceed our insurance coverage could adversely affect our business, financial condition, results of operations and prospects, including preventing or limiting the use of our platform to discover antibodies.

We also expect that operating as a public company will make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our Board, our Board committees or as executive officers. We do not know, however, if we will be able to maintain existing insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our business, financial condition, results of operations and prospects.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.

In the ordinary course of our business, we generate and store sensitive data, including research data, intellectual property and proprietary business information owned or controlled by ourselves or our employees, partners and other parties. We manage and maintain our applications and data utilizing a combination of on-site systems and cloud-based data centers. We utilize external security and infrastructure vendors to manage parts of our data centers. These applications and data encompass a wide variety of business-critical information, including research and development information, commercial information and business and financial information. We face a number of risks relative to protecting this critical information, including loss of access risk, inappropriate use or disclosure, accidental exposure, unauthorized access, inappropriate modification and the risk of our being unable to adequately monitor, audit, and modify our controls over our critical information. This risk extends to the third party vendors and subcontractors we use to manage this sensitive data or otherwise process it on our behalf.

Attacks upon information technology systems are increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives and expertise. Further, to the extent our employees are working remotely, additional risks may arise as a result of depending on the networking and security in place in the remote environments. Furthermore, because the techniques used to obtain unauthorized access to, infiltrate, or sabotage systems change frequently and often are not recognized until after they occur, we may be unable to anticipate these exploits or implement adequate preventative measures. We may experience security breaches that may remain undetected for an extended period. Our third-party service providers and partners are also subject to these heightened risks. The secure processing, storage, maintenance and transmission of this critical information are vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take reasonable measures to protect sensitive data from unauthorized access, use or disclosure, our information technology and infrastructure and those of our third-party service providers, strategic partners and other contractors or consultants are vulnerable to attack, damage and interruption from viruses or other malware (e.g. ransomware), malicious code, natural disasters, terrorism, war, telecommunication and electrical failures, hacking, cyberattacks, phishing attacks and other social engineering schemes, employee theft or misuse, human error, fraud, denial or degradation of service attacks, sophisticated nation-state and nation-state-supported actors or unauthorized access or use by persons inside our organization, or persons with access to systems inside our organization.

We and our third-party service providers and partners are from time to time subject to cyberattacks and security incidents. While we do not believe that we have experienced any significant system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations, whether due to a loss, corruption or unauthorized disclosure of our trade secrets, personal information or other proprietary or sensitive information or other similar disruptions. It could also expose us to risks, including an inability to provide our services and fulfill contractual demands, and could cause management distraction and the obligation to devote significant financial and other resources to mitigate such problems, which would increase our future information security costs, including through organizational changes, deploying additional personnel, reinforcing administrative, physical and technical safeguards, further training of employees, changing third-party vendor control practices and engaging third-party subject matter experts and consultants and reduce the demand for our technology and services.

If a security breach or other incident were to result in the unauthorized access to or unauthorized use, disclosure, release or other processing of personal information, it may be necessary to notify individuals, governmental authorities, supervisory bodies, the media and other parties pursuant to privacy and security laws. Any security compromise affecting us, our service providers, partners, other contractors, consultants, or our industry, whether real or perceived, could harm our reputation, erode confidence in the effectiveness of our security measures and lead to regulatory scrutiny. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or systems, or inappropriate disclosure of confidential or proprietary or personal information, we could incur liability, including litigation exposure, penalties and fines, we could become the subject of regulatory action or investigation, our competitive position could be harmed and the further development and commercialization of our products and services could be delayed. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our business. Furthermore, federal, state and international laws and regulations can expose us to enforcement actions and investigations by regulatory authorities, and potentially result in regulatory penalties, fines and significant legal liability, if our information technology security efforts fail. We may also be exposed to a risk of loss or litigation and potential liability, which could materially and adversely affect our business, results of operations or financial condition. Additionally, although we maintain cybersecurity insurance coverage, we cannot be certain that such coverage will be adequate for data security liabilities actually incurred, will cover any indemnification claims against us relating to any incident, will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could adversely affect our reputation, business, financial condition and results of operations.

Our business could become subject to more extensive government regulation than we currently anticipate, and regulatory compliance obligations and the investigational exemption and approval processes to which our animals may become subject are expensive, time-consuming and uncertain both in timing and in outcome.

We believe our operations are currently subject to limited direct regulation by the FDA, comparable foreign authorities or other regulatory bodies. However, our business could in future become subject to more direct oversight by the FDA, EMA or other comparable domestic or international agencies. For example, we may be subject to evolving and variable regulations governing the production of genetically engineered organisms. In particular, the FDA regulates animals whose genomes have been intentionally altered, and the FDA considers such alterations to be new animal drugs that may require approvals or exemptions in order to be commercially marketed or for investigational use in the United States. The FDA has previously advised us that such approvals or exemptions were not required with respect to our OmniChickens designed to produce human immunoglobulin in light of the early stage of our research. However, the FDA may determine that we are not in compliance with the conditions imposed upon us to avoid the requirement for such approvals or exemptions at present or we may later be required to obtain such approvals or exemptions. Furthermore, while we have no active plans to operate a manufacturing facility designed to comply with current good manufacturing practices (“cGMPs”), future market pressures or the lack of available capacity at cGMP manufacturing facilities may necessitate our entry into this market. Complying with such regulations may be expensive, time-consuming and uncertain, and if we fail to comply with any applicable requirements enforced by the FDA with respect to our intentionally genetically altered animals or otherwise, we may be subject to administratively or judicially imposed sanctions, including restrictions on our products or operations, warning or untitled letters, civil or criminal penalties, injunctions, product seizures, product detentions, import bans, product recalls, or adverse publicity requirements, any of which could have an adverse effect on our business, financial condition and operating results.

Our business operations and current and future relationships with investigators, healthcare professionals, and partners may be subject to applicable fraud and abuse and other healthcare laws and regulations, which could expose us and/or our partners to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare professionals, physicians and third-party payors will play a primary role in the recommendation and prescription of any therapeutic candidates generated by our platform for which our partners obtain marketing approval. Our arrangements with our partners may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we conduct our business. Restrictions under applicable federal, state and foreign healthcare laws and regulations, include the following:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the U.S. federal False Claims Act and civil monetary penalties laws, which, among other things, impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. The government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;
- the U.S. federal Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or service. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the U.S. Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid or the Children’s Health Insurance Program to report to the Department of Health and Human Services information related to certain financial interactions with physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other non-physician practitioners (physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists, anesthesiology assistants and certified nurse midwives), and teaching hospitals, as well as the ownership and investment interests of physicians and their immediate family members;
- analogous state laws and regulations, such as state anti-kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; and some state laws require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other healthcare professionals or marketing expenditures and pricing information; and
- EU and other foreign law equivalents of each of the laws, including reporting requirements detailing interactions with and payments to healthcare providers.

Ensuring that our business arrangements with third parties comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities may conclude that our or our partners’ business practices do not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our or our partners’ operations were to be found to be in violation of any of these laws or any other governmental regulations that may apply, we and/or our partners may be subject to the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, individual imprisonment, contractual damages, reputational harm, diminished profits and future earnings, additional reporting requirements or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. Further, defending against any such actions can be costly, time consuming and may require significant personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

Changes in and actual or perceived failures to comply with applicable data privacy, security and protection laws, regulations, standards and contractual obligations may adversely affect our business, operations and financial performance.

We and our partners may be subject to federal, state, and foreign laws and regulations that govern data privacy and security. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an increasing focus on privacy and data protection issues, which may affect our business and may increase our compliance costs and exposure to liability. In the United States, numerous federal and state laws and regulations govern the collection, use, disclosure, and protection of personal information, including state data breach notification laws, federal and state health information privacy laws, and federal and state consumer protection laws. Each of these laws is subject to varying interpretations by courts and government agencies, creating complex compliance issues. If we fail to comply with applicable laws and regulations we could be subject to penalties or sanctions, including criminal penalties if we knowingly obtain or disclose individually identifiable health information from a covered entity in a manner that is not authorized or permitted by such laws.

In the U.S., HIPAA imposes, among other things, certain standards relating to the privacy, security, transmission and breach reporting of individually identifiable health information. We may obtain health information from third parties (including research institutions from which we obtain patient health information) that are subject to privacy and security requirements under HIPAA. Depending on the facts and circumstances, we could be subject to significant penalties if we violate HIPAA. Certain states have also adopted comparable privacy and security laws and regulations, which govern the privacy, processing and protection of health-related and other personal information. Such laws and regulations will be subject to interpretation by various courts and other governmental authorities, thus creating potentially complex compliance issues for us and our future customers and strategic partners. For example, the California Consumer Privacy Act, as amended by the California Privacy Rights Act (collectively, the “CCPA”) requires covered businesses that process the personal information of California residents to, among other things: (i) provide certain disclosures to California residents regarding the business’s collection, use, and disclosure of their personal information; (ii) receive and respond to requests from California residents to access, delete, and correct their personal information, or to opt out of certain disclosures of their personal information; and (iii) enter into specific contractual provisions with service providers that process California resident personal information on the business’s behalf. Similar laws have passed in other states and are continuing to be proposed in other states and at the federal level, reflecting a trend toward more stringent privacy legislation in the United States. The enactment of such laws could have potentially conflicting requirements that would make compliance challenging. In the event that we are subject to or affected by HIPAA, the CCPA, or other domestic privacy and data protection laws, any liability from failure to comply with the requirements of these laws could adversely affect our financial condition.

We are also or may become subject to rapidly evolving data protection laws, rules and regulations in foreign jurisdictions. For example, the European Union General Data Protection Regulation (“GDPR”) governs certain collection and other processing activities involving personal data about individuals in the European Economic Area (“EEA”). Among other things, the GDPR imposes requirements regarding the security of personal data, the rights of data subjects to access and delete personal data, requires having lawful bases on which personal data can be processed, includes requirements relating to the consent of individuals to whom the personal data relates, requires detailed notices for clinical trial participants and investigators and regulates transfers of personal data from the EEA to third countries that have not been found to provide adequate protection to such personal data, including the United States. The GDPR imposes substantial fines for breaches and violations (up to the greater of €20.0 million or 4% of our annual global revenue). The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies and obtain compensation for damages resulting from violations of the GDPR.

Among other requirements, the GDPR regulates transfers of personal data subject to the GDPR to third countries that have not been found to provide adequate protection to such personal data, including the United States, and the efficacy and longevity of current transfer mechanisms between the EEA and the United States remains uncertain. Case law from the Court of Justice of the European Union (“CJEU”) states that reliance on the standard contractual clauses - a standard form of contract approved by the European Commission as an adequate personal data transfer mechanism - alone may not necessarily be sufficient in all circumstances and that transfers must be assessed on a case-by-case basis. On July 10, 2023, the European Commission adopted its Adequacy Decision in relation to the new EU-US Data Privacy Framework (“DPF”), rendering the DPF effective as a GDPR transfer mechanism to U.S. entities self-certified under the DPF. We expect the existing legal complexity and uncertainty regarding international personal data transfers to continue. In particular, we expect the DPF Adequacy Decision to be challenged and international transfers to the United States and to other jurisdictions more generally to continue to be subject to enhanced scrutiny by regulators. As a result, we may have to make certain operational changes and we will have to implement revised standard contractual clauses and other relevant documentation for existing data transfers within required time frames.

Further, from January 1, 2021, companies have been subject to the GDPR and also the UK GDPR, which, together with the amended UK Data Protection Act 2018, retains the GDPR in national law of the United Kingdom (“UK”). The UK GDPR mirrors the fines under the GDPR, e.g., fines up to the greater of €20.0 million (£17.5 million) or 4% of global turnover. On October 12, 2023, the UK Extension to the DPF came into effect (as approved by the UK Government), as a data transfer mechanism from the UK to U.S. entities self-certified under the DPF. As we continue to expand into other foreign countries and jurisdictions, we may be subject to additional laws and regulations that may affect how we conduct business.

Further, we use artificial intelligence, machine learning, and automated decision-making technologies (collectively, “AI Technologies”) throughout our business. The regulatory framework for AI Technologies is rapidly evolving as many federal, state and foreign government bodies and agencies have introduced or are currently considering additional laws and regulations. Additionally, existing laws and regulations may be interpreted in ways that would affect the operation of our AI Technologies. As a result, implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet determine the impact future laws, regulations, standards, or market perception of their requirements may have on our business and may not always be able to anticipate how to respond to these laws or regulations.

Already, certain existing legal regimes (e.g., relating to data privacy) regulate certain aspects of AI Technologies, and new laws regulating AI Technologies either entered into force in the United States and the EU in 2024 or are expected to enter into force in 2025. In the United States, the Trump administration has rescinded an executive order relating to AI Technologies that was previously implemented by the Biden administration. The Trump administration may continue to rescind other existing federal orders and/or administrative policies relating to AI Technologies, or may implement new executive orders and/or other rule making relating to AI Technologies in the future. Any such changes at the federal level could require us to expend significant resources to modify our products, services, or operations to ensure compliance or remain competitive. U.S. legislation related to AI Technologies has also been introduced at the federal level and is advancing at the state level. For example, California Privacy Protection Agency is currently in the process of finalizing regulations under the CCPA regarding the use of automated decision-making. Such additional regulations may impact our ability to develop, use and commercialize AI Technologies in the future. California also enacted seventeen new laws in 2024 that further regulate use of AI Technologies and provide consumers with additional protections around companies’ use of AI Technologies, such as requiring companies to disclose certain uses of generative AI. Other states have also passed AI-focused legislation, such as Colorado’s Artificial Intelligence Act, which will require developers and deployers of “high-risk” AI systems to implement certain safeguards against algorithmic discrimination, and Utah’s Artificial Intelligence Policy Act, which establishes disclosure requirements and accountability measures for the use of generative AI in certain consumer interactions.

In Europe, on May 21, 2024, the European Union legislators approved the EU Artificial Intelligence Act (the “EU AI Act”), which establishes a comprehensive, risk-based governance framework for artificial intelligence in the EU market. The EU AI Act enters into force on August 2, 2024, and the majority of the substantive requirements will apply from August 2, 2026. The EU AI Act will apply to companies that develop, use and/or provide AI in the EU and includes requirements around transparency, conformity assessments and monitoring, risk assessments, human oversight, security, accuracy, general purpose AI and foundation models, and proposes fines for breach of up to 7% of worldwide annual turnover. In addition, on September 28, 2022, the European Commission proposed two Directives seeking to establish a harmonized civil liability regime for AI in the EU in order to facilitate civil claims in respect of harm caused by AI and to include AI-enabled products within the scope of the EU’s existing strict product liability regime. Once fully applicable, the EU AI Act and the Liability Directives will have a material impact on the way AI is regulated in the EU. Recent case law from the CJEU has taken an expansive view of the scope of the GDPR’s requirements around automated decision making and introduced uncertainty in the interpretation of these rules. The EU AI Act, and developing interpretation and application of the GDPR in respect of automated decision making, together with developing guidance and/or decisions in this area, may affect our use of AI Technologies and our ability to provide, improve or commercialize our business, require additional compliance measures and changes to our operations and processes, result in increased compliance costs and potential increases in civil claims against us, and could adversely affect our business, operations and financial condition.

It is possible that further new laws and regulations will be adopted in the United States and in other non-U.S. jurisdictions, or that existing laws and regulations, including competition and antitrust laws, may be interpreted in ways that would limit our ability to use AI Technologies for our business, or require us to change the way we use AI Technologies in a manner that negatively affects the performance of our business and the way in which we use AI Technologies. We may need to expend resources to adjust our operations in certain jurisdictions if the laws, regulations, or decisions are not consistent across jurisdictions. Further, the cost to comply with such laws, regulations, or decisions and/or guidance interpreting existing laws, could be significant and would increase our operating expenses (such as by imposing additional reporting obligations regarding our use of AI Technologies). Such an increase in operating expenses, as well as any actual or perceived failure to comply with such laws and regulations, could adversely affect our business, financial condition and results of operations.

Compliance with applicable data privacy and security laws, rules and regulations could require us to take on more onerous obligations in our contracts, require us to engage in costly compliance exercises, restrict our ability to collect, use and disclose data, or in some cases, impact our or our partners' ability to operate in certain jurisdictions. Each of these constantly evolving laws can be subject to varying interpretations. If we fail to comply with any such laws, rules or regulations, we may face government investigations and/or enforcement actions, fines, civil or criminal penalties, private litigation or adverse publicity that could adversely affect our business, financial condition and results of operations.

Our portfolio of investments or bank deposits may be subject to market, interest and credit risk that may reduce their value and adversely affect our business, results of operations and financial condition.

The value of our investments may decline due to increases in interest rates, downgrades of the bonds and other securities included in our commercial money market account portfolio and instability in the global financial markets that reduces the liquidity of securities included in our portfolio. In addition, in 2023 the closures of financial institutions and their placement into receivership with the Federal Deposit Insurance Corporation ("FDIC") created bank-specific and broader financial institution liquidity risk and concerns. Future adverse developments with respect to specific financial institutions or the broader financial services industry may impair our ability to access capital needed to support near-term working capital needs, whether from our existing investment and deposit accounts and credit facilities or otherwise, and may lead to market-wide liquidity shortages and create additional market and economic uncertainty. Furthermore, a possible recession and continuing inflation concerns has and may continue to adversely affect the financial markets in some or all countries worldwide. Each of these events may cause us to record charges to reduce the carrying value of our investment portfolio or sell investments for less than our acquisition cost. Although we attempt to mitigate these risks through diversification of our investments, the value of our investments may nevertheless decline, and our ability to fund our near-term and long-term working capital needs to support our business and operating plans may be adversely affected. In addition, any decline in available funding or access to our cash and liquidity resources could also result in breaches of our financial and/or contractual obligations or result in violations of federal or state wage and hour laws.

Risks Related to the Separation and Distribution and Our Relationship with Ligand

If the Distribution, together with certain related transactions, failed to qualify as a reorganization under Sections 355 and 368(a)(1)(D) of the Code, or the Merger or other transactions caused Section 355(e) of the Code to apply to the Distribution, Ligand could incur significant tax liabilities, and OmniAb could be required to indemnify Ligand for taxes that could be material pursuant to indemnification obligations under the Tax Matters Agreement.

Ligand received a tax opinion from its outside tax counsel to the effect that the Distribution, together with certain related transactions, qualified as a reorganization under Sections 355 and 368(a)(1)(D) of the Code and that the Merger would not cause Section 355(e) of the Code to apply to the Distribution.

The tax opinion was delivered in connection with the closing of the Merger and was based on, among other things, certain facts, assumptions, representations and undertakings from Ligand and OmniAb, including those regarding the past and future conduct of the companies' respective businesses and other matters. If any of these facts, assumptions, representations, or undertakings are incorrect or not satisfied, Ligand may not be able to rely on the opinion, and Ligand could be subject to significant U.S. federal income tax liabilities. In addition, the opinion is not binding on the IRS or the courts and notwithstanding the opinion, the IRS could determine on audit that the Distribution, together with certain related transactions, does not qualify as a reorganization if it determines that any of the facts, assumptions, representations or undertakings on which the opinion is based are not correct or have been violated or that the Distribution, together with certain related transactions, should be taxable for other reasons, including as a result of a significant change in stock or asset ownership of Ligand or OmniAb after the Distribution.

If the Distribution, together with certain related transactions, is ultimately determined not to qualify as a reorganization, the Distribution could be treated as a taxable disposition of shares of OmniAb stock by Ligand. In such case, Ligand could incur significant U.S. federal income tax liabilities.

Under the Tax Matters Agreement that OmniAb entered into with Ligand, OmniAb is generally required to indemnify Ligand against certain taxes incurred by Ligand that arise in connection with the Distribution as a result of certain actions or omissions by OmniAb. Further, even if OmniAb is not responsible for tax liabilities of Ligand under the Tax Matters Agreement, OmniAb nonetheless could be liable under applicable U.S. federal tax law for such liabilities if Ligand were to fail to pay them. If OmniAb is required to pay any liabilities under the circumstances set forth in the Tax Matters Agreement or pursuant to applicable tax law, the amounts may be significant.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our platform and technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technologies or a platform similar or identical to ours, and our ability to successfully sell our platform and services may be impaired.

We rely on patent protection, as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions, to protect our proprietary technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep a competitive advantage. If we fail to protect our intellectual property, third parties may be able to compete more effectively against us. In addition, we may incur substantial litigation costs in our attempts to recover or restrict the use of our intellectual property.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate coverage to exclude our competitors from making products or providing services claimed in our patents, 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.

Our success depends in large part on our ability to obtain and maintain adequate protection of the intellectual property we may own solely and jointly with others or otherwise have rights to, particularly patents, in the United States and in other countries with respect to our platform, our software and our technologies, without infringing the intellectual property rights of others.

We strive to protect and enhance the proprietary technologies that we believe are important to our business, including seeking patents intended to cover our platform and related technologies and uses thereof, as we deem appropriate. Certain of our patents and patent applications in the United States and certain foreign jurisdictions relate to our technology. However, obtaining and enforcing patents in our industry is costly, time-consuming and complex, and we may fail to apply for patents on important products and technologies in a timely fashion or at all, or we may fail to apply for patents in potentially relevant jurisdictions. There can be no assurance that the claims of our patents (or any patent application that issues as a patent), will exclude others from making, using, importing, offering for sale, or selling our products or services that are substantially similar to ours. We also rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. In countries where we have not sought and do not seek patent protection, third parties may be able to manufacture and sell our technology without our permission, and we may not be able to stop them from doing so. We may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

It is possible that none of our pending patent applications will result in issued patents in a timely fashion or at all, and even if patents are granted, they may not provide a basis for intellectual property protection of commercially viable products or services, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties or deemed unenforceable by a court. It is possible that others will design around our current or future patented technologies. As a result, our owned and licensed patents and patent applications comprising our patent portfolio may not provide us with sufficient rights to exclude others from commercializing technology and products similar to any of our technology.

It is possible that in the future some of our patents, licensed patents or patent applications may be challenged in court in the United States or outside of the United States, at the United States Patent and Trademark Office (“USPTO”) or in proceedings before the patent offices of other jurisdictions. We may not be successful in defending any such challenges made against our patents or patent applications. Any successful third party challenge to our patents could result in loss of exclusivity, patent claims being narrowed, or the unenforceability or invalidity of such patents, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, limit the duration of the patent protection of our technology, and increase competition to our business. We may have to challenge the patents or patent applications of third parties. The outcome of patent litigation or other proceedings can be uncertain, and any attempt by us to enforce our patent rights against others or to challenge the patent rights of others may not be successful, or, if successful, may take substantial time and involve substantial cost, and may divert our efforts and attention from other aspects of our business.

Any changes we make to our technology, including changes that may be required for commercialization or that cause them to have what we view as more advantageous properties, may not be covered by our existing patent portfolio, and we may be required to file new applications and/or seek other forms of protection for any such alterations to our technology. There can be no assurance that we would be able to secure patent protection that would adequately cover an alternative to our technology.

The patent positions of life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States or elsewhere. Courts frequently render opinions in the biotechnology field that may affect the patentability of certain inventions or discoveries.

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

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

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

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

Additionally, on June 1, 2023, the European Union Patent Package (EU Patent Package) regulations were implemented with the goal of providing a single pan-European Unitary Patent and a new European Unified Patent Court (UPC) for litigation involving European patents. As a result, all European patents, including those issued prior to ratification of the EU Patent Package, now by default automatically fall under the jurisdiction of the UPC. It is uncertain how the UPC will impact granted European patents in the biotechnology and pharmaceutical industries. Our European patent applications, if issued, could be challenged in the UPC. During the first seven years of the UPC's existence, the UPC legislation allows a patent owner to opt its European patents out of the jurisdiction of the UPC. We may decide to opt out our future European patents from the UPC, but doing so may preclude us from realizing the benefits of the UPC. Moreover, if we do not meet all of the formalities and requirements for opt-out under the UPC, our future European patents could remain under the jurisdiction of the UPC. The UPC will provide our competitors with a new forum to centrally revoke our European patents, and allow for the possibility of a competitor to obtain pan-European injunction. Such a loss of patent protection could have a material adverse impact on our business and our ability to commercialize our technology and product candidates and, resultantly, on our business, financial condition, prospects and results of operations.

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

Issued patents directed to our platform and technology could be found invalid or unenforceable if challenged in court or before administrative bodies in the United States or abroad.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability. Some of our patents or patent applications (including licensed patents) may be challenged at a future point in time in opposition, derivation, reexamination, inter partes review, post-grant review or interference. Any successful third party challenge to our patents in this or any other proceeding could result in the unenforceability or invalidity of such patents or amendment to our patents in such a way that any resulting protection may lead to increased competition to our business, which could harm our business. In addition, in patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on certain aspects of our platform technologies. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future products.

We may not be aware of all third party intellectual property rights potentially relating to our platform or technology. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until approximately 18 months after filing or, in some cases, not until such patent applications issue as patents. We or our licensors might not have been the first to make the inventions included in each of our pending patent applications and we or our licensors might not have been the first to file patent applications for these inventions. There is also no assurance that all of the potentially relevant prior art relating to our patents and patent applications or licensed patents and patent applications has been found, which could be used by a third party to challenge their validity, or prevent a patent from issuing from a pending patent application.

To determine the priority of these inventions, we may have to participate in interference proceedings, derivation proceedings or other post-grant proceedings declared by the USPTO that could result in substantial cost to us. The outcome of such proceedings is uncertain. No assurance can be given that other patent applications will not have priority over our patent applications. In addition, changes to the patent laws of the United States allow for various post-grant opposition proceedings that have not been extensively tested, and their outcome is therefore uncertain. Furthermore, if third parties bring these proceedings against our patents, we could experience significant costs and management distraction.

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

We are party to royalty-bearing license agreements that grant us rights to practice certain patent rights that are related to our systems, including our microcapillary assay technology, methods for selecting agents that bind to transmembrane receptors in a conformationally selective manner, and bovine antibody humanization technology. We may need to obtain additional licenses from others to advance our research, development and commercialization activities. Some of our license agreements impose, and we expect that any future in-license agreements will impose, various development, diligence, commercialization and other obligations on us. We may enter into engagements in the future, with other licensors or other third parties under which we obtain certain intellectual property rights relating to our platform and technology. These engagements may take the form of an exclusive license or purchase of intellectual property rights or technology from third parties. Our rights to use the technology we license are subject to the continuation of and compliance with the terms of those agreements. In some cases, we may not control the prosecution, maintenance or filing of the patents to which we hold licenses, or the enforcement of those patents against third parties. Moreover, disputes may arise with respect to our licensing or other upstream agreements, including:

- the scope of rights granted under the agreements and other interpretation-related issues;

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

In spite of our efforts to comply with our obligations under our in-license agreements, our licensors might conclude that we have materially breached our obligations under our license agreements and might therefore, including in connection with any aforementioned disputes, terminate the relevant license agreement, thereby removing or limiting our ability to develop and commercialize technology covered by these license agreements. If any such in-license is terminated, or if the licensed patents fail to provide the intended exclusivity, competitors or other third parties might have the freedom to market or develop technologies similar to ours. In addition, absent the rights granted to us under our license agreements, we may infringe the intellectual property rights that are the subject of those agreements, we may be subject to litigation by the licensor, and if such litigation by the licensor is successful we may be required to pay damages to our licensor, or we may be required to cease our development and commercialization activities that are deemed infringing, and in such event we may ultimately need to modify our activities or technologies to design around such infringement, which may be time- and resource-consuming, and which ultimately may not be successful. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

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

If we cannot acquire or license rights to use technologies on reasonable terms or if we fail to comply with our obligations under such agreements, we may not be able to commercialize new technologies or services in the future and our business could be harmed.

In the future, we may identify third party intellectual property and technology we may need to acquire or license in order to engage in our business, including to develop or commercialize new technologies or services, and the growth of our business may depend in part on our ability to acquire, in-license or use this technology.

However, such licenses may not be available to us on acceptable terms or at all. The licensing or acquisition of third party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater development or commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. Even if such licenses are available, we may be required to pay the licensor in return for the use of such licensor's technology, lump-sum payments, payments based on certain milestones such as sales volumes, or royalties based on sales of our platform. In addition, such licenses may be non-exclusive, which could give our competitors access to the same intellectual property licensed to us.

In spite of our best efforts, our licensors might conclude that we have materially breached our license agreements and might therefore terminate the license agreements, thereby removing our ability to develop and commercialize technology covered by these license agreements. If these licenses are terminated, or if the underlying intellectual property fails to provide the intended exclusivity, competitors would have the freedom to seek regulatory approval of, and to market, technologies identical to ours. This could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects. Additionally, termination of these license agreements or reduction or elimination of our rights under these agreements, or restrictions on our ability to freely assign or sublicense our rights under such agreements when it is in the interest of our business to do so, may result in our having to negotiate new or reinstated agreements with less favorable terms, or cause us to lose our rights under these agreements, including our rights to important intellectual property or technology or impede, or delay or prohibit the further development or commercialization of one or more technologies that rely on such agreements.

We cannot prevent third parties from also accessing those technologies. In addition, our licenses may place restrictions on our future business opportunities.

In addition to the above risks, intellectual property rights that we license in the future may include sublicenses under intellectual property owned by third parties, in some cases through multiple tiers. The actions of our licensors may therefore affect our rights to use our sublicensed intellectual property, even if we are in compliance with all of the obligations under our license agreements. Should our licensors or any of the upstream licensors fail to comply with their obligations under the agreements pursuant to which they obtain the rights that are sublicensed to us, or should such agreements be terminated or amended, our or our partners' ability to further commercialize our technology or products generated using our technology may be materially harmed.

Further, we may not have the right to control the prosecution, maintenance and enforcement of all of our licensed and sublicensed intellectual property, and even when we do have such rights, we may require the cooperation of our licensors and upstream licensors, which may not be forthcoming. Our business could be adversely affected if we or our licensors are unable to prosecute, maintain and enforce our licensed and sublicensed intellectual property effectively.

Our licensors may have relied on third-party consultants or collaborators or on funds from third parties such that our licensors are not the sole and exclusive owners of the patents and patent applications we in-license. If other third parties have ownership rights to patents or patent applications we in-license, they may be able to license such patents to our competitors, and our competitors could market competing technology and services. This could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

Our business, financial condition, results of operations and prospects could be materially and adversely affected if we are unable to enter into necessary agreements on acceptable terms or at all, if any necessary licenses are subsequently terminated, if the licensors fail to abide by the terms of the licenses or fail to prevent infringement by third parties, or if the acquired or licensed patents or other rights are found to be invalid or unenforceable. Moreover, we could encounter delays in the introduction of new technology or services while we attempt to develop alternatives. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing our platform and technology and advancing partnerships, which could harm our business, financial condition, results of operations and prospects.

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

Filing, prosecuting and defending patents on our platform, technology, software, systems, workflows and processes in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and even where such protection is nominally available, judicial and governmental enforcement of such intellectual property rights may be lacking. Whether filed in the United States or abroad, our patent applications may be challenged or may fail to result in issued patents. Further, we may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we may not be able to prevent third parties from practicing our inventions in some or all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own platform or technologies and may also sell their products or services to territories where we have patent protection, but enforcement is not as strong as that in the United States. These platforms and technologies may compete with ours. Our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. In addition, certain countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. Furthermore, many countries limit the enforceability of patents against other parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of any patents. In many foreign countries, patent applications and/or issued patents, or parts thereof, must be translated into the native language. If our patent applications or issued patents are translated incorrectly, they may not adequately cover our technologies; in some countries, it may not be possible to rectify an incorrect translation, which may result in patent protection that does not adequately cover our technologies in those countries.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of many other countries do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the misappropriation or other violations of our intellectual property rights including infringement of our patents in such countries. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, or that are initiated against us, and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, changes in the law and legal decisions by courts in the United States and foreign countries may affect our ability to obtain adequate protection for our technologies and the enforcement of intellectual property. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

In addition, geo-political actions in the United States and in foreign countries could increase the uncertainties and costs surrounding the prosecution or maintenance of our patent applications or those of any current or future licensors and the maintenance, enforcement or defense of our issued patents or those of any current or future licensors. For example, the United States and foreign government actions related to Russia's conflict in Ukraine may limit or prevent filing, prosecution, and maintenance of patent applications in Russia. Government actions may also prevent maintenance of issued patents in Russia. These actions could result in abandonment or lapse of our patents or patent applications, resulting in partial or complete loss of patent rights in Russia. If such an event were to occur, it could have a material adverse effect on our business. In addition, a decree was adopted by the Russian government in March 2022, allowing Russian companies and individuals to exploit inventions owned by patentees from the United States without consent or compensation. Consequently, we would not be able to prevent third parties from practicing our inventions in Russia or from selling or importing products made using our inventions in and into Russia. Accordingly, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected.

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

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

- others may be able to make products that are similar to any therapeutic candidates generated by our platform that our partners may develop but that are not covered by the claims of the patents that we or our partners have or license or may own or license in the future;
- we, or our current or future partners, might not have been the first to make the inventions covered by the issued patents and pending patent applications that we or our partners have or license or may have or license in the future;

- we, or our current or future partners, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our owned or licensed intellectual property rights;
- it is possible that our pending patent applications or those that we may hold in the future will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we cannot ensure that any patents issued to us or our licensors will provide a basis for an exclusive market for our commercially viable technology or therapeutic candidates of our partners or will provide us or our partners with any competitive advantages;
- we cannot ensure that our commercial activities or partners' therapeutic candidates will not infringe the patents of others;
- we cannot ensure that we will be able to further commercialize our technology on a substantial scale, if approved, before the relevant patents that we hold or license expire;
- we cannot ensure that any of our patents, or any of our pending patent applications, if issued, or those of our licensors, will include claims having a scope sufficient to protect our technology;
- we may not develop additional proprietary technologies that are patentable;
- the patents or intellectual property rights of others may harm our business; and
- we may choose not to file a patent application in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are unable to protect the confidentiality of our information and our trade secrets, the value of our technology could be materially and adversely affected and our business could be harmed.

We rely on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information, including parts of our technology platform, and to maintain our competitive position. However, trade secrets and know-how can be difficult to protect. In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into agreements, including confidentiality agreements, non-disclosure agreements and intellectual property assignment agreements, with our employees, consultants, academic institutions, corporate partners and, when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure, which could adversely impact our ability to establish or maintain a competitive advantage in the market. If we are required to assert our rights against such party, it could result in significant cost and distraction.

Monitoring unauthorized disclosure and detection of 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, some courts both within and outside the United States may be less willing, or unwilling, to protect trade secrets. Further, we may need to share our trade secrets and confidential know-how with current or future partners, collaborators, contractors and others located in countries at heightened risk of theft of trade secrets, including through direct intrusion by private parties or foreign actors, and those affiliated with or controlled by state actors.

We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor or other third party, absent patent protection, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. If any of our trade secrets were to be disclosed to or independently discovered by a competitor or other third party, it could harm our business, financial condition, results of operations and prospects.

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

We have employed and expect to employ individuals who were previously employed at universities or other companies. Although we try to ensure that our employees, consultants, advisors and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that our employees, advisors, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information of their former employers or other third parties, or to claims that we have improperly used or obtained such trade secrets. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights and face increased competition to our business. A loss of key research personnel work product could hamper or prevent our ability to commercialize potential technologies and solutions, which could harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

We may not be able to protect and enforce our trademarks and trade names, or build name recognition in our markets of interest thereby harming our competitive position.

The registered or unregistered trademarks or trade names that we own may be challenged, infringed, circumvented, declared generic, lapsed or determined to be infringing on or dilutive of other marks. We may not be able to protect our rights in these trademarks and trade names, which we need in order to build name recognition. In addition, third parties may in the future file for registration of trademarks similar or identical to our trademarks, thereby impeding our ability to build brand identity and possibly leading to market confusion. If they succeed in registering or developing common law rights in such trademarks, and if we are not successful in challenging such rights, we may not be able to use these trademarks to develop brand recognition of our technologies or platform. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Further, we have and may in the future enter into agreements with owners of such third party trade names or trademarks to avoid potential trademark litigation which may limit our ability to use our trade names or trademarks in certain fields of business.

We have not yet registered certain of our trademarks in all of our potential markets. If we apply to register these trademarks in other countries, and/or other trademarks in the United States and other countries, our applications may not be allowed for registration in a timely fashion or at all; and further, our registered trademarks may not be maintained or enforced. In addition, opposition or cancellation proceedings may in the future be filed against our trademark applications and registrations, 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 to market our technologies in those countries. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively, which could harm our business, financial condition, results of operations and prospects. And, over the long-term, if we are unable to establish name recognition based on our trademarks, then our marketing abilities may be materially and adversely impacted.

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

We or our licensors may be subject to claims that former employees, partners or other third parties have an interest in our or our in-licensed patents, trade secrets or other intellectual property as an inventor or co-inventor. Litigation may be necessary to defend against these and other claims challenging inventorship of our or our licensors' ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our systems, including our software, workflows, consumables, reagents, and transgenic animals. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees, and certain partners or partners may defer engaging with us until the particular dispute is resolved. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may from time to time become involved in litigation and other proceedings related to intellectual property, which could be time-intensive and costly and may adversely affect our business, financial condition, results of operations and prospects.

There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology, pharmaceutical and drug discovery industries, including patent infringement lawsuits, declaratory judgment litigation and adversarial proceedings before the USPTO, including interferences, derivation proceedings, ex parte reexaminations, post-grant review and inter partes review, as well as corresponding proceedings in foreign courts and foreign patent offices.

We are, and may, in the future, become involved with litigation or actions at the USPTO or foreign patent offices with various third parties. We expect that the number of such claims may increase as our business, visibility and partnership base expands, and as the level of competition in our industry increases. Any infringement claim, regardless of its validity, could harm our business by, among other things, resulting in time-consuming and costly litigation, diverting management's time and attention from the development of the business, requiring the payment of monetary damages (including treble damages, attorneys' fees, costs and expenses) or royalty payments, or result in potential or existing partners delaying entering into engagements with us pending resolution of the dispute.

It may be necessary for us to pursue litigation or adversarial proceedings before the patent office in order to enforce our patent and proprietary rights or to determine the scope, coverage and validity of the proprietary rights of others. The outcome of any such litigation might not be favorable to us, and even if we were to prevail, such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on our business, operating results or financial condition.

Third parties may assert that we are employing their proprietary technology without authorization. Given that the therapeutics discovery field is a highly competitive areas, there may be third-party intellectual property rights that others believe could relate to our technologies. The legal threshold for initiating litigation or contested proceedings is low, so that even lawsuits or proceedings with a low probability of success might be initiated and require significant resources to defend. An unfavorable outcome in any such proceeding could require us to cease using the related technology or developing or commercializing our technology, or to attempt to license rights to it from the prevailing party, which may not be available on commercially reasonable terms, or at all.

Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our current or future products, technologies and services may infringe. We cannot be certain that we have identified or addressed all potentially significant third-party patents in advance of an infringement claim being made against us. In addition, similar to what other companies in our industry have experienced, we expect our competitors and others may have patents or may in the future obtain patents and claim that making, having made, using, selling, offering to sell or importing our technologies infringes these patents. Defense of infringement and other claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and employee resources from our business. Parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products or services and could result in the award of substantial damages against us, including treble damages, attorney's fees, costs and expenses if we are found to have willfully infringed. In the event of a successful claim of infringement against us, we may be required to pay damages and ongoing royalties and obtain one or more licenses from third parties, or be prohibited from selling certain products or services. We may not be able to obtain these licenses on acceptable or commercially reasonable terms, if at all, or these licenses may be non-exclusive, which could result in our competitors gaining access to the same intellectual property. In addition, we could encounter delays in product or service introductions while we attempt to develop alternative products or services to avoid infringing third-party patents or proprietary rights. Defense of any lawsuit or failure to obtain any of these licenses could prevent us from commercializing products or services, and the prohibition of sale of any of our technologies could materially affect our business and our ability to gain market acceptance for our technology.

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.

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

Any uncertainties resulting from the initiation and continuation of any litigation or administrative proceeding could have a material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on issued United States and most foreign patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States at several stages over the lifetime of the patents and/or applications in order to maintain such patents and patent applications. We have systems in place to remind us to pay these fees, and we engage an outside service and rely on those services and our outside counsel to pay these fees. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals and services to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, if we or our licensors fail to maintain the patents and patent applications covering our technology and products, our competitors may be able to enter the market with similar or identical technology or products without infringing our patents and this circumstance would have a material adverse effect on our business, financial condition, results of operations and prospects.

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

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. This term can be reduced by the filing of a terminal disclaimer. Some of our patents have terminal disclaimers. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our platform or technology are obtained, once the patent life has expired, we may be open to competition from others. If our platform or technologies require extended development and/or regulatory review, patents protecting our platform or technologies might expire before or shortly after we are able to successfully commercialize them. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing processes or technologies similar or identical to ours.

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

We use open source software in connection with our technology and computational engine of our platform. Companies that incorporate open source software into their technologies and services have, from time to time, faced claims challenging their use of open source software and compliance with open source license terms. As a result, we could be subject to lawsuits by parties claiming ownership of what we believe to be open source software or claiming noncompliance with open source licensing terms. Some open source software licenses require users who distribute software containing open source software to publicly disclose all or part of the source code to the licensee's software that incorporates, links or uses such open source software, and make available to third parties for no cost, any derivative works of the open source code created by the licensee, which could include the licensee's own valuable proprietary code. While we monitor our use of open source software and try to ensure that none is used in a manner that would require us to disclose our proprietary source code or that would otherwise breach the terms of an open source agreement, such use could inadvertently occur, or could be claimed to have occurred, in part because open source license terms are often ambiguous. There is little legal precedent in this area and any actual or claimed requirement to disclose our proprietary source code or pay damages for breach of contract could harm our business and could help third parties, including our competitors, develop technologies that are similar to or better than ours. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

Some of our intellectual property rights may have been discovered through government funded programs and thus may be subject to federal regulations such as "march-in" rights, certain reporting requirements and a preference for U.S.-based companies. Compliance with such regulations may limit our exclusive rights, and limit our ability to contract with non-U.S. manufacturers.

Some of our intellectual property rights may have been generated through the use of U.S. government funding and are therefore subject to certain federal regulations. As a result, the U.S. government may have certain rights to intellectual property embodied in our technology pursuant to the Bayh-Dole Act of 1980 (the "Bayh-Dole Act"), and implementing regulations. These U.S. government rights in certain inventions developed under a government-funded program include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right to require us or our licensors to grant exclusive, partially exclusive, or non-exclusive licenses to any of these inventions to a third party if it determines that: (i) adequate steps have not been taken to commercialize the invention; (ii) government action is necessary to meet public health or safety needs; or (iii) government action is necessary to meet requirements for public use under federal regulations (also referred to as "march-in rights"). The U.S. government also has the right to take title to these inventions if we, or the applicable licensor, fail to disclose the invention to the government and fail to file an application to register the intellectual property within specified time limits. These time limits may change in the future. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us or the applicable licensor to expend substantial resources. In addition, the U.S. government requires that any products embodying the subject invention or produced through the use of the subject invention be manufactured substantially in the United States. The manufacturing preference requirement can be waived if the owner of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible. This preference for U.S. manufacturers may limit our ability to contract with non-U.S. product manufacturers for products covered by such intellectual property. To the extent any of our future intellectual property is generated through the use of U.S. government funding, the provisions of the Bayh-Dole Act may similarly apply.

General Risk Factors

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

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

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 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. We are subject to periodic inspections by state and federal authorities to ensure compliance with applicable laws. 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. 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. 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.

We are subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws and anti-money laundering laws and regulations. We could face criminal liability and other serious consequences for violations, which could harm our business.

We are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, and anti-corruption and anti-money laundering laws and regulations, including the US Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the US Travel Act, the USA PATRIOT Act and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, CROs, contractors and other collaborators and partners from authorizing, promising, offering, providing, soliciting or receiving, directly or indirectly, improper payments or anything else of value to or from recipients in the public or private sector. We may engage third parties for clinical trials outside of the United States, to sell our products abroad once we enter a commercialization phase, and/or to obtain necessary permits, licenses, patent registrations and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, CROs, contractors and other collaborators and partners, even if we do not explicitly authorize or have actual knowledge of such activities. We are also subject to other U.S. laws and regulations governing export controls, as well as economic sanctions and embargoes on certain countries and persons.

Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

Unstable market and economic conditions and adverse developments with respect to financial institutions and associated liquidity risk may have serious adverse consequences on our business, financial condition and stock price.

From time to time, the global credit and financial markets have experienced extreme volatility and disruptions, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, inflation, increases in unemployment rates and interest rates and uncertainty about economic stability, including changes related to the U.S. and foreign governments in tariffs and trade policies affecting trade between the U.S and other countries. There can be no assurance that future deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. The financial markets and the global economy may also be adversely affected by the current or anticipated impact of military conflict, including the wars between Russia and Ukraine and Israel and Hamas, terrorism or other geopolitical events. Sanctions imposed by the United States and other countries in response to such conflicts may also adversely impact the financial markets and the global economy, and any economic countermeasures by the affected countries or others could exacerbate market and economic instability. In addition, in 2023 the closures of financial institutions and their placement into receivership with the FDIC created bank-specific and broader financial institution liquidity risk and concerns. Future adverse developments with respect to specific financial institutions or the broader financial services industry may lead to market-wide liquidity shortages, impair the ability of companies to access near-term working capital needs, and create additional market and economic uncertainty. There can be no assurance that future credit and financial market instability and a deterioration in confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, liquidity shortages, volatile business environment, changes in tariffs and trade policies or continued unpredictable and unstable market conditions. If the equity and credit markets deteriorate, or if adverse developments are experienced by financial institutions, it may cause short-term liquidity risk and also make any necessary debt or equity financing more difficult, more costly, more onerous with respect to financial and operating covenants and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price. In addition, there is a risk that one or more of our current service providers, financial institutions, manufacturers and other partners may be adversely affected by the foregoing risks, which could directly affect our ability to attain our operating goals on schedule and on budget.

We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

As a public company, we incur significant legal, accounting, insurance and other expenses that we did not incur as a private company. We are subject to the reporting requirements of the Exchange Act, which requires, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, Sarbanes-Oxley, as well as rules subsequently adopted by the SEC and Nasdaq to implement provisions of Sarbanes-Oxley, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the SEC has adopted additional rules and regulations in these areas, such as mandatory “say on pay” voting requirements that will apply to us when we cease to be an emerging growth company. Stockholder activism, government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our Board, our Board committees or as executive officers.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We are subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

Our failure to meet the continued listing requirements of the Nasdaq Global Market or the Nasdaq Capital Market, as applicable, could result in a delisting of our common stock or warrants.

If we fail to satisfy the continued listing requirements of the Nasdaq Global Market or the Nasdaq Capital Market, as applicable, such as the minimum closing bid price, stockholders' equity or round lot holders requirements or the corporate governance requirements, Nasdaq may take steps to delist our common stock or warrants. Such a delisting would likely have a negative effect on the price of our common stock and warrants and would impair your ability to sell or purchase our securities when you wish to do so. Such a delisting could also result in a limited amount of news and analyst coverage for the Company; and a decreased ability for us to issue additional securities or obtain additional financing in the future. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our securities to become listed again, stabilize the market price or improve the liquidity of our securities, or prevent future non-compliance with Nasdaq's listing requirements.

Our business is subject to risks arising from pandemic and epidemic diseases.

Future pandemics or other public health epidemics pose the risk that we or our employees, contractors, including our CROs, suppliers, and other partners may be prevented from conducting business activities for an indefinite period of time, including due to spread of the disease within these groups or due to shutdowns that may be requested or mandated by governmental authorities. We cannot guarantee that pandemics, such as COVID-19 or the emergence of variants thereof, or a similar event, will not impact our operations or business in the future. Such pandemic or other event could: disrupt the supply chain and the manufacture or shipment of products and supplies for use by us in our discovery activities and by our partners for their discovery and development activities; delay, limit or prevent us or our partners from continuing research and development activities; impede our negotiations with partners and potential partners; impede testing, monitoring, data collection and analysis and other related activities by us and our partners; interrupt or delay the operations of the FDA, EMA, comparable foreign authorities or other regulatory bodies, which may impact review and approval timelines for initiation of clinical trials or marketing; impede the launch or commercialization of any approved products; any of which could delay our partnership programs, increase our operating costs, and have a material adverse effect on our business, financial condition and results of operations.

In addition, if any pandemic or epidemic disease infects our genetically modified animals, which form the basis of our platform, or if there is an outbreak among our employees or our subcontractor's employees who maintain and care for these animals, we and our partners may be unable to produce antibodies for development. The COVID-19 pandemic and mitigation measures had, and any emergence of variants thereof or future pandemic or epidemic disease outbreaks may have, an adverse impact on global economic conditions which could have an adverse effect on our business and financial condition and the trading price of shares of our common stock and could impair our ability to raise capital when needed. The extent to which pandemics or epidemics diseases impact our results of operations will depend on future developments that are highly uncertain and cannot be predicted, including information that may emerge concerning new variants of COVID-19. Further, to the extent any outbreak of an epidemic disease adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this section.

Risks Related to Our Common Stock and Warrants

The market price of our common stock and warrants is likely to be highly volatile, and you may lose some or all of your investment.

The market price of our common stock and warrants may fluctuate significantly due to a number of factors, some of which may be beyond our control, including those factors discussed in this “Risk Factors” section and many others, such as:

- actual or anticipated fluctuations in our financial condition and operating results, including fluctuations in its quarterly and annual results;
- our inability to establish additional partnerships, the termination of license agreements by our existing partners or announcements by our partners regarding therapeutic candidates generated using our platform;
- the introduction of new technologies or enhancements to existing technology by us or others in the industry;
- departures of key scientific or management personnel;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- our failure to meet the estimates and projections of the investment community or that it may otherwise provide to the public;
- publication of research reports about us or the industry, or antibody discovery in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- overall performance of the equity markets;
- sales of our common stock by us or sales or shorting of our common stock by our stockholders in the future;
- trading volume of our common stock;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- the impact of any natural disasters or public health emergencies;
- general economic, industry and market conditions other events or factors, many of which are beyond our control; and
- changes in accounting standards, policies, guidelines, interpretations or principles.

In addition, the stock markets have experienced extreme price and volume fluctuations that affected and continue to affect the market prices of equity securities of many companies. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors, as well as general economic, political, regulatory and market conditions, may negatively affect the market price of our common stock and warrants, regardless of our actual operating performance.

Volatility in our share price could subject us to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. If we face such litigation, it could result in substantial costs and a diversion of management’s attention and resources, which could harm our business.

Affiliates of Avista Capital Partners own a significant equity interest in the Company and may take actions that conflict with the interests of our public shareholders.

Following the consummation of the Business Combination, the liquidation and dissolution of the Sponsor resulted in the distribution of all its assets, including our securities, to its limited partners, which are ultimately controlled by affiliates of Avista Capital Partners. Affiliates of Avista Capital Partners own 15,817,934 shares including earnout shares, or 13.0% of our outstanding common stock as of December 31, 2024. In addition, affiliates of Avista Capital Partners own warrants to purchase 11,345,489 shares of our common stock at an exercise price of \$11.50 per share. The interests of such holders may not align with the interests of our public shareholders in the future. Avista Capital Partners and its affiliates are in the business of making investments in companies and may acquire and hold interests in businesses that compete directly or indirectly with us. In addition, Avista Capital Partners may have an interest in us pursuing acquisitions, divestitures and other transactions that, in their judgment, could enhance their investment, even though such transactions might involve risks to us and our public shareholders.

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

The trading market for our common stock and warrants will depend, in part, on the research and reports that securities or industry analysts publish about us. We do not have any control over these analysts. If our financial performance fails to meet analyst estimates or one or more of the analysts who cover us downgrade our common stock or warrants or change their opinion, the trading price of our common stock and warrants would likely decline. If one or more of these analysts cease coverage of us or fail to regularly publish reports on us, it could lose visibility in the financial markets, which could cause the trading price or trading volume of our common stock and warrants to decline.

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

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of the business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock. There is no guarantee that shares of common stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

Sales of a substantial number of our securities in the public market by the Selling Securityholders and/or by our existing securityholders could cause the prices of our common stock and warrants to fall.

Under a registration statement on Form S-1, Registration No. 333-268613, that we filed with the SEC on February 7, 2023, as amended, including as amended by the Post-Effective Amendment No. 3 to Form S-1 on Form S-3 that we filed with the SEC on December 8, 2023 and the SEC declared effective on December 18, 2023 (the “Resale S-3”), the Selling Securityholders (as defined in the Resale S-3) may sell (a) up to 36,450,645 Total Resale Shares (as defined in the Resale S-3 and which represented approximately 31.2% of our total outstanding common stock as of December 31, 2024, assuming no exercise of the Warrants and options, or approximately 28.4% of our outstanding common stock if the warrants were exercised in full), which consist of (i) up to 3,920,440 shares of common stock issued in connection with the Business Combination at an equity consideration value of \$10.00 per share, including 843,736 Earnout Shares (as defined in the Resale S-3), (ii) 15,922,934 shares of common stock issued to the Sponsor in private placements, which include 5,750,000 shares of Founder Shares (as defined in the Resale S-3) issued in connection with APAC’s initial public offering (the “IPO”) at a purchase price of approximately \$0.004 per share, including 1,293,299 Sponsor Earnout Shares (as defined in the Resale S-3), and an aggregate of 10,172,934 shares issued in the Redemption Backstop and the Forward Purchase (each as defined in the Resale S-3) at a purchase price of \$10.00 per share, (iii) 11,345,489 shares of common stock that are issuable upon the exercise of 11,345,489 Private Placement Warrants (as defined in the Resale S-3) at an exercise price of \$11.50 per share, which include 8,233,333 warrants originally issued by us to the Sponsor in connection with the IPO at a price of \$1.50 per Private Placement Warrant, and an aggregate of 3,112,156 warrants issued to the Sponsor in the Redemption Backstop and the Forward Purchase, which warrants were issued as part of the overall share purchase price of \$10.00 per share in such transactions, and (iv) 5,115,522 shares of common stock issued or issuable upon the exercise of options to purchase common stock and the vesting of restricted stock units and performance restricted stock units, and (b) up to 11,345,489 of the Private Placement Warrants (which represented approximately 8.8% of our total outstanding common stock as of December 31, 2024, assuming the Warrants were exercised in full).

Such equityholders will not be restricted from selling shares of common stock held by them, other than by applicable securities laws. As such, sales of a substantial number of shares of common stock in the public market could occur at any time. These sales by us, the Selling Securityholders and/or by our other existing securityholders, or the perception that those sales might occur, could reduce the market price of our common stock and warrants and could impair our ability to raise capital through the sale of additional equity securities. The sale or possibility of sale of these shares could have the effect of increasing the volatility in our share price. We are unable to predict the effect that such sales may have on the prevailing market prices of our common stock and warrants.

Certain existing shareholders purchased our shares at a price below the current trading price of such shares, and may experience a positive rate of return based on the current trading price. Our future investors may not experience a similar rate of return.

The sale of all the securities being offered in the Resale S-3 could result in a significant decline in the public trading price of our securities. Despite such a decline in the public trading price, some of the Selling Securityholders may still experience a positive rate of return on the securities they purchased due to the differences in the purchase prices described in the Resale S-3. Additionally, even if the current trading price of our common stock is at or significantly below the price at which the units were issued in the IPO, some of the Selling Securityholders may still have an incentive to sell because they could still profit on sales due to the lower price at which they purchased their shares compared to the public investors. For example, the 5,750,000 Founder Shares were initially purchased by the Sponsor at a price of \$0.004 per share. Based on the closing price of our common stock on February 28, 2025 of \$3.48 per share, the holders of the Founder Shares, including affiliates of the Sponsor, would experience a potential profit of up to approximately \$3.476 per share, or approximately \$20.0 million in the aggregate. Public securityholders may not be able to experience the same positive rates of return on securities they purchase due to the low price at which the Sponsor initially purchased the Founder Shares.

Provisions in our certificate of incorporation and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our certificate of incorporation and bylaws contain provisions that could significantly reduce the value of our shares to a potential acquiror or delay or prevent changes in control or changes in our management without the consent of our Board. The provisions in our charter documents include the following:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our Board;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our Board, unless the Board grants such a right to the holders of any series of preferred stock, to elect a director to fill a vacancy created by the expansion of the Board or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our Board;
- the required approval of at least 66-2/3% of the shares entitled to vote to remove a director for cause, and the prohibition on removal of directors without cause;
- the ability of our Board to authorize the issuance of shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquiror;
- the ability of our Board to alter our bylaws without obtaining stockholder approval;
- the required approval of at least 66-2/3% of the shares entitled to vote to adopt, amend or repeal our bylaws or repeal the provisions of our certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- an exclusive forum provision providing that the Court of Chancery of the State of Delaware will be the exclusive forum for certain actions and proceedings;
- the requirement that a special meeting of stockholders may be called only by the Board, the chair of the Board, the chief executive officer or the president, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our Board or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of us.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law ("DGCL"). Under Section 203, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the Board has approved the transaction.

Our certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders and that the federal district courts shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees or the underwriters or any offering giving rise to such claim.

Our certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the DGCL, our certificate of incorporation or our bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine; provided that this provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. In addition, our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. We note, however, that there is uncertainty as to whether a court would enforce this provision and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 22 of the Securities Act creates concurrent jurisdiction for state and federal courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. These choice of forum provisions 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 and officers, which may discourage such lawsuits against us and our directors and officers. If a court were to find the choice of forum provisions in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect its business and financial condition.

The exclusive forum clause set forth in the Warrant Agreement may have the effect of limiting an investor's rights to bring legal action against us and could limit the investor's ability to obtain a favorable judicial forum for disputes with us.

The Warrant Agreement, dated August 9, 2022, between APAC and Continental Stock Transfer & Trust Company ("Continental"), as warrant agent, as amended by the Assignment, Assumption and Amendment Agreement, dated November 1, 2022, by and among us, Continental and Computershare Trust Company, N.A. (collectively, the "Warrant Agreement") provides that (i) any action, proceeding or claim against us arising out of or relating in any way to the Warrant Agreement will be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York and (ii) we irrevocably submit to such jurisdiction, which jurisdiction will be exclusive. We have waived or will waive any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. We note, however, that there is uncertainty as to whether a court would enforce these provisions and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 22 of the Securities Act creates concurrent jurisdiction for state and federal courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

Notwithstanding the foregoing, these provisions of the Warrant Agreement 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 district courts of the United States of America are the sole and exclusive forum. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring any interest in any of our Warrants shall be deemed to have notice of and to have consented to the forum provisions in the Warrant Agreement. If any action, the subject matter of which is within the scope of the forum provisions of the Warrant Agreement, is filed in a court other than a court of the State of New York or the United States District Court for the Southern District of New York (a "foreign action") in the name of any holder of the Warrants, such holder shall be deemed to have consented to: (x) the personal jurisdiction of the state and federal courts located within the State of New York or the United States District Court for the Southern District of New York in connection with any action brought in any such court to enforce the forum provisions (an "enforcement action"), and (y) having service of process made upon such warrant holder in any such enforcement action by service upon such warrant holder's counsel in the foreign action as agent for such warrant holder.

This choice-of-forum provision may limit a warrant holder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us, which may discourage such lawsuits. Alternatively, if a court were to find this provision of the Warrant Agreement inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could materially and adversely affect our business, financial condition and results of operations and result in a diversion of the time and resources of our management and Board.

We are an emerging growth company and smaller reporting company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies and smaller reporting companies will make our shares less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act (the "JOBS Act"). For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including exemption from compliance with the auditor attestation requirements under Section 404 of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the closing of the IPO (December 31, 2026), (b) in which we have total annual gross revenue of at least \$1.235 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of shares of common stock that are held by non-affiliates exceeds \$700.0 million as of the prior June 30, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

In addition, under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We are also a smaller reporting company as defined in the Exchange Act. Even after we no longer qualify as an emerging growth company, we may still qualify as a "smaller reporting company," which would allow us to take advantage of many of the same exemptions from disclosure requirements including exemption from compliance with the auditor attestation requirements of Section 404 and reduced disclosure obligations regarding executive compensation in this Annual Report and our other periodic reports and proxy statements. We will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of its second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for the common stock and our market price may be more volatile.

If our estimates or judgments relating to our critical accounting policies prove to be incorrect or financial reporting standards or interpretations change, our results of operations could be adversely affected.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. We will base our estimates on historical experience, known trends and events, and various other factors that we believe to be reasonable under the circumstances, as provided in "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies and Estimates." The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our financial statements include the estimated variable consideration included in the transaction price in our contracts with customers, stock-based compensation, and valuation of our equity investments in early-stage biotechnology companies. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our common stock.

Additionally, the company will regularly monitor its compliance with applicable financial reporting standards and review new pronouncements and drafts thereof that are relevant to it. As a result of new standards, changes to existing standards and changes in their interpretation, the company might be required to change its accounting policies, alter its operational policies, and implement new or enhance existing systems so that they reflect new or amended financial reporting standards, or the company may be required to restate its published financial statements. Such changes to existing standards or changes in their interpretation may have an adverse effect on its reputation, business, financial position, and profit.

If securityholders exercise their Public Warrants on a “cashless basis,” they will receive fewer shares of common stock from such exercise than if such securityholders were to exercise such Warrants for cash.

There are circumstances in which the exercise of the warrants issued in the IPO (the “Public Warrants”) may be required or permitted to be made on a cashless basis. If our common stock is not listed on a national securities exchange such that it satisfies the definition of a “covered security” under Section 18(b)(1) of the Securities Act at the time that any warrant is exercised, we may, at our option, require holders of Public Warrants who exercise their warrants to do so on a cashless basis in accordance with Section 3(a)(9) of the Securities Act and, in the event we so elect, we will not be required to file or maintain in effect a registration statement, and in the event we do not so elect, we will use our best efforts to register or qualify the shares under applicable blue sky laws to the extent an exemption is not available. In addition, if we call the Public Warrants for redemption, our management will have the option to require all holders that wish to exercise Warrants to do so on a cashless basis. In the event of an exercise on a cashless basis, a holder would pay the warrant exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the Warrants and the “fair market value” (as defined in the next sentence) by (y) the fair market value. The “fair market value” is the average reported last sale price of the common stock for the 10 trading days ending on the third trading day prior to the date on which the notice of exercise is received by the warrant agent or on which the notice of redemption is sent to the holders of Warrants, as applicable. As a result, you would receive fewer shares of common stock from such exercise than if you were to exercise such Warrants for cash.

There is no guarantee that the exercise price of the Public Warrants will ever be less than the trading price of our common stock on Nasdaq, and they may expire worthless, and the terms of the Public Warrants may be amended in a manner adverse to a holder if holders of at least 50% of the then outstanding Public Warrants approve of such amendment.

As of the date of this Annual Report, the Public Warrants are “out-of-the money,” which means that the trading price of the shares of our common stock underlying the Public Warrants is below the \$11.50 exercise price of the Public Warrants. For so long as the Public Warrants remain “out-of-the money,” we do not expect warrant holders to exercise their Public Warrants. Therefore, any cash proceeds that we may receive in relation to the exercise of such securities will be dependent on the trading price of our common stock. If the market price for our common stock is less than the exercise price of the Public Warrants, warrant holders will be unlikely to exercise such securities. There is no guarantee that our Public Warrants will be in the money prior to their expiration and, as such, our Public Warrants may expire worthless.

The Public Warrants were issued in registered form under a Warrant Agreement. The Warrant Agreement provides that the terms of the Public Warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval by the holders of at least 50% of the then outstanding Public Warrants to make any change that adversely affects the interests of the registered holders of Public Warrants. Accordingly, we may amend the terms of the Public Warrants in a manner adverse to a holder if holders of at least 50% of the then outstanding Public Warrants approve of such amendment. Although our ability to amend the terms of the Public Warrants with the consent of at least 50% of the then outstanding Public Warrants is unlimited, examples of such amendments could be amendments to, among other things, increase the exercise price of the warrants, shorten the exercise period or decrease the number of shares of common stock purchasable upon exercise of a Public Warrant.

Warrants are exercisable for shares of common stock, which would increase the number of shares eligible for future resale in the public market and result in dilution to our shareholders.

Warrants to purchase an aggregate of 19,012,156 shares of common stock are exercisable in accordance with the terms of the warrant agreement governing those securities. The exercise price of the Warrants is \$11.50 per share. To the extent such warrants are exercised, additional shares of common stock will be issued, which will result in dilution to the holders of our common stock and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market or the fact that such warrants may be exercised could adversely affect the market price of our common stock.

We may redeem unexpired Public Warrants prior to their exercise at a time that is disadvantageous to securityholders, thereby making such Public Warrants worthless.

We have the ability to redeem outstanding Public Warrants prior to their expiration at \$0.01 per warrant, provided that the last reported sales price (or the closing bid price of our common stock in the event the shares of common stock are not traded on any specific trading day) of the common stock equals or exceeds \$18.00 per share (as adjusted for stock splits, stock dividends, reorganizations and the like) for any 20 trading days within a 30 trading-day period ending on the third trading day prior to the date we send proper notice of such redemption, provided that on the date we give notice of redemption and during the entire period thereafter until the time we redeem the Public Warrants, we have an effective registration statement under the Securities Act covering the shares of common stock issuable upon exercise of the Public Warrants and a current prospectus relating to them is available. If and when the Public Warrants become redeemable by us, we may exercise our redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws.

Redemption of the outstanding Public Warrants could force securityholders: (i) to exercise Public Warrants and pay the exercise price therefor at a time when it may be disadvantageous for them to do so, (ii) to sell Public Warrants at the then-current market price when they might otherwise wish to hold Public Warrants or (iii) to accept the nominal redemption price which, at the time the outstanding Public Warrants are called for redemption, is likely to be substantially less than the market value of such Public Warrants.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Cybersecurity Risk Management and Strategy

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 intellectual property, confidential information that is proprietary, strategic or competitive in nature, and personal information of employees and others (“Information Systems and Data”). We design and assess our program based on the International Standards Organization’s (ISO) International standard “ISO 27001: Information security management systems”, and “ISO 27002: Code of practice for information security controls”. This does not imply that we meet any particular technical standards, specifications, or requirements, only that we use the ISO standards as a guide to help us identify, assess, and manage cybersecurity risks relevant to our business.”

Our information technology department with the assistance of third-party service providers help identify, assess and manage the Company’s cybersecurity threats and risks. Our information technology department identifies and assesses risks from cybersecurity threats by monitoring and evaluating our threat environment using various methods including, for example: manual and automated cybersecurity tools such as malware scans, penetration testing, vulnerability testing such as phishing simulations and analysis of reported threats.

Depending on the environment, we implement and maintain various technical, physical, and organizational measures, processes, standards and policies designed to manage and mitigate material risks from cybersecurity threats to our Information Systems and Data, including, for example: employee training, access controls, data encryption, systems monitoring, regular patching of operating systems and software, a password policy, a written IT security incident response plan, and cybersecurity insurance coverage.

Our assessment and management of material risks from cybersecurity threats are integrated into the Company’s overall risk management processes. For example, the information technology department works with management to prioritize our risk management processes and mitigate cybersecurity threats that are more likely to lead to a material impact to our business and reports to the Audit Committee of the Board of Directors, which evaluates cybersecurity and information technology risk as well as other aspects of our overall enterprise risk.

We have not identified cybersecurity incidents, that have materially affected us, including our operations, business strategy, results of operations, or financial condition. We face risks from cybersecurity threats that, if realized, are reasonably likely to materially affect us, including our operations, business strategy, results of operations, or financial condition. For more information, see the section titled “Risk Factor— Security breaches, loss of data and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.”

Cybersecurity Governance

Our Board of Directors addresses the Company’s cybersecurity risk management as part of its general oversight function. The Board of Directors’ Audit Committee is responsible for overseeing the Company’s cybersecurity risk management processes, including oversight and mitigation of risks from cybersecurity threats.

Our cybersecurity risk assessment and management processes are implemented and maintained by certain Company management, including our Vice President of Data Sciences and IT, who has prior work experience in information technology, and our Director of IT, who has experience in network security and systems administration, who are primarily responsible for assessing and managing our material risks from cybersecurity threats. The Vice President of Data Sciences and IT and Director of IT, who report to our Chief Financial Officer, have a combined 25 years of risk management experience. Our Vice President of Data Sciences and IT is responsible for hiring appropriate personnel, helping to integrate cybersecurity risk considerations into the Company’s overall risk management strategy, and communicating key priorities to relevant personnel.

Our IT security incident response plan is designed to escalate certain cybersecurity incidents to our IT Security Council depending on the circumstances. Our IT Security Council is made up of our Chief Executive Officer, Chief Financial Officer, Chief Legal Officer and Secretary, Vice President of Data Sciences and IT, and Director of IT. Based on the severity and materiality of the incident, the Company’s IT security incident response plan also includes reporting to the Audit Committee of the Board of Directors for cybersecurity incidents. In addition, the Audit Committee receives regular reports from management concerning the Company’s significant cybersecurity threats and risk and the processes the Company has implemented to address them.

Item 2. Properties

Our corporate headquarters are located in Emeryville, California, and our research facilities are located in Emeryville and Dixon, California, Durham, North Carolina and Tucson, Arizona. We lease approximately 70,000 square feet of space under leases expiring from 2026 to 2032. We believe our facilities are adequate and suitable for our current needs and that, should it be needed, suitable additional or alternative space will be available to accommodate our operations.

Item 3. Legal Proceedings

From time to time, we may be subject to legal proceedings. We are not currently a party to or aware of any proceedings that we believe will have, individually or in the aggregate, a material adverse effect on our business, financial condition or results of operations. However, regardless of outcome, litigation can have an adverse impact on our business because of defense and settlement costs, diversion of management resources and other factors, and there can be no assurances that favorable outcomes will be obtained.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our common stock is listed on the Nasdaq Global Market under the symbol “OABI”. Our Warrants are listed on the Nasdaq Capital Market under the symbol “OABIW”.

Holders of Record

As of close of business on February 28, 2025, there were 1,931 holders of record of our common stock and three holders of record of our Warrants. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We intend to retain future earnings, if any, for the development, operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to dividend policy will be made at the discretion of our Board after considering our financial condition, results of operations, capital requirements, business prospects and other factors the Board deems relevant, and subject to the restrictions contained in any future financing instruments.

Securities Authorized for Issuance under Equity Compensation Plans

See Item 12 of Part III of this Annual Report for information about our equity compensation plans which is incorporated by reference herein.

Performance Graph

Not applicable.

Unregistered Sales of Equity Securities

Other than as previously disclosed in our Current Reports on Form 8-K or Quarterly Reports on Form 10-Q filed with the SEC, we did not issue any unregistered equity securities during the 12 months ended December 31, 2024.

Item 6. [Reserved]

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

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

Overview

OmniAb licenses cutting-edge discovery research technology to pharmaceutical and biotech companies and academic institutions to enable the discovery of next-generation therapeutics. Our technology platform creates and screens diverse antibody repertoires and is designed to quickly identify optimal antibodies and other target-binding proteins for our partners' drug development efforts. At the heart of the OmniAb platform is what we call Biological Intelligence™, which powers the immune systems of our proprietary, engineered transgenic animals to create optimized antibody candidates for human therapeutics.

We believe the OmniAb animals comprise the most diverse host systems available in the industry. Our suite of technologies and methods, including computational antigen design and immunization methods, paired with high-throughput single B cell phenotypic screening and mining of next-generation sequencing datasets with custom algorithms, are used to identify fully human antibodies with exceptional performance and developability characteristics. We provide our partners both integrated end-to-end capabilities and highly customizable offerings, which address critical industry challenges and provide optimized discovery solutions.

As of December 31, 2024, we had 91 active partners with 363 active programs using the OmniAb technology platform, including 28 OmniAb-derived antibodies in clinical development by our partners, one under regulatory review, and three approved products developed and commercialized by our partners.

Our proprietary technologies are joined with and leverage a suite of *in silico*, artificial intelligence and machine learning tools for therapeutic discovery and optimization that are woven throughout our various technologies and capabilities. Additionally, an established core competency focused on ion channels and transporters further differentiates OmniAb's technology and creates opportunities in many important and emerging target classes. OmniAb technologies are designed to be leveraged for the discovery of a variety of next-generation antibody-based therapeutic modalities, including bi- and multi-specific biologics, antibody-drug conjugates, CAR-T therapies, targeted radiotherapeutics, and many others.

The OmniAb suite of technologies spans from Biological Intelligence-powered repertoire generation to cutting-edge antibody discovery and optimization offering an increasingly efficient and customizable end-to-end solution for the growing discovery needs of the global pharmaceutical industry.

We partner with pharmaceutical and biotechnology companies and leading academic institutions that vary in size, clinical stage, geography and therapeutic focus. Our partners gain access to wide repertoires of antibodies and state-of-the-art screening technologies designed to enable efficient discovery of next-generation novel therapeutics and deliver high-quality therapeutic antibody candidates for a wide range of diseases. Our partners can select a biological target to treat a disease and define the antibody properties needed for therapeutic development or use certain of our technologies directly in their own laboratories.

Our license agreements with pharmaceutical and biotechnology partners generally include: (i) upfront or, in some instances, annual payments for technology access; (ii) payments for performance of research services; (iii) downstream payments in the form of preclinical, intellectual property, clinical, regulatory, and commercial milestones; and (iv) royalties on net sales of our partners' products, if any. License agreements with academic institutions are typically structured with revenue sharing. We succeed when our partners are successful, and our agreements are structured to align economic and scientific interests. Our license agreements typically include reporting requirements, which provide us updates from our partners on the status of their programs. In addition, we track our active partnered programs by reviewing our partners' public announcements and maintaining close communications with our partners to the extent possible. In some instances, a partner may not publicly announce milestones, in which case, we would be generally dependent on our partner to track, report and disclose to us milestones at the time of achievement. Our license agreements typically grant a perpetual license to our technology and are typically terminable by our partners without penalty with specified notice. However, all milestone payments and royalties survive termination and continue with respect to any OmniAb-derived antibodies. The royalty term is generally the longer of 10 years from the first commercial sale or through the last expiration in any jurisdiction of the patents covering such OmniAb-derived antibody. Importantly, our royalty term is typically linked to the patents that our partners file related to the antibody discovered using our technology, which both lengthens and diversifies the royalty streams we receive. Our typical royalty rates for antibody discovery contracts are currently in the low- to mid-single digits and can vary depending on other economic terms in the agreement. Although our license agreements with pharmaceutical and biotechnology partners typically include technology access fees, milestone payments and royalties, each agreement is negotiated separately and as a result, the financial terms and contractual provisions vary from agreement to agreement. By providing a full suite of antibody discovery technologies with streamlined economics, we believe we offer an attractive option to industry stakeholders.

We believe the long-term value of our business will be driven by royalties given that such payments are based on global sales of potential future partner programs, which generally provide for larger and recurring payments as compared to technology access, research and milestone payments. We believe our revenue will be materially driven by milestones in the shorter term, and by royalties in the longer term, from our partnered programs. However, there is significant uncertainty in timing and likelihood of reaching marketing authorization in drug discovery and development, and we cannot be certain when, if at all, royalty payments will be a material portion of our revenue. Furthermore, we do not control the progression, clinical development, regulatory strategy or eventual commercialization of programs discovered using our platform, and as a result, we are dependent on our partners' efforts and decisions with respect to such programs.

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 important to understanding our current business. These metrics are highly dependent on information provided by our partners and may change or may be substituted for additional or different metrics as our business continues to grow.

Metric	Active Partners	Active Programs	Active Clinical Programs and Approved Products ⁽¹⁾	Approved Products
December 31, 2023	77	325	32	3
Additions	15	69	5	—
Terminations	(1)	(31)	(5)	—
December 31, 2024	91	363	32	3

(1) Two of the five clinical program terminations regressed to discovery or preclinical phases and remained active programs as of December 31, 2024.

Active partners represents the number of partners that have rights to an active program or have executed a license agreement in advance of initiating an active program. A partner is removed from the metric when the partner informs us they are terminating their license or they are no longer in business. We view this metric as an indication of the competitiveness of our platform and our current level of market penetration. The metric also relates to our opportunities to secure additional active programs.

Active programs represents a program for which research work has commenced or where an antigen is introduced into our animals and remains so as long as the program is actively being developed or commercialized. This number includes active clinical programs and approved products separately disclosed in the table above. We view this metric as an indication of the usage of our technology and the potential for mid- and long-term milestone and royalty payments.

Active clinical programs and approved products represents the number of unique programs for which an Investigational New Drug Application or equivalent under other regulatory regimes has been filed based on an OmniAb-derived antibody and which are in clinical development by our partners. We continue to count programs as active as long as they are actively being developed, under regulatory review or commercialized. Where the date of such application is not known to us, we use the official start date from clinical trial registries for the purpose of calculating this metric. This number includes approved products separately disclosed in the table above. We view this metric as an indication of our near- and mid-term potential revenue from milestone fees and potential royalty payments in the long term.

Approved products represents an OmniAb-derived antibody for which our partner has received marketing approval. We view this metric as an indication of our near- and mid-term potential revenue from royalty payments.

Our business metrics are subject to risk and uncertainties related to our dependence on our partners providing timely and accurate information, which impacts our ability to objectively and accurately characterize the current level of activity for each program. In addition, changes in our key business metrics do not directly correlate to current revenues. For more information, see the section titled “Risk Factors - *Our management uses certain key business metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions, and such metrics may not accurately reflect all of the aspects of our business needed to make such evaluations and decisions, in particular as our business continues to grow.*”

Results of Operations

Comparison of the Year Ended December 31, 2024 and December 31, 2023

Revenue

(Dollars in thousands)	2024	2023	\$ Change	% Change
License and milestone revenue	\$ 13,866	\$ 20,699	\$ (6,833)	(33)%
Service revenue	11,949	12,180	(231)	(2)%
Royalty revenue	576	1,285	(709)	(55)%
Total revenue	<u>\$ 26,391</u>	<u>\$ 34,164</u>	<u>\$ (7,773)</u>	(23)%

- License and milestone revenue fluctuates depending on the timing of new license agreements with partners and partners’ achievement of milestones. Because of these factors and the sporadic nature of development milestones, license and milestone revenue could fluctuate significantly from period to period. License and milestone revenue decreased primarily due to the recognition in the prior year period of a \$10.0 million milestone related to the first commercial sale of TECVAYLI® (teclistamab) in the European Union and \$2.5 million of milestones related to the start of pivotal studies in two additional indications for batoclimab. This decrease was partially offset by the recognition in the current year period of a \$2.0 million IND acceptance milestone, a \$2.0 million phase 3 milestone, and a \$1.5 million phase 1 milestone.
- Royalty revenue decreased primarily due to lower net sales from partners’ product sales.

Operating Expenses

(Dollars in thousands)	2024	2023	\$ Change	% Change
Research and development	\$ 55,110	\$ 56,525	\$ (1,415)	(3)%
General and administrative	30,741	33,313	(2,572)	(8)%
Amortization of intangibles	17,407	13,554	3,853	28 %
Other operating expense (income), net	(2,365)	191	(2,556)	NM ⁽¹⁾
Total operating expenses	<u>\$ 100,893</u>	<u>\$ 103,583</u>	<u>\$ (2,690)</u>	(3)%

(1) Percentage change is not meaningful.

- **Research and development expenses** consist of (1) personnel related expenses, including salaries, benefits and share-based compensation, (2) external expenses, including third-party costs for goods and services such as lab supplies and contract research, and (3) facility and other overhead expenses, including depreciation and occupancy costs. Research and development expenses decreased primarily due to lower personnel costs and external expenses partially offset by higher facility and other overhead expenses.

(Dollars in thousands)	2024	2023	Change	% Change
Personnel related expenses	28,444	29,259	\$ (815)	(3)%
External expenses	17,160	18,138	(978)	(5)%
Facility and other overhead expenses	9,506	9,128	378	4 %
Total research and development expenses	<u>\$ 55,110</u>	<u>\$ 56,525</u>	<u>\$ (1,415)</u>	<u>(3)%</u>

- **General and administrative expenses** decreased primarily due to non-recurring consulting and other outside service expenses incurred in 2023 related to our separation from Ligand to become a standalone public company as well as lower legal and share-based compensation expense.
- **Amortization of intangibles** increased primarily due to impairments in 2024, including a \$1.2 million impairment of certain finite-lived intangible assets related to the legacy acquisition of Ab Initio and a \$2.7 million impairment of certain small molecule ion channel intangible assets.
- **Other operating income, net** increased primarily due to a \$2.5 million reduction in contingent liabilities in 2024 attributed to changes in ion channel programs.

Other Income (Expense), net

Other income (expense), net decreased by \$2.0 million during the year ended December 31, 2024 compared to December 31, 2023 due to lower interest income related to lower short-term investment balances.

Income Tax Benefit

(Dollars in thousands)	2024	2023	\$ Change	% Change
Loss before income taxes	\$ (71,411)	\$ (64,363)	\$ (7,048)	11 %
Income tax benefit	9,378	13,744	(4,366)	(32)%
Net loss	<u>\$ (62,033)</u>	<u>\$ (50,619)</u>	<u>\$ (11,414)</u>	<u>23 %</u>
Effective Tax Rate	13.1 %	21.4 %		

Our effective tax rate is affected by recurring items, such as the U.S. federal and state statutory tax rates and the relative amounts of income we earn in those jurisdictions. The tax rate is also affected by discrete items that may occur in any given year, but are not consistent from year to year.

Our effective tax rate for the year ended December 31, 2024 differed from the federal statutory tax rate of 21.0% primarily due to non-deductible share-based compensation expense, an increase to our valuation allowance recorded against deferred tax assets, and repricing of state tax deferred liabilities, net, partially offset by the impact of state taxes and the tax benefit from research and development tax credits. Our effective tax rate for the year ended December 31, 2023 differed from the federal statutory tax rate of 21.0% primarily due to the tax benefit from research and development credits and the deduction of certain transaction costs, partially offset with non-deductible share-based compensation expense.

Liquidity and Capital Resources

As of December 31, 2024, our cash, cash equivalents and short-term investments were \$59.4 million. We believe our cash, cash equivalents and short-term investments are sufficient to support our operations through at least the next 12 months.

If our anticipated cash flows from operations and current cash are insufficient to satisfy our liquidity requirements because of increased expenditures or lower demand for our technology platform, or the realization of other risks, we may be required to raise additional capital through issuances of public or private equity or debt financing or other capital sources. Such additional financing may not be available on terms acceptable to us or at all. In any event, we may consider raising additional capital in the future to expand our business, to pursue strategic investments or acquisitions, to take advantage of favorable market conditions or financing opportunities or for other reasons. Our future capital requirements will depend on many factors, including, but not limited to:

- our ability to achieve revenue growth, which is dependent on ability of our partners to successfully develop and commercialize therapies based on antibodies discovered using our platform;
- the costs of expanding our operations, including our business development and marketing efforts;
- our rate of progress in selling access to our platform and marketing activities associated therewith;
- our rate of progress in, and cost of research and development activities associated with, our platform technologies and our internal developed programs to the extent we pursue any such programs;
- the effect of competing technological and market developments;
- the impact of pandemics or other epidemic diseases on global social, political and economic conditions;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patents and other intellectual property and proprietary rights; and
- the costs associated with any technologies that we may in-license or acquire.

In December 2023, we entered into an Open Market Sale AgreementSM (the “Sales Agreement”), with Jefferies LLC (the “Sales Agent”) under which we may, from time to time, sell shares of our common stock having an aggregate offering price of up to \$100.0 million in an “at the market” (“ATM”) offerings program through the Sales Agent. Sales of the shares of common stock, if any, will be made at prevailing market prices at the time of sale, or as otherwise agreed with the Sales Agent. The Sales Agent will receive a commission from us of up to 3.0% of the gross proceeds of any shares of common stock sold under the Sales Agreement. Sales of our common stock made pursuant to the Sales Agreement are made under our shelf registration statement on Form S-3 which was filed on December 8, 2023 and declared effective by the SEC on December 18, 2023. We are not obligated to sell, and the Sales Agent is not obligated to buy or sell, any shares of common stock under the Sales Agreement. For the year ended December 31, 2024, we sold 2,771,192 shares of our common stock under the ATM program, for net proceeds of \$11.4 million, after deducting commissions.

We anticipate that our principal uses of cash in the future will be primarily to fund our operations, working capital needs, capital expenditures and other general corporate purposes.

Additionally, we may receive up to \$218.6 million from the exercise of our warrants, assuming the exercise in full of all the warrants for cash, but not from the sale of the shares of common stock issuable upon such exercise. As of the date of this Annual Report, our warrants are “out-of-the money,” which means that the trading price of the shares of our common stock underlying our warrants is below the \$11.50 exercise price of the warrants. For so long as the warrants remain out-of-the money, we do not expect warrant holders to exercise their warrants. Therefore, any cash proceeds that we may receive in relation to the exercise of such securities will be dependent on the trading price of our common stock.

Cash Flow Summary

(Dollars in thousands)	2024	2023	Change
Net cash provided by (used in):			
Operating activities	\$ (39,664)	\$ 2,347	\$ (42,011)
Investing activities	37,884	(18,376)	56,260
Financing activities	\$ 13,020	\$ (892)	\$ 13,912

Cash from Operating Activities:

During the year ended December 31, 2024, cash used in operating activities of \$39.7 million primarily reflected our net loss of \$62.0 million for the period, adjusted by net non-cash charges of \$32.5 million and a net change in operating assets and liabilities of \$10.2 million. The net non-cash charges primarily consisted of share-based compensation expense of \$21.5 million and depreciation and amortization expense of \$23.6 million, which were partially offset by a \$9.0 million change in deferred income taxes, net. The net change in operating assets and liabilities was primarily driven by a decrease in deferred revenue of \$6.0 million, a decrease in operating lease liabilities of \$2.4 million, and a decrease in accounts payable, accrued expenses, and other liabilities of \$2.4 million.

During the year ended December 31, 2023, cash provided by operating activities of \$2.3 million primarily reflected our net loss of \$50.6 million for the period, adjusted by net non-cash charges of \$28.1 million and a net change in operating assets and liabilities of \$24.9 million. The net non-cash charges primarily consisted of share-based compensation expense of \$24.8 million and depreciation and amortization expense of \$19.5 million, which were partially offset by a \$12.5 million change in deferred income taxes, net. The net change in operating assets and liabilities was primarily driven by a decrease in accounts receivable of \$26.9 million and a decrease in deferred revenue of \$5.3 million.

Cash from Investing Activities:

During the year ended December 31, 2024, cash provided by investing activities of \$37.9 million primarily consisted of \$78.0 million of cash from the maturity of short-term investments partially offset by \$40.3 million of cash used to purchase short-term investments.

During the year ended December 31, 2023, cash used in investing activities of \$18.4 million primarily consisted of \$112.6 million of cash used to purchase short-term investments and \$96.9 million of cash from the maturity of short-term investments.

Cash from Financing Activities:

During the year ended December 31, 2024, cash provided by financing activities was \$13.0 million, which primarily consisted of \$11.4 million for the issuance of common stock under the ATM facility, net of commissions and \$3.3 million of proceeds from the issuance of common stock from stock compensation plans.

During the year ended December 31, 2023, cash used in financing activities was \$0.9 million.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with GAAP requires estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures of contingent liabilities in the consolidated financial statements and accompanying notes. The SEC has defined a company's critical accounting policies as the ones that are most important to the portrayal of the company's financial condition and results of operations, and which require the company to make its most difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. Based on this definition, we have identified the critical accounting policies and judgments addressed below. We also have other key accounting policies, which involve the use of estimates, judgments, and assumptions that are significant to understanding our results. For additional information, see "Note 2 – Summary of Significant Accounting Policies" in the notes to the consolidated financial statements appearing elsewhere in this Annual Report for a full description of accounting pronouncements which we have recently adopted and the impact to our financial statements upon adoption. Although we believe that our estimates, assumptions, and judgments are reasonable, they are based upon information presently available. Actual results may differ significantly from these estimates under different assumptions, judgments, or conditions.

Revenue Recognition

License revenue is recognized when (or as) control of a performance obligation is transferred to the customer. When combined performance obligations contain a promised license and related services or other promises, management judgment is required to determine whether revenue is recognized at a point in time or over time. If a license for technology access is deemed to be the predominant promise in a performance obligation, we first determine the nature of the license, whether functional or symbolic intellectual property, to conclude whether revenue recognition as of a point in time or over time is most appropriate. The determination of functional or symbolic intellectual property requires an assessment of whether the customer is able to benefit from the license in its current condition, or if the utility of the license is dependent on or influenced by our ongoing activities.

We include contingent milestone based payments in the estimated transaction price when there is a basis to reasonably estimate the amount of the payment and it is probable of being achieved. These estimates are based on historical experience, anticipated results and management's best judgment at the time. If the contingent milestone based payment is sales-based, we apply the royalty recognition constraint and record revenue when the underlying sale has taken place. Significant judgments must be made in determining the transaction price for licenses of intellectual property. Because of the risk that products in development with partners will not reach development based milestones or receive regulatory approval, we generally recognize any contingent payments that would be due upon achievement of the development milestone or regulatory approval.

We recognize service revenue for contracted R&D services performed for partners over time. We measure our progress using an input method based on the effort we expend or cost we incur relative to the estimated total effort or costs to satisfy the performance obligation. This results in a percentage that is multiplied by the transaction price to determine the amount of revenue recognized each period. This approach requires us to make estimates and use judgment. If estimates or judgments change over the course of the collaboration, they may affect the timing and amount of revenue recognized in current and future periods.

We occasionally have sub-license obligations related to arrangements for which we receive license fees, milestones and royalties. We evaluate the determination of gross as a principal versus net as an agent reporting based on each individual agreement.

Our license agreements typically grant a perpetual license to our technology and are typically terminable by our partners without penalty with specified notice. License fees are nonrefundable, and termination of a license does not impact previously received and recognized license revenue. In addition, all milestone payments and royalties survive termination of the license agreement and continue with respect to any OmniAb-derived antibodies discovered under the license agreement and would be recognized when achieved in accordance with our revenue recognition policies regardless of a license termination. As such, any license agreement termination would not affect our revenue recognition policies.

For arrangements that include sales-based royalties, and under which the license is deemed to be the predominant item to which the royalties relate, we recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). Each quarterly period, sales-based royalties are recorded based on estimated quarterly net sales of the associated collaboration products. Differences between actual results and estimated amounts are adjusted for in the period in which they become known, which typically follows the quarterly period in which the estimate was made. To date, actual royalties received have not differed materially from our estimates.

Intangible Assets and Other Long-Lived Assets — Impairment Assessments

We regularly perform reviews to determine if an event occurred that may indicate the carrying values of our intangible and other long-lived assets are impaired. If indicators of impairment exist, we assess the recoverability of the affected long-lived assets by comparing its carrying amounts to its undiscounted cash flows. If the affected assets are not recoverable, we estimate the fair value of the assets and record an impairment loss if the carrying value exceeds the fair value. Factors that may indicate potential impairment include a significant decline in our stock price and market capitalization compared to net book value, significant changes in the ability of an asset to generate positive cash flows and the pattern of utilization of a particular asset.

In order to estimate the fair value of identifiable intangible assets and other long-lived assets, we estimate the present value of future cash flows from those assets. The key assumptions that we use in our discounted cash flow model are the amount and timing of estimated future cash flows to be generated by the asset over an extended period of time and a rate of return that considers the relative risk of achieving the cash flows, the time value of money, and other factors that a willing market participant would consider. Significant judgment is required to estimate the amount and timing of future cash flows and the relative risk of achieving those cash flows.

Assumptions and estimates about future values and remaining useful lives are complex and often subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our internal forecasts. For example, if our future operating results do not meet current forecasts or if we experience a sustained decline in our market capitalization that is determined to be indicative of a reduction in fair value of our reporting unit, we may be required to record future impairment charges for purchased intangible assets. Impairment charges could materially decrease our future net income and result in lower asset values on our balance sheet.

Income Taxes

Our provision for income taxes, deferred tax assets and liabilities, and reserves for unrecognized tax benefits reflect our best assessment of estimated current and future taxes to be paid. Significant judgments and estimates based on interpretations of existing tax laws or regulations in the United States are required in determining our provision for income taxes. Changes in tax laws, statutory tax rates, and estimates of our future taxable income could impact the deferred tax assets and liabilities provided for in the consolidated financial statements and would require an adjustment to the provision for income taxes.

Deferred tax assets are regularly assessed to determine the likelihood they will be recovered from future taxable income. A valuation allowance is established when we believe it is more likely than not the future realization of all or some of a deferred tax asset will not be achieved. In evaluating our ability to recover deferred tax assets within the jurisdiction which they arise, we consider all available positive and negative evidence. Factors reviewed can include the cumulative pre-tax book income (loss) for the past three years, scheduled reversals of deferred tax liabilities, our history of earnings and reliability of our forecasts, projections of pre-tax book income over the foreseeable future, and the impact of any feasible and prudent tax planning strategies.

We recognize the impact of a tax position in our financial statements only if that position is more likely than not of being sustained upon examination by taxing authorities, based on the technical merits of the position. Tax authorities can examine our returns in the jurisdictions in which we do business and we regularly assess the tax risk of our return filing positions. Due to the complexity of some of the uncertainties, the ultimate resolution may result in payments that are materially different from our current estimate of the tax liability. These differences, as well as any interest and penalties, will be reflected in the provision for income taxes in the period in which they are determined.

Recent Accounting Pronouncements

For the summary of recent accounting pronouncements applicable to our consolidated financial statements, see “*Item 8. Financial Statements and Supplementary Data—Notes to Consolidated Financial Statements—Note 2 – Summary of Significant Accounting Policies.*”

Implications of Being an Emerging Growth Company

We qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act). As an emerging growth company, we may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the Sarbanes-Oxley Act);
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements, unless the SEC determines the new rules are necessary for protecting the public;
- reduced disclosure obligations regarding executive compensation; and

- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions until the earlier of: (1) the last day of the fiscal year (a) following the fifth anniversary of the closing of the IPO, (b) in which we have total annual gross revenue of at least \$1.235 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common equity that is held by non-affiliates exceeds \$700.0 million as of the end of the prior fiscal year's second fiscal quarter; and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in this Annual Report and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information in this Annual Report and that we provide to our stockholders in the future may be different than what you might receive from other public reporting companies in which you hold equity interests.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We intend to rely on this and other exemptions provided by the JOBS Act, including without limitation, not being required to comply with the auditor attestation requirements of Section 404(b) of Sarbanes-Oxley.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

We are exposed to market risk related to changes in interest rates. Our primary exposure to interest rate risk results from the cash equivalents and short-term investments in our investment portfolio. Our primary objectives in managing our investment portfolio are to preserve principal, maintain proper liquidity to meet operating needs and maximize yields. At any time, significant changes in interest rates can affect the fair value of the investment portfolio and its interest earnings. Currently, we do not hedge these interest rate exposures.

As of December 31, 2024, our cash equivalents and short-term investments primarily consisted of money market mutual funds and U.S. government and agency securities. If market interest rates were to increase immediately and uniformly by 100 basis points, or one percentage point, from levels at December 31, 2024, we estimate that the increase would have resulted in a hypothetical decline of \$0.1 million in the net fair value of our interest-sensitive securities.

Effects of Inflation

Inflation generally affects us by increasing our cost of labor and research and development contract costs. We do not believe inflation has had a material effect on our consolidated financial statements included in this Annual Report.

Item 8. Financial Statements and Supplementary Data

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of OmniAb, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of OmniAb, Inc. (the Company) as of December 31, 2024 and 2023, the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the two years in the period ended December 31, 2024, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2024, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2021.

San Diego, California
March 18, 2025

OMNIAB, INC.

CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	December 31,	
	2024	2023
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 27,598	\$ 16,358
Short-term investments	31,836	70,625
Accounts receivable, net	5,272	3,844
Prepaid expenses and other current assets	3,432	4,074
Total current assets	68,138	94,901
Intangible assets, net	138,060	155,467
Goodwill	83,979	83,979
Property and equipment, net	15,492	18,249
Operating lease right-of-use assets	17,789	19,884
Restricted cash	560	560
Other long-term assets	1,540	2,185
Total assets	<u>\$ 325,558</u>	<u>\$ 375,225</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 2,297	\$ 4,411
Accrued expenses and other current liabilities	6,141	7,068
Current contingent liabilities	531	1,303
Current deferred revenue	2,337	6,848
Current operating lease liabilities	3,782	3,486
Total current liabilities	15,088	23,116
Long-term contingent liabilities	953	3,203
Deferred income taxes, net	2,314	11,354
Long-term operating lease liabilities	19,382	22,075
Long-term deferred revenue	117	862
Other long-term liabilities	86	30
Total liabilities	37,940	60,640
Commitments and Contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, \$0.0001 par value; 100,000,000 shares authorized; no shares issued and outstanding at December 31, 2024 and December 31, 2023	—	—
Common stock, \$0.0001 par value; 1,000,000,000 shares authorized at December 31, 2024 and December 31, 2023; 121,599,488 and 116,859,468 shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	12	12
Additional paid-in capital	388,979	353,890
Accumulated other comprehensive income	27	50
Accumulated deficit	(101,400)	(39,367)
Total stockholders' equity	287,618	314,585
Total liabilities and stockholders' equity	<u>\$ 325,558</u>	<u>\$ 375,225</u>

See accompanying notes to these consolidated financial statements.

OMNIAB, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share data)

	Year Ended December 31,	
	2024	2023
Revenue:		
License and milestone revenue	\$ 13,866	\$ 20,699
Service revenue	11,949	12,180
Royalty revenue	576	1,285
Total revenue	26,391	34,164
Operating expenses:		
Research and development	55,110	56,525
General and administrative	30,741	33,313
Amortization of intangibles	17,407	13,554
Other operating expense (income), net	(2,365)	191
Total operating expenses	100,893	103,583
Loss from operations	(74,502)	(69,419)
Other income (expense), net:		
Interest income	3,106	5,055
Other income (expense), net	(15)	1
Total other income (expense), net	3,091	5,056
Loss before income taxes	(71,411)	(64,363)
Income tax benefit	9,378	13,744
Net loss	\$ (62,033)	\$ (50,619)
Net loss per share, basic and diluted	\$ (0.61)	\$ (0.51)
Weighted-average shares outstanding, basic and diluted	102,365	99,683

See accompanying notes to these consolidated financial statements.

OMNIAB, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Year Ended December 31,	
	2024	2023
Net loss	\$ (62,033)	\$ (50,619)
Unrealized net gain (loss) on available-for-sale securities	(23)	41
Comprehensive loss	<u>\$ (62,056)</u>	<u>\$ (50,578)</u>

See accompanying notes to these consolidated financial statements.

OMNIAB, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands, except share data)

	Common Stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Retained earnings (accumulated deficit)	Total stockholders' equity
	Shares	Amount				
Balance at January 1, 2023	115,218,229	\$ 12	\$ 330,100	\$ 9	\$ 11,252	\$ 341,373
Issuance of common stock under stock compensation plans, net of tax	1,641,239	—	1,523	—	—	1,523
Share-based compensation	—	—	24,820	—	—	24,820
Unrealized net gain on available-for-sale securities	—	—	—	41	—	41
Adjustments to net transfers of deferred income taxes, net from former parent company	—	—	(2,553)	—	—	(2,553)
Net loss	—	—	—	—	(50,619)	(50,619)
Balance at December 31, 2023	116,859,468	12	353,890	50	(39,367)	314,585
Issuance of common stock under stock compensation plans, net of tax	1,968,828	—	2,297	—	—	2,297
Share-based compensation	—	—	21,499	—	—	21,499
Unrealized net loss on available-for-sale securities	—	—	—	(23)	—	(23)
Issuance of common stock under ATM facility, net of commissions and issuance costs	2,771,192	—	11,293	—	—	11,293
Net loss	—	—	—	—	(62,033)	(62,033)
Balance at December 31, 2024	121,599,488	\$ 12	\$ 388,979	\$ 27	\$ (101,400)	\$ 287,618

See accompanying notes to these consolidated financial statements.

OMNIAB, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended December 31,	
	2024	2023
Operating activities:		
Net loss	\$ (62,033)	\$ (50,619)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	23,583	19,497
Share-based compensation	21,499	24,820
Amortization of discounts on short-term investments, net	(1,498)	(3,441)
Deferred income taxes, net	(9,040)	(12,540)
Change in estimated fair value of contingent liabilities	(2,547)	(341)
Other	544	100
Changes in operating assets and liabilities, net		
Accounts receivable, net	(625)	26,898
Prepaid expenses and other current assets	642	2,321
Other long-term assets	645	642
Accounts payable, accrued expenses, and other liabilities	(2,410)	920
Operating lease liabilities	(2,436)	(563)
Deferred revenue	(5,988)	(5,347)
Net cash provided by (used in) operating activities	(39,664)	2,347
Investing activities:		
Purchases of property and equipment	(1,875)	(1,644)
Purchases of short-term investments	(40,288)	(112,616)
Proceeds from the maturity of short-term investments	78,000	96,900
Proceeds from sale of short-term investments	2,447	3,424
Payments of contingent liabilities	(400)	(4,440)
Net cash provided by (used in) investing activities	37,884	(18,376)
Financing activities:		
Proceeds from issuance of common stock from stock compensation plans	3,257	1,205
Taxes paid related to net share settlement of equity awards	(960)	(1,324)
Payments of contingent liabilities	(75)	(300)
Payment of transaction costs	(571)	(473)
Proceeds from issuance of common stock under ATM facility, net of commissions	11,369	—
Net cash provided by (used in) financing activities	13,020	(892)
Net increase (decrease) in cash, cash equivalents, and restricted cash	11,240	(16,921)
Cash, cash equivalents and restricted cash at beginning of year	16,918	33,839
Cash, cash equivalents and restricted cash at end of year	\$ 28,158	\$ 16,918
Supplemental cash flow information:		
Right-of-use assets obtained in exchange for operating lease obligations	\$ 39	\$ 328
Deferred revenue recorded in accounts receivable	\$ 732	\$ 517
Taxes paid	\$ 16	\$ 2,614
Supplemental non-cash investing and financing activities:		
Purchase of fixed assets recorded in accounts payable	\$ 77	\$ 667
Intangible additions recorded in contingent liabilities	\$ —	\$ 1,476
Transaction cost recorded in accounts payable	\$ 15	\$ 370

See accompanying notes to these consolidated financial statements.

OMNIAB INC.
Notes to Consolidated Financial Statements

1. Organization and Basis of Presentation

Description of Business

OmniAb, Inc. (“OmniAb” or the “Company”, formerly known as Avista Public Acquisition Corp. II (“APAC”)) is a biotechnology company that licenses cutting-edge discovery research technology to the pharmaceutical and biotech industries and academic institutions to enable the discovery of next-generation therapeutics. The Company’s technology platform creates and screens diverse antibody repertoires and is designed to quickly identify optimal antibodies and other target-binding proteins for its partners’ drug development efforts. At the heart of the OmniAb platform is something the Company calls Biological Intelligence™, which powers the immune systems of its proprietary, engineered transgenic animals to create optimized antibody candidates for human therapeutics. The Company primarily derives revenue from license fees for technology access, milestones from partnered programs and service revenue from research programs.

Business Combination

On November 1, 2022 (the “Closing Date”), the Company, Ligand Pharmaceuticals Incorporated, a Delaware corporation (“Ligand”), OmniAb Operations, Inc., a Delaware corporation and wholly-owned subsidiary of Ligand (“Legacy OmniAb”, formerly known as OmniAb, Inc.), and Orwell Merger Sub Inc., a Delaware corporation and a wholly-owned subsidiary of APAC (“Merger Sub”), consummated the transactions contemplated by the Agreement and Plan of Merger (the “Merger Agreement”), dated as of March 23, 2022 (the “Business Combination”).

Basis of Presentation

The Company’s accompanying consolidated financial statements have been prepared in accordance with U.S. GAAP. Any reference in these notes to applicable guidance is meant to refer to the authoritative U.S. GAAP as included in the Accounting Standards Codification (“ASC”) and Accounting Standards Updates (“ASU”) of the Financial Accounting Standards Board (“FASB”). Certain prior period amounts in the consolidated financial statements have been reclassified to conform to the current period presentation.

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions and accounts within the Company have been eliminated.

Liquidity and Capital Resources

The Company expects to continue to incur losses as it invests in research and development activities to improve its technology and platform, market and sell its technologies to existing and new partners, add operational, financial and management information systems and personnel to support its operations and incur ongoing costs associated with operating as a public company. The Company’s ability to continue its operations is dependent upon its ability to generate cash flows from operations and potentially obtain additional capital in the future. The Company believes its existing cash, cash equivalents and short-term investments are sufficient to support operations through at least the next 12 months from the date of issuance of these financial statements.

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business.

Emerging Growth Company

OmniAb qualifies as an emerging growth company as defined in Section 2(a) of the Securities Act of 1933, as amended, (“Securities Act”), as modified by the Jumpstart Our Business Startups Act of 2012 (“JOBS Act”).

Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. OmniAb has elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, OmniAb, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of OmniAb's financial statements with another public company, which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period, difficult because of the potential differences in accounting standards used.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of these consolidated financial statements in conformity with U.S. GAAP requires the use of estimates and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. Actual results may differ from those estimates.

Cash, Cash Equivalents, and Restricted Cash

Cash and cash equivalents consist of cash and highly liquid investments with maturities of three months or less when purchased. Cash and cash equivalents generally consist of bank deposits, money market funds as well as U.S. government and agency securities. The following table provides a reconciliation of the components of cash, cash equivalents and restricted cash reported in the consolidated balance sheets to the total of the amount presented in the consolidated statements of cash flows:

(in thousands)	December 31, 2024	December 31, 2023
Cash and cash equivalents	\$ 27,598	\$ 16,358
Restricted cash	560	560
Total cash, cash equivalents and restricted cash presented in the consolidated statements of cash flows	<u>\$ 28,158</u>	<u>\$ 16,918</u>

Restricted cash relates to deposits for the Company's property leases. The restriction will lapse when the related leases expire.

Short-term Investments

Short-term investments generally consist of commercial paper, corporate debt securities, asset-backed securities and U.S. government and agency securities. The Company classifies short-term investments as "available-for-sale" as the sale of such investments may be required prior to maturity to implement management strategies. Therefore, the Company has classified all investments with maturity dates beyond three months at the date of purchase as current assets in the accompanying consolidated balance sheets based upon its ability and intent to use the investments to satisfy the liquidity needs of current operations. Any premium or discount arising at purchase is amortized and/or accreted to interest income as an adjustment to yield using the straight-line method over the life of the instrument. Investments are reported at their estimated fair value. Unrealized gains and losses are included in accumulated other comprehensive income (loss) as a component of stockholders' equity until realized.

Property and Equipment

Property and equipment are stated at cost, subject to review for impairment, and depreciated over the estimated useful lives of the assets using the straight-line method. Amortization of leasehold improvements is recorded over the shorter of the lease term or estimated useful life of the related asset. Maintenance and repairs are charged to operations as incurred. When assets are sold, or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any gain or loss is included in operating income or expense.

Asset	Estimated Useful Life
Lab and office equipment	4 - 7 years
Computer hardware	3 - 5 years
Leasehold improvements	Shorter of the useful life or remaining lease term
Computer software	Shorter of 3 years or useful life of asset

Acquisitions

The Company first determines whether a set of assets acquired constitutes a business and should be accounted for as a business combination. If the assets acquired are not a business, the Company accounts for the transaction as an asset acquisition. Business combinations are accounted for by using the acquisition method of accounting which requires the Company to use significant estimates and assumptions, including fair value estimates, as of the business combination date and to refine those estimates as necessary during the measurement period (defined as the period, not to exceed one year, in which the Company may adjust the provisional amounts recognized).

Under the acquisition method of accounting, the Company recognizes separately from goodwill the identifiable assets acquired, the liabilities assumed, including contingent consideration and all contractual contingencies, generally at the acquisition date fair value. Contingent purchase consideration to be settled in cash is remeasured to estimated fair value at each reporting period with the change in fair value recorded in the statement of operations. Costs that the Company incurs to complete the business combination such as investment banking, legal and other professional fees are not considered part of consideration and the Company charges them to general and administrative expense as they are incurred.

The Company measures goodwill as of the acquisition date as the excess of consideration transferred, which is also measured at fair value, over the net of the acquisition date amounts of the identifiable assets acquired and liabilities assumed.

Should the initial accounting for a business combination be incomplete by the end of a reporting period that falls within the measurement period, the Company reports provisional amounts in its financial statements. During the measurement period, the Company adjusts the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the measurement of the amounts recognized as of that date and the Company records those adjustments to its financial statements in the period of change, if any.

Under the acquisition method of accounting for business combinations, if the Company identifies changes to acquired deferred tax asset valuation allowances or liabilities related to uncertain tax positions during the measurement period and they relate to new information obtained about facts and circumstances that existed as of the acquisition date, those changes are considered a measurement period adjustment and the Company records the offset to goodwill. The Company records all other changes to deferred tax asset valuation allowances and liabilities related to uncertain tax positions in current period income tax expense.

Goodwill, Intangible Assets and Other Long-Lived Assets

Goodwill, which has an indefinite useful life, represents the excess of cost over fair value of net assets acquired. Goodwill is reviewed for impairment at least annually during the fourth quarter, or more frequently if an event occurs indicating the potential for impairment. During the goodwill impairment review, the Company assesses qualitative factors to determine whether it is more likely than not that the fair value of its reporting unit is less than the carrying amount, including goodwill. The Company operates in one reporting unit. The qualitative factors include, but are not limited to, macroeconomic conditions, industry and market considerations, cost factors, the overall financial performance, and events affecting the reporting unit. If, after assessing the totality of these qualitative factors, the Company determines that it is not more likely than not that the fair value of its reporting unit is less than the carrying amount, then no additional assessment is deemed necessary. Otherwise, the Company proceeds to perform the quantitative assessment. The Company will then evaluate goodwill for impairment by comparing the estimated fair value of the reporting unit to its carrying value, including the associated goodwill. To determine the fair value, the Company generally uses a combination of market approach based on OmniAb and comparable publicly traded companies in similar lines of businesses and the income approach based on estimated discounted future cash flows. The Company's cash flow assumptions consider historical and forecasted revenue, operating costs and other relevant factors. The Company may also elect to bypass the qualitative assessment in a period and elect to proceed to perform the quantitative assessment for the goodwill impairment test. The Company performs its annual assessment for goodwill impairment during the fourth quarter each year. No impairment indicators were noted in any periods presented in the consolidated financial statements under the qualitative assessment.

The Company's identifiable intangible assets are composed of acquired core technologies, licensed technologies, contractual relationships, customer relationships and trade names. Identifiable intangible assets with finite lives are generally amortized on a straight-line basis over the assets' respective estimated useful life. The Company regularly performs reviews to determine if any event has occurred that may indicate that intangible assets with finite useful lives and other long-lived assets are potentially impaired. If indicators of impairment exist, an impairment test is performed to assess the recoverability of the affected assets by determining whether the carrying amount of such assets exceeds the undiscounted expected future cash flows. If the affected assets are not recoverable, the Company estimates the fair value of the assets and records an impairment loss if the carrying value of the assets exceeds the fair value. Factors that may indicate potential impairment include market conditions, industry and economic trends, changes in regulations, historical and forecasted financial results, significant changes in the ability of a particular asset to generate positive cash flows, and the pattern of utilization of a particular asset. Other than an impairment of the Company's finite-lived intangible assets related to certain legacy assets from Ligand's acquisition of Ab Initio Biotherapeutics, Inc. ("Ab Initio") in July 2019 and an impairment of certain small molecule ion channel intangible assets, as further described in Note 6 – Goodwill and Intangible Assets, Net, the Company did not identify indicators of impairment for its other finite-lived intangibles and long-lived assets at December 31, 2024 and 2023.

Public, Private Placement, Forward Purchase and Backstop Warrants

The Company assumed 7,666,667 warrants originally issued in APAC's initial public offering (the "Public Warrants") and 8,233,333 warrants issued in a private placement that closed concurrently with APAC's initial public offering, (the "Private Placement Warrants") in the Business Combination. Additionally, pursuant to the Amended and Restated Forward Purchase Agreement, dated as of March 23, 2022 (the "A&R FPA"), on the Closing Date, the Company issued 1,666,667 warrants in the forward purchase (the "Forward Purchase Warrants") and 1,445,489 warrants in the redemption backstop (the "Backstop Warrants"). The Public, Private Placement, Forward Purchase and Backstop Warrants entitle the holder to purchase one share of common stock at an exercise price of \$11.50 per share.

The Public Warrants are publicly traded and are exercisable for cash unless certain conditions occur, such as the failure to have an effective registration statement related to the shares issuable upon exercise or redemption by the Company under certain conditions, at which time the warrants may be cashless exercised at the option of the Company. The Private Placement Warrants have terms and provisions that are identical to the Public Warrants except that the Private Placement Warrants were not transferable, assignable or salable until 30 days after the completion of the Business Combination. The Private Placement Warrants will be redeemable by the Company in all redemption scenarios and exercisable by the holders on the same basis as the Public Warrants. The Forward Purchase Warrants and the Backstop Warrants have the same terms as the Private Placement Warrants.

The Company evaluated the Public, Private Placement, Forward Purchase and Backstop Warrants under ASC 815-40, *Derivatives and Hedging-Contracts in Entity's Own Equity* ("ASC 815-40"), and concluded they meet the criteria for equity classification as they are considered to be indexed to the Company's own stock.

Revenue Recognition

The Company applies the following five-step model in accordance with ASC 606, *Revenue from Contracts with Customers*, in order to determine revenue: (i) identification of the contract; (ii) identification of the performance obligations in the contract, 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; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation.

The Company's revenue is typically derived from license agreements with its partners and consists of: (i) upfront or annual payments for technology access (license revenue), (ii) payments for the performance of research services (service revenue), (iii) downstream payments in the form of preclinical, intellectual property, clinical, regulatory, and commercial milestones (milestone revenue) and (iv) royalties on net sales from partners' product sales (royalty revenue).

License fees are recognized when (or as) control of a performance obligation is transferred to the customer. When combined performance obligations contain a promised license and related services or other promises, management judgment is required to determine whether revenue is recognized at a point in time or over time. If a license for technology access is deemed to be the predominant promise in a performance obligation, the Company first determines the nature of the license, whether functional or symbolic intellectual property, to conclude whether revenue recognition as of a point in time or over time is most appropriate. The determination of functional or symbolic intellectual property requires an assessment of whether the customer is able to benefit from the license in its current condition, or if the utility of the license is dependent on or influenced by the Company's ongoing activities.

The Company recognizes service revenue for contracted R&D services performed for partners over time. The Company measures its progress using an input method based on the effort it expends or costs it incurs relative to the estimated total effort or costs to satisfy the performance obligation. This results in a percentage that it multiplies by the transaction price to determine the amount of revenue recognized each period. This approach requires the Company to make estimates and use judgment. If estimates or judgments change over the course of the collaboration, they may affect the timing and amount of revenue recognized in current and future periods.

The Company includes contingent milestone based payments in the estimated transaction price when there is a basis to reasonably estimate the amount of the payment and it is probable of being achieved. These estimates are based on historical experience, anticipated results and its best judgment at the time. If the contingent milestone based payment is sales-based, we apply the royalty recognition constraint and record revenue when the underlying sale has taken place. Significant judgments must be made in determining the transaction price for licenses of intellectual property. Because of the risk that products in development with partners will not reach development based milestones or receive regulatory approval, the Company generally recognizes any contingent payments that would be due to it upon or after achievement of the development milestone or regulatory approval.

For arrangements that include sales-based royalties, and under which the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). Each quarterly period, sales-based royalties are recorded based on estimated quarterly net sales of the associated collaboration products. Differences between actual results and estimated amounts are adjusted for in the period in which they become known, which typically follows the quarterly period in which the estimate was made. To date, actual royalties received have not differed materially from our estimates.

Accounts Receivable, Unbilled Receivables and Deferred Revenue

Accounts receivable represents the amounts billed to the Company's partners that are due unconditionally for revenue it has earned. The Company establishes an allowance for credit losses to present the net amount of accounts receivable expected to be collected. The allowance requires an estimation based upon historical loss experienced and adjusted for factors that are relevant to determining the expected collectability of accounts receivable. Some of these factors include delinquency trends, aging behavior of receivables, credit and liquidity quality indicators for industry groups, customer classes or individual customers and the current and expected future economic and market conditions.

Depending on the terms of the arrangement, the Company may also defer a portion of the consideration received if it needs to satisfy a future obligation. The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets), and deferred revenue (contract liabilities) on the consolidated balance sheets. The Company generally receives payment at the point it satisfies its obligation or soon after. When revenue recognized exceeds the amount billed to the customer, the Company records an unbilled receivable for the amount entitled to be received based on an enforceable right to payment. Any fees billed in advance of being earned are recorded as deferred revenue.

Unbilled receivables were \$2.6 million and \$0.8 million as of December 31, 2024 and 2023, respectively. During the year ended December 31, 2024, the amount recognized as revenue that was previously deferred at December 31, 2023 was \$7.0 million. During the year ended December 31, 2023, the amount recognized as revenue that was previously deferred at December 31, 2022 was \$6.4 million.

Disaggregation of Revenue

The disaggregated revenue categories are presented on the face of the consolidated statements of operations.

Research and Development Expenses

Research and development expenses consist of material, equipment, facilities and labor costs of scientific staff who are working pursuant to collaborative agreements and other research and development projects. Also included in research and development expenses are third-party costs incurred for research programs including in-licensing costs, and costs incurred by other research and development service vendors. The Company expenses these costs as they are incurred. When the Company makes payments for research and development services prior to the services being rendered, it records those amounts as prepaid assets on its consolidated balance sheets and it expenses them as the services are provided.

Share-Based Compensation

The Company recognizes share-based compensation expense based on the estimated fair value on a straight-line basis over the requisite service periods of the awards, taking into consideration forfeitures as they occur. The fair value of restricted stock units ("RSUs") is determined by the closing market price of the Company's common stock on the date of grant. Performance-based restricted stock units ("PRSUs") generally represent the right to receive a certain number of shares of common stock based on the achievement of the Company's corporate performance or market goals and continued employment during the vesting period. Share-based compensation expense for these PRSUs is measured using the Monte-Carlo valuation model and is not adjusted for the achievement, or lack thereof, of the market conditions.

The Company uses the Black-Scholes option-pricing model to estimate the fair value of stock purchases under the ESPP and stock options granted. The model assumptions include expected volatility, term, dividends, and the risk-free interest rate.

The Company measures and recognizes compensation expense for shares to be issued under its employee stock purchase plan based on an estimated grant date fair value recognized on a straight-line basis over the offering period.

Income Taxes

The Company provides for income taxes under the asset and liability method prescribed by the ASC Topic 740, Income Taxes ("Topic 740"). Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates in effect when the differences are expected to reverse. If necessary, deferred tax assets are reduced by a valuation allowance to reflect the uncertainty associated with their ultimate realization.

The Company accounts for uncertain tax positions recognized in the consolidated financial statements in accordance with the provisions of Topic 740 by prescribing a more-likely-than-not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. When uncertain tax positions exist, we recognize the tax benefit of tax positions to the extent that the benefit will more likely than not be realized. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. The Company evaluates uncertain tax positions on a quarterly basis and adjusts the level of the liability to reflect any subsequent changes in the relevant facts surrounding the uncertain positions. Any changes to these estimates, based on the actual results obtained and/or a change in assumptions, could affect its income tax provision in future periods. Interest and penalty charges, if any, related to unrecognized tax benefits would be classified as a provision for income tax in its consolidated statements of operations.

Income (Loss) Per Share

Basic income (loss) per share is calculated by dividing net income (loss) by the weighted-average number of common shares outstanding during the period. Diluted income (loss) per share is computed based on the sum of the weighted average number of common shares and potentially dilutive common shares outstanding during the period.

Comprehensive Income (Loss)

Comprehensive income (loss) represents net income (loss) adjusted for the change during the periods presented in unrealized gains and losses on available-for-sale debt securities and reclassification adjustments for realized gains or losses included in net income (loss). The unrealized gains or losses are reported in the consolidated statements of comprehensive income (loss).

Recent Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies and adopted by the Company as of the specified effective date. Unless otherwise discussed below, the Company believes that the impact of recently issued standards is either not applicable to the Company or will not have a material impact on its consolidated financial statements upon adoption.

The following table provides a brief description of recently issued accounting standards which may impact the Company's financial statements:

Standard	Description	Effective Date	Effect on the Financial Statements or Other Significant Matters
ASU 2023-09, Income Taxes (Topic 740) - Improvements to Income Tax Disclosures	The amendments in this ASU address investor requests for more transparency about income tax information through improvements to tax disclosures primarily related to the rate reconciliation and income taxes paid information. The ASU also includes certain other amendments to improve the effectiveness of income tax disclosures.	Effective for the Company for annual periods beginning after December 15, 2024, with early adoption permitted.	The Company is currently evaluating the impact of adopting this standard on its consolidated financial statements and disclosures.
ASU 2024-03, Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures	The amendments in this ASU require a public business entity to disclose specific information about certain costs and expenses in the notes to its financial statements for interim and annual reporting periods. The objective of the disclosure requirements is to provide disaggregated information about a public business entity's expenses to help investors (a) better understand the entity's performance, (b) better assess the entity's prospects for future cash flows, and (c) compare an entity's performance over time and with that of other entities.	Effective in annual reporting periods beginning after December 15, 2026, and interim periods within annual reporting periods beginning after December 15, 2027, with early adoption permitted.	The Company is currently evaluating the impact of adopting this standard on its consolidated financial statement disclosures.

Segment Information

Operating segments are components of an enterprise for which separate financial information is available and are evaluated regularly by the Company's chief operating decision-maker in deciding how to allocate resources and assess performance. The Company manages its business as one operating segment.

Concentrations of Business Risk

Revenue from significant partners, which is defined as 10% or more of total revenue, was as follows:

	Year Ended December 31,	
	2024	2023
Partner A	(1)	29%
Partner B	19%	15%
Partner C	16%	14%
Partner D	13%	(1)
Partner E	12%	(1)

(1) Represents less than 10% of total revenue.

As of December 31, 2024, amounts due from two partners exceeded 10% of gross trade receivables and accounted for 55% of net trade receivables. As of December 31, 2023, amounts due from three partners exceeded 10% of gross trade receivables and accounted for 88% of net trade receivables.

3. Fair Value Measurement

The Company measures its financial assets and liabilities at fair value, which is defined as the exit price, or the amount 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.

The Company uses the following three-level valuation hierarchy that maximizes the use of observable inputs and minimizes the use of unobservable inputs to value its financial assets and liabilities:

- Level 1 - Observable inputs such as unadjusted quoted prices in active markets for identical instruments.
- Level 2 - Quoted prices for similar instruments in active markets or inputs that are observable for the asset or liability, either directly or indirectly.
- Level 3 - Significant unobservable inputs based on the Company's assumptions.

Financial Instruments Measured on a Recurring Basis

The following tables provide a summary of the assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2024 and 2023:

(in thousands)	Fair Value Measurements as of December 31, 2024			
	Level 1	Level 2	Level 3	Total
Cash equivalents				
Money market funds	\$ 17,616	\$ —	—	\$ 17,616
Total cash equivalents	\$ 17,616	\$ —	\$ —	\$ 17,616
Short-term investments				
Government and agency securities	\$ 30,429	\$ 1,316	—	\$ 31,745
Asset-backed securities	—	91	—	91
Total short-term investments	\$ 30,429	\$ 1,407	\$ —	\$ 31,836
Liabilities:				
Current contingent liabilities	\$ —	\$ —	531	\$ 531
Long-term contingent liabilities	—	—	953	953
Total contingent liabilities	\$ —	\$ —	\$ 1,484	\$ 1,484
(in thousands)	Fair Value Measurements as of December 31, 2023			
	Level 1	Level 2	Level 3	Total
Cash equivalents				
Money market funds	\$ 12,289	\$ —	—	\$ 12,289
Total cash equivalents	\$ 12,289	\$ —	\$ —	\$ 12,289
Short-term investments				
Government and agency securities	\$ 63,109	\$ 4,998	—	\$ 68,107
Asset-backed securities	—	2,518	—	2,518
Total short-term investments	\$ 63,109	\$ 7,516	\$ —	\$ 70,625
Liabilities:				
Current contingent liabilities	\$ —	\$ —	\$ 1,303	\$ 1,303
Long-term contingent liabilities	—	—	3,203	3,203
Total contingent liabilities	\$ —	\$ —	\$ 4,506	\$ 4,506

The carrying amounts reported in the Company's consolidated balance sheets for accounts receivable, other assets, accounts payable and accrued expenses and other current liabilities approximate fair value due to their relatively short periods to maturity.

Available-for-Sale Securities

The Company obtains the fair value of its Level 2 available-for-sale securities from third-party pricing services. The pricing services utilize industry standard valuation models whereby all significant inputs, including benchmark yields, reported trades, broker/dealer quotes, issuer spreads, bids, offers, or other market-related data, are observable. The Company validates the prices provided by the third-party pricing services by reviewing their pricing methods and obtaining market values from other pricing sources. The Company did not adjust or override any fair value measurements provided by these pricing services as of December 31, 2024 or December 31, 2023. The Company has not transferred any investment securities between classification levels.

Contingent Liabilities

Contingent liabilities are measured at fair value each reporting period by using a probability weighted income approach.

A reconciliation of the Level 3 financial instruments as of December 31, 2024 and 2023 is as follows:

(in thousands)	Icagen ⁽¹⁾	Taurus ⁽²⁾	xCella ⁽²⁾	Total
Balance as of January 1, 2023	\$ 4,747	\$ 1,600	\$ 1,764	\$ 8,111
Payments of contingent liabilities	(300)	(1,600)	(2,840)	(4,740)
Fair value adjustments to contingent liabilities	(341)	400	1,076	1,135
Balance as of December 31, 2023	\$ 4,106	\$ 400	\$ —	\$ 4,506
Payments of contingent liabilities	(75)	(400)	—	(475)
Fair value adjustments to contingent liabilities	(2,547)	—	—	(2,547)
Balance as of December 31, 2024	\$ 1,484	\$ —	\$ —	\$ 1,484

- (1) Changes in the fair values of contingent liabilities in connection with the acquisition of Icagen are recognized in Other operating expense (income), net in the consolidated statements of operations and in the operating section of the statements of cash flows. Payments to contingent liability holders are disclosed in the financing section of the statements of cash flows.
- (2) Changes in the fair values of contingent liabilities in connection with the acquisitions of Taurus and xCella are recognized in Intangible assets, net in the consolidated balance sheets. Payments to contingent liability holders are disclosed in the investing section of the statement of cash flows.

Contingent liabilities are classified as Level 3 liabilities as their valuation requires substantial judgment and estimation of factors that are not currently observable in the market. These subjective estimates include but are not limited to assumptions involving the achievement probability of certain developmental and commercialization milestones, discount rates, and projected years of payments. If different assumptions were used for the various inputs to the valuation approaches, the estimated fair value could be materially higher or lower than the fair value determined.

4. Short-Term Investments

The Company classified short-term investments as available-for-sale securities, as the sale of such investments may be required prior to maturity to implement management strategies. The following tables summarize short-term investments as of December 31, 2024 and December 31, 2023:

(in thousands)	December 31, 2024			
	Unrealized			Estimated Fair Value
	Amortized Cost	Gains	Losses	
Government and agency securities	\$ 31,719	\$ 30	\$ (3)	\$ 31,746
Asset-backed securities	90	—	—	90
Total investments	\$ 31,809	\$ 30	\$ (3)	\$ 31,836

(in thousands)	December 31, 2023			
	Amortized Cost	Unrealized		Estimated Fair Value
		Gains	Losses	
Government and agency securities	\$ 68,054	\$ 57	\$ (4)	\$ 68,107
Asset-backed securities	2,522	—	(4)	2,518
Total investments	\$ 70,576	\$ 57	\$ (8)	\$ 70,625

The Company classified all investments with maturity dates beyond three months at the date of purchase as short-term investments in the consolidated balance sheets based upon its ability and intent to use the investments to satisfy the liquidity needs of current operations. The following table summarizes available-for-sale investments by maturity as of December 31, 2024:

(in thousands)	Amortized Cost	Estimated Fair Value
Due in one year or less	\$ 31,809	\$ 31,836
Due after one year	—	—
Total investments	\$ 31,809	\$ 31,836

The following tables summarize the Company's available-for-sale investments' gross unrealized losses and fair value aggregated by investment category and length of time that individual securities have been in a continuous loss position, as of December 31, 2024 and December 31, 2023:

(in thousands)	December 31, 2024								
	Less than 12 months			More than 12 months			Total		
	Count	Fair Value	Unrealized Losses	Count	Fair Value	Unrealized Losses	Count	Fair Value	Unrealized Losses
	2	\$ 2,930	\$ (3)	—	\$ —	\$ —	2	\$ 2,930	\$ (3)
Government and agency securities	2	\$ 2,930	\$ (3)	—	\$ —	\$ —	2	\$ 2,930	\$ (3)
(in thousands)	December 31, 2023								
	Less than 12 months			More than 12 months			Total		
	Count	Fair Value	Unrealized Losses	Count	Fair Value	Unrealized Losses	Count	Fair Value	Unrealized Losses
	5	\$ 10,402	\$ (4)	—	\$ —	\$ —	5	\$ 10,402	\$ (4)
Government and agency securities	3	2,518	(4)	—	—	—	3	2,518	(4)
Asset-backed securities	8	\$ 12,920	\$ (8)	—	\$ —	\$ —	8	\$ 12,920	\$ (8)

The Company had certain available-for-sale debt securities in an unrealized loss position without an allowance for credit loss as of December 31, 2024. Unrealized losses on these debt securities have not been recognized into income because (1) the issuers have high credit quality, (2) management does not intend to sell and it is likely that management will not be required to sell these securities prior to their anticipated recovery and (3) the decline in fair value is largely due to market conditions and/or changes in interest rates. The issuers continue to make timely interest payments on the securities, and the fair value is expected to recover as the bonds approach maturity.

5. Balance Sheet Account Details

Property and Equipment, Net

Property and equipment, net, consisted of the following as of December 31, 2024 and 2023:

(in thousands)	December 31,	
	2024	2023
Leasehold improvements	\$ 17,745	\$ 16,077
Lab and office equipment	9,785	9,452
Computer hardware and software	760	754
Construction in progress	103	842
Property and equipment, at cost	28,393	27,125
Less accumulated depreciation	(12,901)	(8,876)
Total property and equipment, net	<u>\$ 15,492</u>	<u>\$ 18,249</u>

Depreciation expense, which is included in operating expense, was \$4.1 million and \$4.0 million was recognized during the years ended December 31, 2024 and 2023, respectively, and was included in operating expenses.

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following as of December 31, 2024 and 2023:

(in thousands)	December 31,	
	2024	2023
Compensation	\$ 5,468	\$ 5,247
Due to former parent Ligand	—	1,234
Professional service fees	324	431
Royalties owed to third parties	143	139
Other	206	17
Total accrued expenses and other current liabilities	<u>\$ 6,141</u>	<u>\$ 7,068</u>

6. Goodwill and Intangible Assets, Net

Goodwill and intangible assets, net consisted of the following as of December 31, 2024 and 2023:

(in thousands)	December 31,	
	2024	2023
Goodwill	\$ 83,979	\$ 83,979
Definite-lived intangible assets		
Completed technology	233,158	233,158
Less: Accumulated amortization	(98,773)	(84,328)
Customer relationships	11,100	11,100
Less: Accumulated amortization	(7,425)	(4,463)
Intangible assets, net	<u>\$ 138,060</u>	<u>\$ 155,467</u>
Total goodwill and other identifiable intangible assets, net	<u>\$ 222,039</u>	<u>\$ 239,446</u>

Goodwill

There were no changes in the carrying amount of goodwill during the years ended December 31, 2024 and 2023.

Intangible Assets

Amortization of finite-lived intangible assets is computed using the straight-line method over the estimated useful life of the asset of up to 20 years and is reflected within amortization of intangibles expense on the consolidated statements of operations. Amortization expense of \$17.4 million and \$13.6 million was recognized for the years ended December 31, 2024 and 2023, respectively.

During the year ended December 31, 2024, the Company determined that certain of its finite-lived intangible assets related to the acquisition of Ab Initio in July 2019 were fully impaired, and recorded a \$1.2 million write-off of the net carrying value. In addition, the Company recorded a \$2.7 million impairment of certain small molecule ion channel intangible assets during the year ended December 31, 2024. The impairment charges were recorded as “Amortization of intangibles” in the consolidated statements of operations. For the year ended December 31, 2023, there was no impairment of intangible assets with finite lives.

The remaining weighted-average useful life of definite lived intangible assets is 11.1 years. At December 31, 2024, future amortization expense on intangible assets is estimated to be as follows (in thousands):

Years Ending December 31,	Amount
2025	\$ 12,912
2026	12,912
2027	12,912
2028	12,912
2029	12,912
Thereafter	73,500
Total future amortization expense	<u>\$ 138,060</u>

7. Commitments and Contingencies

Lease Commitments

The Company’s corporate headquarters are located in Emeryville, California and its research facilities are located in Emeryville and Dixon, California, Durham, North Carolina, and Tucson, Arizona. It leases approximately 70,000 square feet of space under leases expiring from 2026 and 2032.

The Company’s lease agreements do not contain any material residual value guarantees, material restrictive covenants, or material termination options. The Company’s operating lease costs are primarily related to facility leases for administration offices and research and development facilities and its finance leases are immaterial.

Lease assets and lease liabilities are recognized at the commencement of an arrangement where it is determined at inception that a lease exists. Lease assets represent the right to use an underlying asset for the lease term, and lease liabilities represent the obligation to make lease payments arising from the lease. These assets and liabilities are initially recognized based on the present value of lease payments over the lease term calculated using the Company’s incremental borrowing rate generally applicable to the location of the lease asset, unless the implicit rate is readily determinable. Lease assets also include any upfront lease payments made and lease incentives. Lease terms include options to extend or terminate the lease when it is reasonably certain that those options will be exercised.

Leases with an initial term of 12 months or less are not recorded on the consolidated balance sheets, and the expense for these short-term leases and for operating leases is recognized on a straight-line basis over the lease term. The depreciable life of lease assets and leasehold improvements is limited by the expected lease term, unless there is a transfer of title or purchase option reasonably certain of exercise.

The below table provides supplemental cash flow and other information related to operating leases (in thousands, except for lease term and discount rate):

	Year Ended December 31,	
	2024	2023
Cash paid for amounts included in the measurement of lease liabilities:	\$ 3,495	\$ 3,337
Right-of-use assets obtained in exchange for lease obligations:	\$ 39	\$ 328
Weighted average remaining lease term (in years)	6.8	7.8
Weighted average discount rate	4.3 %	4.3 %

In addition to base rent, certain of the Company's operating leases require variable payments. These variable lease costs include amounts relating to common area maintenance and are expensed when the obligation for those payments is incurred and are recognized as operating expenses in the consolidated statements of operations. The following table summarizes the components of operating lease expense for the years ended December 31, 2024 and 2023:

(in thousands)	Year Ended December 31,	
	2024	2023
Operating lease cost	\$ 3,192	\$ 3,175
Variable lease cost	1,798	1,524
Total lease costs	<u>\$ 4,990</u>	<u>\$ 4,699</u>

Future minimum lease commitments are as follows as of December 31, 2024 (in thousands):

Years Ending December 31,	Operating Leases
2025	\$ 3,782
2026	3,879
2027	3,980
2028	4,107
2029	3,307
Thereafter	7,992
Total lease payments	<u>27,047</u>
Less tenant improvement allowance	(3,883)
Present value of lease liabilities	<u>\$ 23,164</u>

Legal Proceedings

From time to time, the Company has been and may be involved in various legal proceedings arising in its ordinary course of business. In the opinion of management, resolution of any pending claims (either individually or in the aggregate) is not expected to have a material adverse impact on the consolidated financial statements, cash flows or financial position and it is not possible to provide an estimated amount of any such loss. However, the outcome of disputes is inherently uncertain. Therefore, although management considers the likelihood of such an outcome to be remote, an unfavorable resolution of one or more matters could materially affect future results of operations or cash flows, or both, in a particular period.

8. Stockholders' Equity

Authorized and Outstanding Capital Stock

The total number of shares of the Company's authorized capital stock is 1,100,000,000. The total amount of authorized capital stock consists of 1,000,000,000 shares of common stock and 100,000,000 shares of preferred stock. As of December 31, 2024, no shares of preferred stock are issued or outstanding.

Common Stock

Holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, including the election of directors, and do not have cumulative voting rights. Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive ratably those dividends, if any, as may be declared by the Board out of legally available funds. In the event of our liquidation, dissolution or winding up, the

holders of common stock will be entitled to share ratably in the assets legally available for distribution to stockholders after the payment of or provision for all of the Company's debts and other liabilities, subject to the prior rights of any preferred stock then outstanding. Holders of common stock have no preemptive or conversion rights or other subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are duly authorized, validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that the Company may designate and issue in the future.

Preferred stock

Under the terms of the Company's certificate of incorporation, its board of directors has the authority, without further action by the Company's stockholders, to issue up to 100,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the dividend, voting and other rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

The Company's board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deterring or preventing a change in the Company's control and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. The Company has no current plans to issue any shares of preferred stock.

Earnout Shares

Some of the Company's shares of common stock are subject to certain price-based earnout triggers (the "Earnout Shares"). Earnout Shares vest based upon the achievement of certain volume-weighted average trading prices ("VWAP") for shares of the Company for any 20 trading days over a consecutive 30 trading-day period during the five-year period following the Closing Date, with (i) 50% of such Earnout Shares vesting upon achievement of a VWAP of \$12.50 per share of common stock or upon the occurrence of a change of control transaction that will result in the holders of common stock receiving a price per share in excess of \$12.50, and (ii) the remaining 50% percent of the Earnout Shares vesting upon achievement of a VWAP of \$15.00 per share of common stock or upon the occurrence of a change of control transaction that will result in the holders of common stock receiving a price per share in excess of \$15.00. The Earnout Shares are not transferable until the vesting condition for the applicable tranche of Earnout Shares has been achieved. As of December 31, 2024, 14,999,243 Earnout Shares were issued and outstanding.

Pursuant to the Sponsor Insider Letter Agreement executed concurrently with the Merger Agreement, by and among APAC, Avista Acquisition LP II (the "Sponsor"), Legacy OmniAb and certain insiders of APAC, 1,293,299 shares of OmniAb common stock held by the Sponsor became subject to the same price-based vesting conditions as the Earnout Shares (the "Sponsor Earnout Shares"). The Sponsor Earnout Shares are accounted for as equity-classified equity instruments and recorded in additional paid-in capital as part of the Business Combination. As of December 31, 2024, 1,293,299 Sponsor Earnout Shares were issued and outstanding.

The Earnout Shares and Sponsor Earnout Shares will be automatically forfeited for no consideration if an applicable triggering event has not occurred from the Closing Date to and including the fifth anniversary of the Closing Date.

Warrants

As part of APAC's initial public offering, 7,666,667 Public Warrants were sold. The Public Warrants entitle the holder thereof to purchase one share of common stock at a price of \$11.50 per share, subject to adjustments. The Public Warrants are only exercisable for a whole number of shares of common stock. No fractional shares are to be issued upon exercise of the warrants. The Public Warrants will expire on November 1, 2027 (which is five years after the completion of the Business Combination), at 5:00 p.m., New York City time, or earlier upon redemption or liquidation. The Public Warrants are listed on the Nasdaq Capital Market under the symbol "OABIW".

Additionally, once the Public Warrants become exercisable, the Company can redeem the outstanding Public Warrants:

- in whole and not in part;

- at a price of \$0.01 per warrant;
- upon not less than 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the closing price of the ordinary shares equals or exceeds \$18.00 per share (as adjusted for share subdivisions, share capitalizations, reorganizations, recapitalizations and the like) for any 20 trading days within a 30-trading day period ending three trading days before the Company sends the notice of redemption to the warrant holders provided there was an effective registration statement covering the shares of common stock issuable upon exercise of the warrants.

If the Company calls the Public Warrants for redemption as previously described, the Company has the option to require all holders that wish to exercise the Public Warrants to do so on a cashless basis.

Simultaneously with APAC's initial public offering, APAC consummated a private placement of 8,233,333 Private Placement Warrants with APAC's sponsor. Each Private Placement Warrant is exercisable for one share of common stock at a price of \$11.50 per share, subject to adjustment. The Private Placement Warrants have terms and provisions that are identical to those of the Public Warrants except that the Private Placement Warrants were not transferable, assignable or salable until 30 days after the completion of the Business Combination. The Private Placement Warrants will be redeemable by the Company in all redemption scenarios and exercisable by the holders on the same basis as the Public Warrants.

Additionally, on the Closing Date, the Company issued 1,666,667 Forward Purchase Warrants and 1,445,489 Backstop Warrants pursuant to the A&R FPA. The Forward Purchase Warrants and Backstop Warrants have the same terms as the Private Placement Warrants.

The Company concluded the Public, Private Placement, Forward Purchase and Backstop Warrants meet the criteria to be classified as equity. Upon consummation of the Business Combination, the Public, Private Placement, Forward Purchase and Backstop Warrants were recorded in additional paid-in capital.

Equity Compensation Plans

2022 Incentive Award Plan

The Company's board of directors and stockholders adopted the 2022 Incentive Award Plan, or the 2022 Plan, which became effective upon the Closing of the Business Combination. Under the 2022 Plan, the Company may grant cash and equity incentive awards to eligible employees, directors and consultants.

As of December 31, 2024, the aggregate number of shares of common stock that may be issued under the 2022 Plan was 29,262,905 shares. In addition, the number of shares of common stock available for issuance under the 2022 Plan will be annually increased on January 1 of each calendar year beginning in 2023 and ending in 2032 by an amount equal to the lesser of (i) a number equal to 5% of the fully-diluted shares on the final day of the immediately preceding calendar year or (ii) such smaller number of shares as is determined by the Company's board of directors.

The 2022 Plan provides for the grant of stock options, including incentive stock options and nonqualified stock options, stock appreciation rights, restricted stock, dividend equivalents, RSUs and other stock or cash-based awards.

OmniAb Prior Plans

In connection with the Business Combination, Legacy OmniAb adopted the OmniAb, Inc. 2022 Ligand Service Provider Assumed Award Plan and the OmniAb, Inc. 2022 OmniAb Service Provider Assumed Award Plan, collectively referred to as the OmniAb Prior Plans, which govern the OmniAb equity awards issued upon adjustment of outstanding Ligand equity awards in connection with Ligand's distribution of Legacy OmniAb common stock to Ligand stockholders. All awards under the OmniAb Prior Plans that were outstanding as of the closing of the Business Combination continued to be governed by the terms, conditions and procedures set forth in the OmniAb Prior Plans and any applicable award agreements, as those terms may be equitably adjusted in connection with the Business Combination. The Company assumed the OmniAb Prior Plans in connection with the closing of the Business Combination, and each of the awards thereunder.

At the Market Offering

In December 2023, the Company entered into an Open Market Sale AgreementSM (the “Sales Agreement”), with Jefferies LLC (the “Sales Agent”) under which it may, from time to time, sell shares of its common stock having an aggregate offering price of up to \$100.0 million in “at the market” (“ATM”) offerings through the Sales Agent. Sales of the shares of common stock, if any, will be made at prevailing market prices at the time of sale, or as otherwise agreed with the Sales Agent. The Sales Agent will receive a commission from the Company of up to 3.0% of the gross proceeds of any shares of common stock sold under the Sales Agreement. Sales of its common stock made pursuant to the Sales Agreement are made under its shelf registration statement on Form S-3 which was filed on December 8, 2023 and declared effective by the SEC on December 18, 2023. The Company is not obligated to sell, and the Sales Agent is not obligated to buy or sell, any shares of common stock under the Sales Agreement. During the year ended December 31, 2024, 2,771,192 shares of common stock in the ATM offering were issued for net proceeds of \$11.4 million, after deducting commissions.

9. Share-Based Compensation

Share-Based Compensation Expense

The Company recognized share-based compensation expense by function as follows:

(in thousands)	Year Ended December 31,	
	2024	2023
Research and development expenses	\$ 10,588	\$ 12,804
General and administrative expenses	10,911	12,016
Total share-based compensation expense	<u>\$ 21,499</u>	<u>\$ 24,820</u>

The Company recognized share-based compensation expense by award type as follows:

(in thousands)	Year Ended December 31,	
	2024	2023
Stock options	\$ 14,654	\$ 15,148
Restricted stock units	5,746	7,730
Employee share purchase plan	485	1,329
Performance restricted stock units	614	613
Total share-based compensation expense	<u>\$ 21,499</u>	<u>\$ 24,820</u>

Stock Options

Stock options granted under the 2022 Plan typically vest 1/8 on the 6-month anniversary of the date of grant, and 1/48 each month thereafter for 42 months. All option awards generally expire ten years from the date of grant.

The Company uses the Black-Scholes option-pricing model to estimate the fair value of stock options granted. The model assumptions include expected volatility, term, dividends, and the risk-free interest rate.

- **Expected volatility:** Due to the Company’s limited trading history for its common stock, the Company lacks sufficient historical data to support its expected stock price volatility. As such, the Company utilized a weighted approach by blending its own limited historical data with the volatilities of publicly traded biotechnology peers. The Company will continue to apply this approach until it has enough historical data to solely support its expected volatility.
- **Expected term:** The expected term represents the period of time that options are expected to be outstanding. Because the Company does not have historical exercise behavior, it determines the expected life assumption using the simplified method which is an average of the contractual term of the option and its vesting period.
- **Dividend yield:** The Company bases the expected dividend yield assumption on the fact that it has never paid cash dividends and has no present intention to pay cash dividends and, therefore, used an expected dividend yield of zero.
- **Risk-free interest rate:** The risk-free interest rate is based upon U.S. Treasury securities with remaining terms similar to the expected term of the share-based awards.

The fair value of each option issued was estimated on the grant date using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Year Ended December 31,	
	2024	2023
Risk-free interest rate	4.3 %	3.7 %
Expected volatility	54.5 %	50.2 %
Expected term (years)	6.0	6.1
Dividend yield	— %	— %

The following table summarizes stock option activity under the Company's equity award plans:

	Shares	Weighted-average exercise price per share	Weighted-average remaining contractual life (in years)	Aggregate intrinsic value (in thousands) ⁽¹⁾
Outstanding at January 1, 2024	14,795,859	\$ 6.50		
Granted	3,326,225	\$ 5.43		
Exercised	(607,590)	\$ 3.66		
Cancelled/Expired	(633,866)	\$ 6.11		
Outstanding at December 31, 2024	16,880,628	\$ 6.40	7.8	\$ 150
Exercisable at December 31, 2024	8,391,735	\$ 7.65	7.2	\$ 80

(1) The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying options and the estimated fair value of the common stock for in the money options at December 31, 2024.

As of December 31, 2024, unrecognized stock-based compensation expense related to OmniAb options was \$21.4 million, which is expected to be recognized over a remaining weighted-average period of approximately 1.17 years. As of December 31, 2024, unrecognized stock-based compensation expense related to Ligand options was \$0.3 million, which is expected to be recognized over a remaining weighted-average period of approximately 0.31 years.

The aggregate intrinsic value of OmniAb options exercised by OmniAb service providers during the year ended December 31, 2024 was \$0.6 million. Cash received from OmniAb options exercised by OmniAb service providers during the year ended December 31, 2024 was \$2.0 million.

There were no OmniAb options exercised by Ligand service providers during the year ended December 31, 2024.

Restricted Stock Units

RSUs generally represent the right to receive a certain number of shares of common stock subject to certain vesting conditions and other restrictions. RSUs generally vest over three years. The fair value of restricted stock is determined by the closing market price on the grant date.

The following table summarizes RSU activity during the year ended December 31, 2024 under the Company's equity awards plans:

	Shares	Weighted-Average Grant Date Fair Value
Unvested balance at January 1, 2024	1,878,381	\$ 5.61
Granted	915,564	\$ 5.39
Vested	(906,016)	\$ 6.28
Forfeited	(126,721)	\$ 4.54
Unvested balance at December 31, 2024	1,761,208	\$ 5.23

As of December 31, 2024, unrecognized stock-based compensation expense related to OmniAb RSUs was \$5.5 million, which is expected to be recognized over a remaining weighted-average period of approximately 1.25 years. As of December 31, 2024, there is no unrecognized stock-based compensation expense related to Ligand RSUs.

The aggregate intrinsic value of OmniAb RSUs vested for OmniAb service providers during the year ended December 31, 2024 was \$4.5 million. The aggregate intrinsic value of OmniAb RSUs vested for Ligand service providers during the year ended December 31, 2024 was \$0.7 million.

Performance Restricted Stock Units

PRSUs generally represent the right to receive a certain number of shares of common stock based on the achievement of certain corporate performance or market goals and continued employment during the vesting period.

The Company's PRSUs contain a market condition dependent upon the Company's relative and absolute total stockholder return over a three-year period, with a payout range of 0% to 200% of the target shares granted. Share-based compensation expense for these PRSUs is measured using the Monte-Carlo valuation model and is not adjusted for the achievement, or lack thereof, of the market conditions.

The following table summarizes the PRSU activity during the year ended December 31, 2024, under the Company's equity awards plans:

	Shares ⁽¹⁾	Weighted-Average Grant Date Fair Value
Unvested balance at January 1, 2024	94,749	\$ 16.11
Granted	—	\$ —
Vested	—	\$ —
Forfeited	—	\$ —
Unvested balance at December 31, 2024	94,749	\$ 16.11

(1) Pursuant to the terms of the awards granted, the actual number of awards earned could range between 0% and 200% of target. The amount disclosed represents PRSU grants at target payout.

As of December 31, 2024, there is no unrecognized stock-based compensation expense related to OmniAb PRSUs.

Employee Stock Purchase Plan

Under the Company's 2022 Employee Stock Purchase Plan (the "ESPP"), eligible employees are entitled to purchase shares of common stock at a discount with accumulated payroll deductions. The ESPP provides for a series of overlapping 24-month offering periods comprising four six-month purchase periods. The initial offering period under the 2022 ESPP is longer than 24 months, commencing November 1, 2022 and ending on November 29, 2024. The purchase price for shares of common stock purchased under the ESPP is equal to 85% of the lesser of the fair market value of the Company's common stock on (i) the first trading day of the applicable offering period or (ii) the last trading day of each six month purchase period in the applicable offering period.

As of December 31, 2024, the aggregate number of shares of our common stock that may be issued pursuant to rights granted under the ESPP was 2,827,016 shares of our common stock. In addition, on the first day of each calendar year beginning on January 1, 2023 and ending on (and including) January 1, 2032, the number of shares available for issuance under the ESPP will be increased by a number of shares equal to the lesser of (i) 1% of the fully diluted shares outstanding on the final day of the immediately preceding calendar year, and (ii) such smaller number of shares as determined by the board of directors.

The fair value of ESPP shares issued to employees was estimated on the grant date using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Year Ended December 31,	
	2024	2023
Risk-free interest rate	4.3 %	4.9 %
Expected volatility	55.1 %	54.3 %
Expected term (years)	1.3	1.3
Dividend yield	— %	— %

As of December 31, 2024, there was \$0.8 million of unrecognized compensation expense associated with the ESPP, which is expected to be recognized over an estimated weighted-average period of 1.25 years.

During the year ended December 31, 2024, there were 567,562 shares issued pursuant to the ESPP.

10. Income Taxes

Income tax expense (benefit) consists of the following:

(in thousands)	Year Ended December 31,	
	2024	2023
Current expense (benefit):		
Federal	\$ (364)	\$ (840)
State	26	(62)
Total current expense (benefit):	(338)	(902)
Deferred expense (benefit):		
Federal	(8,929)	(12,546)
State	(111)	(296)
Total deferred expense (benefit):	(9,040)	(12,842)
Total income tax expense (benefit)	<u>\$ (9,378)</u>	<u>\$ (13,744)</u>

A reconciliation of income tax expense (benefit) at the U.S. federal statutory rate to the provision for income taxes is as follows:

(in thousands)	Year Ended December 31,			
	2024		2023	
Tax at federal statutory rate	\$ (14,996)	21.0 %	\$ (13,516)	21.0 %
State, net of federal benefit	(1,376)	1.9 %	(531)	0.8 %
Share-based compensation	1,207	(1.8)%	1,359	(2.0)%
Executive compensation limitation	566	(0.8)%	995	(1.5)%
Research and development credits	(904)	1.3 %	(1,053)	1.6 %
Return to provision	247	(0.3)%	(1,748)	2.7 %
Change in uncertain tax positions	90	(0.1)%	99	(0.2)%
State tax rate change	1,092	(1.5)%	126	(0.2)%
Change in valuation allowance	4,688	(6.6)%	518	(0.8)%
Other	8	0.0 %	7	0.0 %
Total income tax benefit and effective tax rate	<u>\$ (9,378)</u>	<u>13.1 %</u>	<u>\$ (13,744)</u>	<u>21.4 %</u>

The Company remeasured certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future. Significant components of the Company's deferred tax assets and liabilities as of December 31, 2024 and 2023 are shown below. The Company assesses the positive and negative evidence to determine if sufficient future taxable income will be generated to realize the existing deferred tax assets. The Company's evaluation of evidence resulted in management concluding that the majority of the Company's deferred tax assets will be realized.

The Company offsets all deferred tax assets and liabilities by jurisdiction, as well as any related valuation allowance, and presents them on its consolidated balance sheet as a non-current deferred income tax asset or liability (as applicable). Deferred tax assets (liabilities) are comprised of the following:

(in thousands)	December 31,	
	2024	2023
Deferred tax assets:		
Net operating loss carryforwards	\$ 13,302	\$ 3,523
Research credit carryforwards	2,517	2,370
Share-based compensation	7,337	5,772
Deferred revenue	176	1,357
Operating lease liabilities	5,388	5,633
Contingent liabilities	153	706
Capitalized research and experimental expenditures	7,956	7,500
Accrued liabilities	1,222	204
Other	544	527
Total deferred tax assets before valuation allowance	38,595	27,592
Valuation allowance for deferred tax assets	(5,526)	(832)
Net deferred tax assets	\$ 33,069	\$ 26,760
Deferred tax liabilities:		
Identified intangibles	\$ (28,200)	\$ (30,116)
Operating lease right-of-use assets	(4,140)	(4,383)
Property and equipment, net	(3,043)	(3,615)
Total deferred tax liabilities	\$ (35,383)	\$ (38,114)
Deferred income taxes, net	<u>\$ (2,314)</u>	<u>\$ (11,354)</u>

The following table presents the Company's U.S. federal and state NOL and tax credit carryforwards, net of unrecognized tax benefits, which may be available to offset future income tax liabilities:

(in thousands)	December 31, 2024	Expiration Date (if not utilized)
U.S. federal NOL carryforwards	\$ 56,587	Indefinite
U.S. state NOL carryforwards	\$ 20,227	Various dates between 2031 and 2044
U.S. federal research and development credit carryforwards	\$ 1,080	Various dates between 2032 and 2044
California research and development credit carryforwards	\$ 2,384	Indefinite

Pursuant to Section 382 and 383 of the Internal Revenue Code of 1986, as amended, utilization of the Company's net operating losses and credits may be subject to annual limitations in the event of any significant future changes in its ownership structure. These annual limitations may result in the expiration of net operating losses and credits prior to utilization. The deferred tax assets as of December 31, 2024 are net of any previous limitations due to Section 382 and 383.

The Company accounts for income taxes by evaluating a probability threshold that a tax position must meet before a financial statement benefit is recognized. The minimum threshold is a tax position that is more likely than not to be sustained upon examination by the applicable taxing authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position.

A reconciliation of the amount of unrecognized tax benefits at December 31, 2024 and 2023 is as follows:

(in thousands)	December 31,	
	2024	2023
Balance at beginning of year	\$ 569	\$ 463
Additions based on tax positions related to the current year	99	113
Reductions for tax positions of prior years	(30)	(7)
Balance at end of year	<u>\$ 638</u>	<u>\$ 569</u>

Included in the balance of unrecognized tax benefits at December 31, 2024 is \$0.2 million of tax benefits that, if recognized would impact the effective rate. There are no positions for which it is reasonably possible that the uncertain tax benefit will significantly increase or decrease within twelve months.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2024 and December 31, 2023, the Company recognized no interest and penalties. The Company files income tax returns in the United States and various state jurisdictions with varying statutes of limitations. The federal statute of limitation remains open for the 2021 tax year through the present. The state income tax returns generally remain open for the 2020 tax year through the present. Net operating loss and research credit carryforwards arising prior to these years are also open to examination if and when utilized.

11. Net Loss Per Share

Loss Per Share

Basic loss per share is calculated by dividing net loss by the weighted-average number of common shares outstanding during the period. Diluted loss per share is computed based on the sum of the weighted average number of common shares and dilutive common shares outstanding during the period. As described in Note 8 – Stockholders' Equity, Earnout Shares issued in connection with the Business Combination are subject to vesting based on the VWAP of common shares during the earnout period. The Earnout Shares are excluded from the calculation of basic and diluted weighted-average number of common shares outstanding until vested.

The following table outlines the basic and diluted net loss per share for the years ended December 31, 2024 and 2023:

(in thousands, except per share data)	Year Ended December 31,	
	2024	2023
Net loss	\$ (62,033)	\$ (50,619)
Weighted-average shares outstanding, basic and diluted	102,365	99,683
Net loss per share, basic and diluted	<u>\$ (0.61)</u>	<u>\$ (0.51)</u>

The following table outlines common share equivalents which were excluded from the computation of diluted net loss per share, as the effect of their inclusion would be anti-dilutive or the share equivalents were contingently issuable as of each period presented:

	December 31,	
	2024	2023
Options to purchase common stock issued and outstanding ⁽¹⁾	21,993,590	20,823,399
Earnout shares	16,292,542	16,292,542
Avista private placement warrants	8,233,333	8,233,333
Avista public warrants	7,666,667	7,666,667
Restricted stock units issued and outstanding	1,855,957	2,090,145
Forward purchase warrants	1,666,667	1,666,667
Backstop warrants	1,445,489	1,445,489
Shares expected to be purchased under employee stock purchase plan	687,515	1,589,197
Total anti-dilutive shares	<u>59,841,760</u>	<u>59,807,439</u>

- (1) Outstanding stock options include awards outstanding to employees of Ligand.

12. Segment Information

The Company operates under one reportable business segment, providing discovery research technology to enable the discovery of next-generation therapeutics. The determination of a single reportable business segment is consistent with the consolidated financial information regularly provided to the Company's chief operating decision maker ("CODM"). The Company's CODM is its Chief Executive Officer, who reviews financial information presented on a consolidated basis for purposes of making operating decisions, allocating resources, and evaluating financial performance.

In addition to the significant expense categories included within the consolidated statements of operations, certain other disaggregated amounts that comprise research and development and general and administrative are reviewed by the CODM. These expenses consist of (1) personnel related expenses, including salaries, benefits and share-based compensation, (2) external expenses, including third-party costs for goods and services such as lab supplies and contract research, and (3) facility and other overhead expenses, including depreciation and occupancy costs.

The following table outlines information about segment revenues, significant segment expenses, and segment net loss for the years ended December 31, 2024 and 2023:

(in thousands)	December 31,	
	2024	2023
Revenue	\$ 26,391	\$ 34,164
Research and development expenses		
Personnel related expenses	28,444	29,259
External expenses	17,160	18,138
Facility and other overhead expenses	9,506	9,128
Total research and development expenses	55,110	56,525
General and administrative expenses		
Personnel related expenses	21,733	21,904
External expenses	8,470	11,185
Facility and other overhead expenses	538	224
Total general and administrative expenses	30,741	33,313
Amortization of intangibles	17,407	13,554
Other operating expense (income), net	(2,365)	191
Total other income, net	3,091	5,056
Income tax benefit	9,378	13,744
Net loss	<u>\$ (62,033)</u>	<u>\$ (50,619)</u>

All long-term assets are maintained in, and all net losses are attributable to, the United States of America.

13. Employee Benefit Plan

The Company sponsors a qualified 401(k) defined contribution plan covering eligible employees. Participants may contribute a portion of their annual compensation limited to a maximum annual amount allowable under federal tax regulations. The Company, at its discretion, may make certain contributions to the 401(k) plan. The Company's matching contributions were \$0.6 million for both years ended December 31, 2024 and 2023.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic and current reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Our management, with the participation of our principal executive officer and our principal financial officer, have evaluated our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of the end of the period covered by this Annual Report. Based on such evaluation, our principal executive officer and our principal financial officer have concluded that as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

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 defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act). Internal control over financial reporting is a process designed under the supervision and with the participation of our management to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Management conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control—Integrated Framework (2013 Framework). Based on this assessment, our management concluded that, as of December 31, 2024, our internal control over financial reporting was effective.

Attestation Report of the Registered Public Accounting Firm

This Annual Report does not include an attestation report of our registered public accounting firm due to an exemption provided by the JOBS Act for "emerging growth companies" and our status as a non-accelerated filer under the Exchange Act.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Rule 10b5-1 Trading Arrangements

From time to time, our officers (as defined in Rule 16a-1(f) of the Exchange Act) and directors may enter into Rule 10b5-1 or non-Rule 10b5-1 trading arrangements (as each such term is defined in Item 408 of Regulation S-K). During the three months ended December 31, 2024, none of our officers or directors adopted, modified or terminated any such trading arrangements.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The other information required by this item and not set forth below will be included in our definitive proxy statement to be filed with the SEC within 120 days of December 31, 2024 in connection with our 2025 annual meeting of stockholders (“Definitive Proxy Statement”), and is incorporated herein by reference.

Code of Conduct

The board of directors has adopted a Code of Business Conduct and Ethics (“Code of Conduct”) that applies to all officers, directors and employees. The Company will promptly disclose (1) the nature of any amendment to the Code of Conduct that applies to our principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions and (2) the nature of any waiver, including an implicit waiver, from a provision of our Code of Conduct that is granted to one of these specified officers, the name of such person who is granted the waiver and the date of the waiver on our website in the future. The Code of Conduct can be accessed via our website (<http://www.omniab.com>), Governance Documents page. You may also request a free copy by writing to: Investor Relations, OmniAb Inc., 5980 Horton Street, Suite 600, Emeryville, CA 94608.

Insider Trading Compliance Policy and Procedures

We have adopted an insider trading policy and procedures governing the purchase, sale, and/or other dispositions of our securities by our directors, officers, employees and other covered persons that are designed to promote compliance with insider trading laws, rules and regulations, and the Nasdaq Stock Market LLC listing rules, as applicable. A copy of our Insider Trading Compliance Policy and Procedures is filed as Exhibit 19 to this Annual Report. It is our policy to comply with U.S. insider trading laws and regulations, including with respect to transactions in our own securities.

Item 11. Executive Compensation

Information required by this item will be included in our Definitive Proxy Statement and is incorporated herein by reference.

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

Information required by this item will be included in our Definitive Proxy Statement and is incorporated herein by reference.

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

Information required by this item will be included in our Definitive Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Information required by this item will be included in our Definitive Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedule

The following documents are included as part of this Annual Report.

1. Financial Statements.

Index to Consolidated Financial Statements	74
Report of Independent Registered Public Accounting Firm	75
Consolidated Balance Sheets	76
Consolidated Statements of Operations	76
Consolidated Statements of Comprehensive Loss	78
Consolidated Statements of Stockholders' Equity	79
Consolidated Statements of Cash Flows	80
Notes to Consolidated Financial Statements	81

2. Financial Statements Schedules.

All schedules are omitted because they are not applicable or the required information is in the financial statements or notes thereto.

3. Exhibits.

A list of exhibits is set forth on the Exhibit Index immediately preceding the signature page of this Annual Report and is incorporated herein by reference.

Item 16. Form 10-K Summary

None

EXHIBIT INDEX

Exhibit Number	Description of Exhibit	Incorporated by Reference			Exhibit Number	Filed Herewith
		Form	File Number	Date of Filing		
2.1+	Agreement and Plan of Merger, dated March 23, 2022, by and among Avista Public Acquisition Corp. II, Orwell Merger Sub Inc., Ligand Pharmaceuticals Incorporated and OmniAb, Inc.	S-4	333-264525	September 27, 2022	2.1	
2.2+	Separation and Distribution Agreement, dated March 23, 2022, by and among Avista Public Acquisition Corp. II, Ligand Pharmaceuticals Incorporated and OmniAb, Inc.	S-4	333-264525	September 27, 2022	2.2	
3.1	Certificate of Incorporation of the Registrant	10-K	001-40720	March 30, 2023	3.1	
3.2	Bylaws of the Registrant	8-K	001-40720	November 7, 2022	3.2	
4.1	Warrant Agreement, dated August 9, 2021, between Avista Public Acquisition Corp. II and Continental Stock Transfer & Trust Company, as warrant agent	8-K	001-40720	August 12, 2021	4.1	
4.2	Assignment, Assumption and Amendment Agreement, dated November 1, 2022, by and among OmniAb, Inc., Continental Stock Transfer & Trust Company and Computershare Trust Company, N.A.	8-K	001-40720	November 7, 2022	4.2	

4.3	Specimen Warrant Certificate	S-1/A	333-257177	July 28, 2021	4.3
4.4	Specimen Common Stock Certificate of OmniAb, Inc.	S-4	333-264525	September 27, 2022	4.5
4.5	Description of Registered Securities	10-K	001-40720	March 30, 2023	4.5
10.1	Private Placement Warrants Purchase Agreement, dated August 9, 2021, between Avista Public Acquisition Corp. II and Avista Acquisition LP II	8-K	001-40720	August 12, 2021	10.3
10.2#	Form of Letter Agreements, dated August 9, 2021, by and among Avista Public Acquisition Corp. II, each of Avista Public Acquisition Corp. II's officers and directors and Avista Acquisition LP II	8-K	001-40720	August 12, 2021	10.5
10.3#	Form of Indemnity Agreements, dated August 9, 2021, between Avista Public Acquisition Corp. II, each of its officers and directors and Avista Acquisition LP II	8-K	001-40720	August 12, 2021	10.6
10.4	Securities Subscription Agreement, dated February 12, 2021, between Avista Public Acquisition Corp. II and the Sponsor	S-1/A	333-257177	July 28, 2021	10.7
10.5	Sponsor Insider Agreement, dated March 23, 2022, by and among OmniAb, Inc., Avista Public Acquisition Corp. II, Avista Acquisition LP II and the other parties signatory thereto	S-4	333-264525	September 27, 2022	10.11
10.6†	Amended and Restated Registration and Stockholder Rights Agreement, dated November 1, 2022 by and among OmniAb, Inc., Avista Acquisition LP II and the other parties therein	8-K	001-40720	November 7, 2022	10.7
10.7	Amended and Restated Forward Purchase Agreement, dated March 23, 2022, by and among Avista Public Acquisition Corp. II, Avista Acquisition LP II and OmniAb, Inc.	S-4	333-264525	September 27, 2022	10.12
10.8+	Amended and Restated Employee Matters Agreement, dated August 18, 2022, by and among Avista Public Acquisition Corp. II, Orwell Merger Sub Inc., Ligand Pharmaceuticals Incorporated and OmniAb, Inc.	S-4	333-264525	September 27, 2022	10.13
10.9†+	Tax Matters Agreement, dated November 1, 2022, by and among OmniAb, Inc., Ligand Pharmaceuticals Incorporated and OmniAb Operations, Inc.	8-K	001-40720	November 7, 2022	10.10
10.10#	OmniAb, Inc. 2022 Incentive Award Plan	8-K	001-40720	October 24, 2022	10.1
10.11#	Form of Stock Option Agreement under the OmniAb, Inc. 2022 Incentive Award Plan	8-K	001-40720	November 7, 2022	10.14
10.12#	Form of Restricted Stock Unit Agreement under the OmniAb, Inc. 2022 Incentive Award Plan	8-K	001-40720	November 7, 2022	10.15
10.13#	Form of Performance Stock Unit Agreement under the OmniAb, Inc. 2022 Incentive Award Plan	8-K	001-40720	November 7, 2022	10.16
10.14#	OmniAb, Inc. 2022 Employee Stock Purchase Plan	8-K	001-40720	October 24, 2022	10.2
10.15#	OmniAb, Inc. 2022 Ligand Service Provider Assumed Award Plan	8-K	001-40720	November 7, 2022	10.18
10.16#	OmniAb, Inc. 2022 OmniAb Service Provider Assumed Award Plan	8-K	001-40720	November 7, 2022	10.19
10.17#	OmniAb, Inc. Director Compensation and Stock Ownership Policy (as amended and restated effective June 1, 2023)	10-Q	001-40720	August 10, 2023	10.1
10.18#	OmniAb, Inc. Severance Plan	8-K	001-40720	November 7, 2022	10.21
10.19#	Change in Control Severance Agreement, effective November 1, 2022, between OmniAb, Inc. and Matthew W. Foehr	10-K	001-40720	March 30, 2023	10.21
10.20#	Change in Control Severance Agreement, effective November 1, 2022, between OmniAb, Inc. and Kurt A. Gustafson	10-K	001-40720	March 30, 2023	10.22

10.21#	Change in Control Severance Agreement, effective November 1, 2022, between OmniAb, Inc. and Charles S. Berkman	10-K	001-40720	March 30, 2023	10.23	
10.22#	Form of OmniAb, Inc. Indemnification Agreement for Directors and Officers	S-4	333-264525	September 27, 2022	10.25	
10.23+	Office/Laboratory Lease between Emery Station Office II, LLC and Ligand Pharmaceuticals Incorporated, dated June 8, 2021	S-4	333-264525	September 27, 2022	10.26	
10.24†	Assignment of Lease, Consent to Assignment of Lease and First Amendment to Lease, dated for reference purposes only as of October 26, 2022, by Emery Station Office II, LLC, Ligand Pharmaceuticals Incorporated and OmniAb, Inc.	10-K	001-40720	March 30, 2023	10.26	
10.25	Open Market Sale Agreement SM , dated December 8, 2023, between the Company and Jefferies LLC	S-3	333-275966	December 8, 2023	1.2	
19	Insider Trading Compliance Policy and Procedures, as amended and restated effective March 28, 2023					X
21.1	List of Subsidiaries of OmniAb, Inc.	8-K/A	001-40720	November 7, 2022	21.1	
23.1	Consent of Ernst & Young LLP					X
31.1	Certification of Chief Executive Officer, as required by Rule 13a-14(a) or Rule 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Chief Financial Officer, as required by Rule 13a-14(a) or Rule 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
97	Policy for Recovery of Erroneously Awarded Compensation	10-K	001-40720	March 25, 2024	97	
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)					X

+ Certain schedules and annexes have been omitted in accordance with Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule and/or annex will be furnished as a supplement to the SEC upon request.
 # Indicates management contract or compensatory plan.
 † Pursuant to Item 601(b)(10) of Regulation S-K, certain confidential portions of this exhibit were omitted by means of marking such portions with an asterisk because the identified confidential portions are (i) not material and (ii) treated by the Registrant as private or confidential.
 * This certification is deemed not filed for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

SIGNATURES

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

OMNIAB, INC.

By:

/s/ MATTHEW W. FOEHR

Matthew W. Foehr

President and Chief Executive Officer

Date: March 18, 2025

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ MATTHEW W. FOEHR Matthew W. Foehr	President and Chief Executive Officer and Director (Principal Executive Officer)	March 18, 2025
/s/ KURT GUSTAFSON Kurt Gustafson	Executive Vice President, Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	March 18, 2025
/s/ JOHN L. HIGGINS John L. Higgins	Director and Board Chair	March 18, 2025
/s/ CAROLYN R. BERTOZZI, Ph.D. Carolyn R. Bertozzi, Ph.D.	Director	March 18, 2025
/s/ SARAH BOYCE Sarah Boyce	Director	March 18, 2025
/s/ JENNIFER COCHRAN, Ph.D. Jennifer Cochran, Ph.D.	Director	March 18, 2025
/s/ STEVEN LOVE Steven Love	Director	March 18, 2025

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